



7450 ETHERNET SERVICE SWITCH
7750 SERVICE ROUTER
7950 EXTENSIBLE ROUTING SYSTEM
VIRTUALIZED SERVICE ROUTER

MD-CLI COMMAND REFERENCE GUIDE

RELEASE 22.10.R3

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1 Getting started

1.1 About this guide

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

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

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



Note:

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

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

1.2 Platforms and terminology



Note:

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

Table 1: Platforms and terminology

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

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

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

1.3 Conventions

This section describes the general conventions used in this guide.

1.3.1 Precautionary and information messages

The following are information symbols used in the documentation.



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



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



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



Note: Note provides additional operational information.



Tip: Tip provides suggestions for use or best practices.

1.3.2 Options or substeps in procedures and sequential workflows

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

Example: Options in a procedure

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

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

Example: Substeps in a procedure

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

1.4 MD-CLI command reference

1.4.1 MD-CLI tree hierarchy

Table 2: Command syntax symbols

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

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

location *keyword*

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

graceful-shutdown *boolean*

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

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

Figure 1: MD-CLI configuration tree example

```

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

```

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

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

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

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

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

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

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

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

- number
- IPv4 address
- IPv6 address
- MAC address

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

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

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

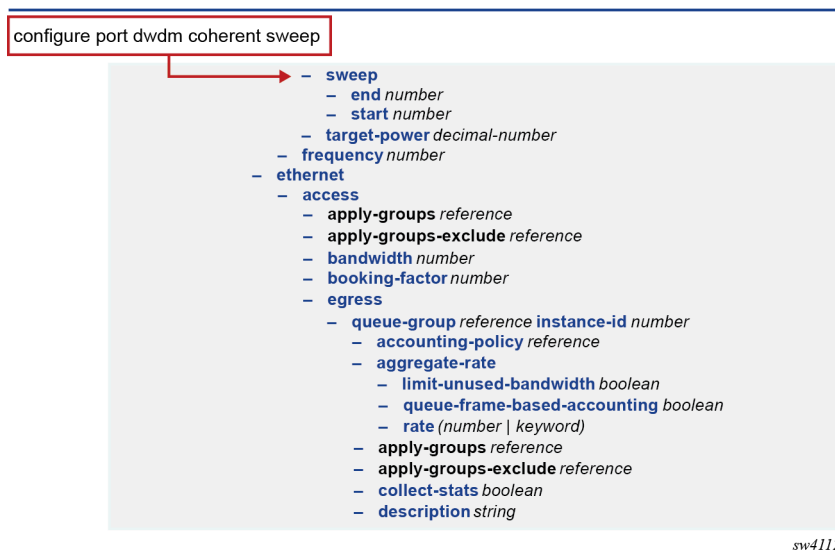
```
- indirect (ipv4-address-no-zone | ipv6-address-no-zone)
```

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

1.4.1.1 Context path

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

Figure 2: Command tree navigation



1.4.2 MD-CLI command descriptions

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

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

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

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


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

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

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

Table 3: Command descriptions fields

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

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

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



Note:

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

2 Operational commands

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

2.1 admin commands

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

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

admin show configuration configure

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

2.1.1 admin command descriptions

admin

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

application-assurance

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

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

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

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

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

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

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

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

[url-list-name] *reference*

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

upgrade

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

upgrade

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

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

clear

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

security

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

lockout

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

all

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

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

user string

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

password-history

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

all

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

user string

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

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

disconnect

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

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

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

op-table-bypass *boolean*

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

session-id *number*

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

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

session-type *keyword*

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

username *string*

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

nat

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

save-deterministic-script

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

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

reboot

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

[card] keyword

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

hold

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

now

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

Introduced 16.0.R1
Platforms All

redundancy

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

force-switchover

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

ignore-status

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

now

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

synchronize

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

boot-environment

Synopsis	Synchronize files used in system initialization
Context	admin redundancy synchronize boot-environment
Tree	boot-environment
Notes	The following elements are part of a mandatory choice: boot-environment or configuration .
Introduced	20.10.R1
Platforms	All

configuration

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

satellite

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

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

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

[satellite-id] *reference*

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

reboot

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

now

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

upgrade

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

synchronize

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

tech-support

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

[url] *string*

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

save

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

bof

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

configure

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

debug

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

li

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

[url] string

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

set

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

time

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

[system-time] *string*

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

show

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

configuration

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

bof

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

booted

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

cflash-id *string*

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

[cli-path] *string*

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

configure

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

debug

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

detail

Synopsis	Include default and unconfigured values
Context	admin show configuration detail
Tree	detail
Introduced	20.7.R1
Platforms	All

flat

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

full-context

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

intended

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

json

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

li

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

Platforms All

running

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

units

Synopsis Include unit types for applicable elements
Context [admin show configuration units](#)
Tree [units](#)
Introduced 20.10.R1
Platforms All

xml

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

support-mode

Synopsis Enable the shell and kernel commands
Context [admin support-mode](#)
Tree [support-mode](#)
Introduced 16.0.R4
Platforms All

system

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

license

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

activate

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

[file-url] *string*

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

now

Synopsis	Activate the license immediately
Context	admin system license activate now
Tree	now
Introduced	19.10.R1
Platforms	All

validate

Synopsis	Load and validate a system license
Context	admin system license validate
Tree	validate
Introduced	19.10.R1
Platforms	All

[file-url] *string*

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

management-interface

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

operations

Synopsis	Enter the operations context
----------	-------------------------------------

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

delete-operation

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

[delete-id] *number*

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

op-table-bypass *boolean*

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

Introduced 21.5.R1
Platforms All

stop-operation

Synopsis Stop the execution of an operational command

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

Tree [stop-operation](#)

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

Introduced 21.5.R1
Platforms All

op-table-bypass *boolean*

Synopsis Avoid operation ID allocation

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

Tree [op-table-bypass](#)

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

Introduced 21.5.R1
Platforms All

[stop-id] *number*

Synopsis ID of the operation to stop

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

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

Range 1 to 10000

Notes This element is mandatory.

Introduced 21.5.R1
Platforms All

security

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

hash-control

Synopsis	Enter the hash-control context
Context	admin system security hash-control
Tree	hash-control
Introduced	16.0.R6
Platforms	All

custom-hash

Synopsis	Custom encryption
Context	admin system security hash-control custom-hash
Tree	custom-hash
Introduced	16.0.R6
Platforms	All

algorithm *keyword*

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

key string

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

remove-custom-hash

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

system-password

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

admin-password

Synopsis	Administrative password
Context	admin system security system-password admin-password
Tree	admin-password
Notes	The following elements are part of a choice: admin-password or vsd-password .
Introduced	22.10.R2
Platforms	All

vsd-password

Synopsis	VSD password
Context	admin system security system-password vsd-password
Tree	vsd-password
Notes	The following elements are part of a choice: admin-password or vsd-password .
Introduced	22.10.R2
Platforms	All

telemetry

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

grpc

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

cancel

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

all

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

subscription-id *number*

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

tech-support

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

[url] *string*

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

2.2 Configuration mode commands

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

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

2.2.1 Configuration mode command descriptions

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

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

[comment-text] *string*

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

[cli-path] *string*

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

commit

Synopsis	Commit the candidate configuration
Context	commit
Tree	commit

Introduced 16.0.R1
Platforms All

comment *string*

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

confirmed

Synopsis Explicitly confirm the changes to be accepted
Context [commit confirmed](#)
Tree [confirmed](#)
Introduced 16.0.R1
Platforms All

accept

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

cancel

Synopsis Cancel an ongoing confirmed commit issued and roll back
Context [commit confirmed cancel](#)
Tree [cancel](#)

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

comment *string*

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

persist-id *string*

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

[timeout] *number*

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

Platforms All

compare *[from] string to string*

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

[from] *string*

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

[to] *string*

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

[cli-path] *string*

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

Introduced	20.10.R1
Platforms	All

flat

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

full-context

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

lines number

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

netconf-rpc

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

summary

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

copy

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

[cli-path] string

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

Platforms All

to string

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

discard

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

[cli-path] string

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

insert [new-entry] string

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

[new-entry] *string*

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

after

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

[cli-path] *string*

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

before

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

[cli-path] string

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

beginning

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

end

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

load [mode] keyword

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

[mode] keyword

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

encryption-key string

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

interactive

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

[url] string

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

rename

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

[cli-path] string

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

to string

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

rollback

Synopsis	Rollback to a previous configuration
Context	rollback
Tree	rollback
Introduced	16.0.R1
Platforms	All

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

Synopsis	Commit ID to roll back to
Context	rollback [commit-id] (<i>keyword</i> <i>number</i>)
Tree	[commit-id]
Range	1 to max
Options	startup
Introduced	16.0.R1
Platforms	All

update

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

/configure

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

/bof

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

check

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

/debug

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

/li

Synopsis	Update the entire LI candidate
Context	update /li
Tree	/li
Introduced	19.10.R1
Platforms	All

validate

Synopsis	Validate changes in the candidate datastore
Context	validate

Tree	validate
Introduced	16.0.R1
Platforms	All

2.3 environment commands

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

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

2.3.1 environment command descriptions

environment

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

command-alias

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

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

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

[alias-name] *string*

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

admin-state *keyword*

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

cli-command *string*

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

description *string*

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

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

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

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

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

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

python-script *reference*

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

command-completion

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

enter *boolean*

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

space *boolean*

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

tab *boolean*

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

console

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

length *number*

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

width *number*

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

info-output

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

always-display

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

admin-state *boolean*

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

message-severity-level

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

cli *keyword*

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

Options	warning, info
Introduced	16.0.R1
Platforms	All

more *boolean*

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

progress-indicator

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

admin-state *keyword*

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

delay *number*

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

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

type *keyword*

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

prompt

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

context *boolean*

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

newline *boolean*

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

timestamp *boolean*

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

uncommitted-changes-indicator *boolean*

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

python

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

memory-reservation *number*

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

minimum-available-memory *number*

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

timeout *number*

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

time-display *keyword*

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

Description	This command configures the time zone for a timestamp displayed in outputs, such as event logs and traps for the current CLI session. Log files on compact flash are maintained and displayed in UTC format.
Default	local
Options	local, utc
Introduced	16.0.R1
Platforms	All

time-format *keyword*

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

2.4 file commands

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

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

file repair [cflash-id]

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

2.4.1 file command descriptions

file

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

change-directory

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

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

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

checksum

Synopsis	Compute and display checksums
Context	file checksum
Tree	checksum

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

[type] *keyword*

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

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

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

copy

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

client-tls-profile *string*

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

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

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

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

direct-http

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

force

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

proxy string

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

recursive

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

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

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

disable

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

Platforms All

active

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

cflash-id *string*

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

standby

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

edit

Synopsis Edit files with the text editor
Context [file edit](#)
Tree [edit](#)

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

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

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

enable

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

active

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

cflash-id *string*

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

standby

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

format

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

[cflash-id] *string*

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

list

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

reverse

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

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

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

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

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

make-directory

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

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

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

move

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

client-tls-profile *string*

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

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

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

direct-http

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

force

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

proxy string

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

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

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

permission

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

[attribute] *keyword*

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

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

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

remove

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

client-tls-profile *string*

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

direct-http

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

force

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

proxy string

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

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

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

remove-directory

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

force

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

recursive

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

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

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

repair

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

[cflash-id] *string*

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

show

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

client-tls-profile *string*

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

direct-http

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

proxy *string*

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

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

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

unzip

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

create-destination

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

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

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

force

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

list

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

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

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

version

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

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

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

2.5 Global commands

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

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

oam eth-cfm eth-test [destination]

```

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

```

ping next-hop-address

```

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

```


2.5.1 Global command descriptions

back [*levels*] *number*

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

[levels] *number*

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

bof

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

exclusive

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

Platforms All

private

Synopsis Enter private configuration mode

Context [bof private](#)

Tree [private](#)

Introduced 20.10.R1

Platforms All

read-only

Synopsis Enter read-only configuration mode

Context [bof read-only](#)

Tree [read-only](#)

Introduced 20.10.R1

Platforms All

configure

Synopsis Enter a candidate configuration mode

Context [configure](#)

Tree [configure](#)

Introduced 16.0.R2

Platforms All

exclusive

Synopsis Enter exclusive configuration mode

Context [configure exclusive](#)

Tree [exclusive](#)

Introduced 16.0.R2

Platforms All

global

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

private

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

read-only

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

debug

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

exclusive

Synopsis	Enter exclusive configuration mode
Context	debug exclusive

Tree	exclusive
Introduced	21.5.R1
Platforms	All

private

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

read-only

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

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

Synopsis	Delete an element
Context	delete <i>string</i>
Tree	delete
Introduced	16.0.R1
Platforms	All

[cli-path] *string*

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

Platforms All

edit-config

Synopsis Enter a configuration context

Context [edit-config](#)

Tree [edit-config](#)

Introduced 16.0.R1

Platforms All

bof

Synopsis Enter the bof configuration context

Context [edit-config bof](#)

Tree [bof](#)

Introduced 20.10.R1

Platforms All

debug

Synopsis Enter the debug configuration context

Context [edit-config debug](#)

Tree [debug](#)

Introduced 21.5.R1

Platforms All

exclusive

Synopsis Enter exclusive configuration mode

Context [edit-config exclusive](#)

Tree [exclusive](#)

Introduced 16.0.R1

Platforms All

global

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

li

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

private

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

read-only

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

enable

Synopsis	Enable administrative mode
Context	enable

Tree	enable
Introduced	20.2.R1
Platforms	All

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

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

[url] *string*

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

echo

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

exit

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

Platforms All

all

Synopsis Return to the root context

Context [exit all](#)

Tree [all](#)

Introduced 16.0.R1

Platforms All

history

Synopsis Show the command history

Context [history](#)

Tree [history](#)

Introduced 16.0.R1

Platforms All

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

Synopsis Show the information under the present working context

Context [info keyword](#)

Tree [info](#)

Introduced 16.0.R1

Platforms All

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

Synopsis Source datastore

Context [info keyword](#)

Tree [info](#)

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

Options candidate, running, baseline, intended

Notes This element is part of a list key.

Introduced 16.0.R1
Platforms All

[cli-path] *string*

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

converted

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

detail

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

flat

Synopsis Show the context from the pwc on each line

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

full-context

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

inheritance

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

json

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

Platforms All

model *keyword*

Synopsis Model for which to display converted output

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

Tree [model](#)

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

Default all

Options all, openconfig

Introduced 20.7.R1

Platforms All

units

Synopsis Include unit types for applicable elements

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

Tree [units](#)

Introduced 20.5.R1

Platforms All

xml

Synopsis Show the output in indented XML format

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

Tree [xml](#)

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

Introduced 20.7.R1

Platforms All

li

Synopsis Enter a candidate configuration mode

Context	li
Tree	li
Introduced	19.10.R1
Platforms	All

exclusive

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

private

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

read-only

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

logout

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

Platforms All

oam

Synopsis Perform OAM tests

Context [oam](#)

Tree [oam](#)

Introduced 20.2.R1

Platforms All

efm

Synopsis Enter the **efm** context

Context [oam efm](#)

Tree [efm](#)

Introduced 20.2.R1

Platforms All

local-loopback

Synopsis Start or stop local loopback test on a port

Context [oam efm local-loopback](#)

Tree [local-loopback](#)

Introduced 20.2.R1

Platforms All

[action] keyword

Synopsis Action type for the test

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

Tree [\[action\]](#)

Options start, stop

Notes This element is mandatory.

Introduced 20.2.R1

Platforms All

port-id *string*

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

remote-loopback

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

[action] *keyword*

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

port-id *string*

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

eth-cfm

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

eth-test

Synopsis	Initiate an OAM ETH-CFM test
Context	oam eth-cfm eth-test
Tree	eth-test
Introduced	20.2.R1
Platforms	All

data-length *number*

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

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

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

ma-admin-name *reference*

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

md-admin-name *reference*

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

mep-id *number*

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

priority *number*

Synopsis	Frame priority that can be manipulated by QoS policies
Context	oam eth-cfm eth-test priority number

Tree	priority
Range	0 to 7
Default	7
Introduced	20.2.R1
Platforms	All

linktrace

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

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

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

ma-admin-name *reference*

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

md-admin-name *reference*

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

mep-id *number*

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

tll *number*

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

loopback

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

Introduced 20.2.R1
Platforms All

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

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

interval *number*

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

lbm-padding *number*

Synopsis Data portion size of the data TLV, no octet string
Context [oam eth-cfm loopback lbm-padding](#) *number*
Tree [lbm-padding](#)
Description This command specifies the size of the data portion of the data TLV which does not allow for an optional octet string.

MSDU is not processed when setting is in use. A value of 0 means that no data TLV is added to the packet. This is specified with an octet string. This parameter and **size** are mutually exclusive.

Range 0 | 3 to 9778

Default	0
Introduced	20.2.R1
Platforms	All

ma-admin-name *reference*

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

md-admin-name *reference*

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

mep-id *number*

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

priority number

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

send-count number

Synopsis	Number of loopback messages to send
Context	oam eth-cfm loopback send-count number
Tree	send-count
Range	1 to 1024
Default	1
Introduced	20.2.R1
Platforms	All

size number

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

timeout *number*

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

one-way-delay-test

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

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

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

ma-admin-name *reference*

Synopsis	Association name
----------	------------------

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

md-admin-name *reference*

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

mep-id *number*

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

priority *number*

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

Introduced 20.2.R1
Platforms All

two-way-delay-test

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

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

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

ma-admin-name *reference*

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

md-admin-name *reference*

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

Tree	md-admin-name
Reference	state eth-cfm domain string
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

mep-id number

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

priority number

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

two-way-slm-test

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

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

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

interval (*number | decimal-number*)

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

ma-admin-name *reference*

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

md-admin-name *reference*

Synopsis	Domain name
Context	oam eth-cfm two-way-slm-test md-admin-name <i>reference</i>

Tree	md-admin-name
Reference	state eth-cfm domain string
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

mep-id number

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

priority number

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

send-count number

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

Platforms All

size number

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

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

Tree [size](#)

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

Range 0 to 1500

Default 0

Units bytes

Introduced 20.2.R1

Platforms All

timeout number

Synopsis Wait time for a reply to a sent message request

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

Tree [timeout](#)

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

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

Range 1 to 10

Default 5

Units seconds

Introduced 20.2.R1

Platforms All

oam-pm

Synopsis Initiate an on-demand OAM Performance Monitoring test

Context [oam oam-pm](#)

Tree [oam-pm](#)

Introduced 20.2.R1

Platforms All

action *keyword*

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

session *reference*

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

test-type *keyword*

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

saa

Synopsis Enter the **saa** context

Context	oam saa
Tree	saa
Introduced	22.10.R1
Platforms	All

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

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

[owner-name] *reference*

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

test *reference*

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

start

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

accounting *boolean*

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

stop

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

accounting *boolean*

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

password

Synopsis	Change the local user password
Context	password
Tree	password
Introduced	20.10.R1
Platforms	All

ping

Synopsis	Ping an IP address or DNS name
Context	ping
Tree	ping
Introduced	19.10.R1
Platforms	All

bypass-routing

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

count *number*

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

Introduced 19.10.R1
Platforms All

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

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

do-not-fragment

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

fc keyword

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

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

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

interval (*number | decimal-number*)

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

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

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

Platforms All

output-format *keyword*

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

pattern (*keyword | number*)

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

router-instance (*reference | reference*)

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

size number

Synopsis	Request packet size including ICMP header and payload
Context	ping size number
Tree	size
Range	0 to 16384
Default	56
Units	bytes
Introduced	19.10.R1
Platforms	All

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

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

subscriber string

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

timeout number

Synopsis	Wait time for the ICMP Echo Reply packet
Context	ping timeout number
Tree	timeout

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

tos number

Synopsis	Type-of-Service (ToS) bits in the IP header
Context	ping tos number
Tree	tos
Range	0 to 255
Default	0
Introduced	19.10.R1
Platforms	All

ttl number

Synopsis	Time To Live (TTL) included in the request packet
Context	ping ttl number
Tree	ttl
Range	1 to 128
Default	64
Introduced	19.10.R1
Platforms	All

pwc

Synopsis	Show the present working context
Context	pwc
Tree	pwc
Introduced	16.0.R1
Platforms	All

[**path-type**] *keyword*

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

previous

Synopsis	Display previous working context
Context	pwc previous
Tree	previous
Introduced	16.0.R1
Platforms	All

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

Synopsis	Execute a Python application
Context	pyexec (string reference)
Tree	pyexec
Introduced	21.7.R1
Platforms	All

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

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

Platforms All

[argument-01] *string*

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

[argument-02] *string*

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

[argument-03] *string*

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

[argument-04] *string*

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

[argument-05] string

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

[argument-06] string

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

[argument-07] string

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

[argument-08] string

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

[argument-09] string

Synopsis	Ninth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-09] <i>string</i>

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

[argument-10] *string*

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

quit-config

Synopsis Exit the candidate configuration mode
Context [quit-config](#)
Tree [quit-config](#)
Introduced 16.0.R1
Platforms All

ssh

Synopsis SSH to an IP address or DNS name
Context [ssh](#)
Tree [ssh](#)
Introduced 20.7.R1
Platforms All

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

Synopsis Destination IP address or DNS name
Context [ssh](#) [\[destination\]](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone* | *string-not-all-spaces*)
Tree [\[destination\]](#)
String Length 1 to 128

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

key-re-exchange

Synopsis	Enter the key-re-exchange context
Context	ssh key-re-exchange
Tree	key-re-exchange
Introduced	20.7.R1
Platforms	All

mbytes (*number* | *keyword*)

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

minutes (*number* | *keyword*)

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

Introduced 20.7.R1
Platforms All

login-name *string*

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

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

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

telnet

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

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

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

port number

Synopsis	Remote host TCP port for the Telnet connection
Context	telnet port number
Tree	port
Range	1 to 65535
Default	23
Introduced	20.7.R1
Platforms	All

router-instance (*reference | reference*)

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

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

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

top

Synopsis	Move to the top level of the context
Context	top
Tree	top
Introduced	16.0.R1
Platforms	All

traceroute

Synopsis	Show the route taken to an IP address or DNS name
Context	traceroute
Tree	traceroute
Introduced	19.10.R1
Platforms	All

decode *keyword*

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

dest-port *number*

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

dest-port-udp-fixed

Synopsis	Avoid increment of destination port number for UDP test
Context	traceroute dest-port-udp-fixed
Tree	dest-port-udp-fixed
Introduced	21.10.R1
Platforms	All

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

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

detail

Synopsis	Display MPLS label stack information or TCP port status
Context	traceroute detail
Tree	detail
Introduced	19.10.R1
Platforms	All

min-ttl *number*

Synopsis	First hop traceroute probes using the ttl value
Context	traceroute min-ttl number
Tree	min-ttl
Description	This command specifies the first hop traceroute probes, using the ttl value.
Range	1 to 255
Default	1
Introduced	21.10.R1
Platforms	All

numeric

Synopsis	Display IP addresses instead of DNS names
Context	traceroute numeric
Tree	numeric
Introduced	19.10.R1
Platforms	All

probe-count *number*

Synopsis	Number of probes to send per hop
Context	traceroute probe-count number
Tree	probe-count
Range	1 to 10
Default	3
Introduced	20.10.R1
Platforms	All

protocol *keyword*

Synopsis	Packet type to send
Context	traceroute protocol keyword
Tree	protocol

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

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

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

size *number*

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

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

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

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

tos number

Synopsis	Type-of-Service (ToS) bits in the IP header
Context	traceroute tos number
Tree	tos
Range	0 to 255
Default	0
Introduced	19.10.R1
Platforms	All

ttl number

Synopsis	Maximum number of hops (time-to-live) traceroute probes
Context	traceroute ttl number
Tree	ttl
Range	1 to 255
Default	30
Introduced	19.10.R1
Platforms	All

wait number

Synopsis	Time to wait for a response to the probe
Context	traceroute wait number
Tree	wait
Range	10 to 60000
Default	5000
Units	milliseconds
Introduced	19.10.R1
Platforms	All

tree

Synopsis	Show the command tree under the present working context
Context	tree
Tree	tree
Introduced	16.0.R1
Platforms	All

[cli-path] *string*

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

detail

Synopsis	Display the tree with keys and field values
Context	tree detail
Tree	detail
Introduced	16.0.R1
Platforms	All

flat

Synopsis	Show the context from the pwc on each line
Context	tree flat
Tree	flat
Introduced	16.0.R1
Platforms	All

2.6 Output modifier commands

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

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

2.6.1 Output modifier command descriptions

|

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

count

Synopsis	Show the line count of the output
Context	count
Tree	count
Introduced	16.0.R1
Platforms	All

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

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

[pattern] *string*

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

ignore-case *boolean*

Synopsis	Ignore case in pattern match
Context	match string ignore-case boolean
Tree	ignore-case
Default	false
Introduced	16.0.R1
Platforms	All

invert-match *boolean*

Synopsis	Invert the pattern match selection
Context	match string invert-match boolean
Tree	invert-match
Default	false
Introduced	16.0.R1
Platforms	All

max-count *number*

Synopsis	Maximum number of displayed matches
Context	match string max-count number
Tree	max-count
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

post-lines *number*

Synopsis	Number of lines to display following the matched line
Context	match string post-lines number
Tree	post-lines
Range	0 to 4294967295
Default	0
Introduced	16.0.R1

Platforms All

pre-lines *number*

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

no-more

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

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

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

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

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

Introduced 21.7.R1
Platforms All

[argument-01] *string*

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

[argument-02] *string*

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

[argument-03] *string*

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

[argument-04] *string*

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

[argument-05] *string*

Synopsis Fifth argument
Context | [pyexec](#) (*string* | *reference*) [\[argument-05\]](#) *string*
Tree [\[argument-05\]](#)
Introduced 21.7.R1
Platforms All

[argument-06] *string*

Synopsis Sixth argument
Context | [pyexec](#) (*string* | *reference*) [\[argument-06\]](#) *string*
Tree [\[argument-06\]](#)
Introduced 21.7.R1
Platforms All

[argument-07] *string*

Synopsis Seventh argument
Context | [pyexec](#) (*string* | *reference*) [\[argument-07\]](#) *string*
Tree [\[argument-07\]](#)
Introduced 21.7.R1
Platforms All

[argument-08] *string*

Synopsis Eight argument
Context | [pyexec](#) (*string* | *reference*) [\[argument-08\]](#) *string*
Tree [\[argument-08\]](#)
Introduced 21.7.R1
Platforms All

[argument-09] *string*

Synopsis Ninth argument
Context | [pyexec](#) (*string* | *reference*) [\[argument-09\]](#) *string*

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

[argument-10] *string*

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

reverse-dns

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

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

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

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

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

Introduced	16.0.R4
Platforms	All

3 Configuration commands

This section lists the configuration trees in the MD-CLI.

3.1 aaa commands

```

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

```

configure aaa diameter peer-policy peer transaction-timer

```

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

```

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

```

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

```

configure aaa radius isa-policy user-name format

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

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

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

3.1.1 aaa command descriptions

aaa

Synopsis	Enter the aaa context
Context	configure aaa
Tree	aaa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter

Synopsis	Enter the diameter context
Context	configure aaa diameter
Tree	diameter
Description	Commands in this context configure Diameter Base parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

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

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

Synopsis	Origin-Host AVP
Context	configure aaa diameter node <i>string</i>
Tree	node
String Length	1 to 80

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

connection

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

ipv4

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

allow-connections *boolean*

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

local-address *string*

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

ipv6

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

allow-connections *boolean*

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

local-address *string*

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

timer *number*

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

description *string*

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

origin-realm *string*



WARNING:

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

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

peer *index number*

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

index *number*

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

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

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

admin-state *keyword*

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

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

connection-timer *number*

Synopsis Wait time before attempting reconnection to peer
Context **configure** [aaa diameter node](#) *string* [peer index](#) *number* **connection-timer** *number*
Tree [connection-timer](#)
Range 1 to 1000
Units seconds
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-peer *boolean*

Synopsis Use the peer as default route for realm-based routing
Context **configure** [aaa diameter node](#) *string* [peer index](#) *number* **default-peer** *boolean*
Tree [default-peer](#)
Default false
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-host *string*



WARNING:

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

Synopsis Destination-Host AVP string for Diameter messages
Context **configure** [aaa diameter node](#) *string* [peer index](#) *number* **destination-host** *string*
Tree [destination-host](#)
String Length 1 to 80
Notes This element is mandatory.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

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

route *index number*

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

index *number*

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

application *keyword*



WARNING:

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

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

preference *number*

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

realm *string*



WARNING:

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

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

watchdog-timer *number*

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

python-policy *reference*

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

router-instance *string*

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

peer-policy [*name*] *string*



WARNING:

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

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

[*name*] *string*



WARNING:

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

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

applications



WARNING:

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

Synopsis	Enter the applications context
Context	configure aaa diameter peer-policy <i>string</i> applications
Tree	applications
Introduced	16.0.R4

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

gx *boolean*



WARNING:

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

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

gy *boolean*



WARNING:

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

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

nasreq *boolean*



WARNING:

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

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

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

connection-timer *number*



WARNING:

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

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

description *string*



WARNING:

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

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

ipv4-source-address *string*



WARNING:

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

Synopsis	IPv4 source address for peering connection
Context	configure aaa diameter peer-policy string ipv4-source-address string
Tree	ipv4-source-address
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-source-address *string*



WARNING:

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

Synopsis	IPv6 source address for IPv6 peering connection
Context	configure aaa diameter peer-policy string ipv6-source-address string
Tree	ipv6-source-address
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

origin-host *string*



WARNING:

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

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

origin-realm *string*



WARNING:

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

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

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



WARNING:

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

Synopsis	Enter the peer list instance
Context	configure aaa diameter peer-policy string peer string
Tree	peer
Max. Instances	5
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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



WARNING:

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

Synopsis	Diameter peer name
Context	configure aaa diameter peer-policy string peer string
Tree	peer
String Length	1 to 32
Notes	This element is part of a list key.

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

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



WARNING:

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



WARNING:

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

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

admin-state *keyword*



WARNING:

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

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

connection-timer *number*



WARNING:

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

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

destination-host *string*



WARNING:

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



WARNING:

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

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

destination-realm *string*



WARNING:

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



WARNING:

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

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

preference number



WARNING:

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

Synopsis	Peer preference of the Diameter peer policy
Context	configure aaa diameter peer-policy string peer string preference number
Tree	preference
Range	1 to 100
Default	50
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

statistics



WARNING:

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

Synopsis	Enter the statistics context
Context	configure aaa diameter peer-policy string peer string statistics
Tree	statistics
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transaction-timer *number*



WARNING:

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

Synopsis	Timeout for base Diameter messages (DWR, CER, DPR)
Context	configure aaa diameter peer-policy string peer string transaction-timer number
Tree	transaction-timer
Range	1 to 1000
Units	seconds
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transport



WARNING:

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

Synopsis	Enter the transport context
Context	configure aaa diameter peer-policy string peer string transport
Tree	transport
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-number *number*



WARNING:

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



WARNING:

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

Synopsis	Destination TCP port number for the policy peer
Context	configure aaa diameter peer-policy string peer string transport port-number number

Tree	port-number
Range	1 to 65535
Default	3868
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watchdog-timer *number*



WARNING:

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

Synopsis	Time between consecutive watchdog messages
Context	configure aaa diameter peer-policy <i>string</i> peer <i>string</i> watchdog-timer <i>number</i>
Tree	watchdog-timer
Range	1 to 1000
Units	seconds
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy



WARNING:

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

Synopsis	Enter the proxy context
Context	configure aaa diameter peer-policy <i>string</i> proxy
Tree	proxy
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

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

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

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



WARNING:

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



WARNING:

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

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

mcs-peer



WARNING:

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

Synopsis	Enable the mcs-peer context
Context	configure aaa diameter peer-policy <i>string</i> proxy mcs-peer

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

address *reference*



WARNING:

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



WARNING:

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

Synopsis	MCS peer address
Context	configure aaa diameter peer-policy <i>string</i> proxy mcs-peer address <i>reference</i>
Tree	address
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is mandatory.
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

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



WARNING:

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

Synopsis	Synchronization tag shared by MCS peers
Context	configure aaa diameter peer-policy <i>string</i> proxy mcs-peer sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.

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

router-instance *string*



WARNING:

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



WARNING:

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

Synopsis	Routing context associated with Diameter proxy
Context	configure aaa diameter peer-policy <i>string</i> proxy router-instance <i>string</i>
Tree	router-instance
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*



WARNING:

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

Synopsis	Name of the python policy for Diameter processing
Context	configure aaa diameter peer-policy <i>string</i> python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

role *keyword*



WARNING:

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



WARNING:

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

Synopsis	Client or proxy role of a Diameter peer policy
Context	configure aaa diameter peer-policy <i>string</i> role <i>keyword</i>
Tree	role
Default	client
Options	client, proxy
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

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

Synopsis	Diameter peer policy router
Context	configure aaa diameter peer-policy <i>string</i> router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transaction-timer *number*



WARNING:

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

Synopsis	Timeout for base Diameter messages (DWR, CER, DPR)
Context	configure aaa diameter peer-policy <i>string</i> transaction-timer <i>number</i>

Tree	transaction-timer
Range	1 to 1000
Default	30
Units	seconds
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-support *keyword*



WARNING:

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

Synopsis	Vendor support announced in the capability exchange
Context	configure aaa diameter peer-policy <i>string</i> vendor-support <i>keyword</i>
Tree	vendor-support
Default	three-gpp
Options	vodafone, three-gpp
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watchdog-timer *number*



WARNING:

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

Synopsis	Time between consecutive watchdog messages
Context	configure aaa diameter peer-policy <i>string</i> watchdog-timer <i>number</i>
Tree	watchdog-timer
Range	1 to 1000
Default	30
Units	seconds
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the radius context
Context	configure aaa radius
Tree	radius
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-on-off-group [[name](#)] *string*

Synopsis	Enter the acct-on-off-group list instance
Context	configure aaa radius acct-on-off-group <i>string</i>
Tree	acct-on-off-group
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Group name for accounting on/off
Context	configure aaa radius acct-on-off-group <i>string</i>
Tree	acct-on-off-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure aaa radius acct-on-off-group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

coa-port *number*

Synopsis RADIUS listening port for CoA and Disconnect messages
Context **configure** *aaa radius coa-port number*
Tree *coa-port*
Range 1647 | 1700 | 1812 | 3799
Default 3799
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

isa-policy [*name*] *string*

Synopsis Enter the **isa-policy** list instance
Context **configure** *aaa radius isa-policy string*
Tree *isa-policy*
Max. Instances 8
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis ISA RADIUS policy name referenced by a NAT application
Context **configure** *aaa radius isa-policy string*
Tree *isa-policy*
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting

Synopsis Enter the **accounting** context

Context	configure aaa radius isa-policy string accounting
Tree	accounting
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-attributes

Synopsis	Enter the include-attributes context
Context	configure aaa radius isa-policy string accounting include-attributes
Tree	include-attributes
Description	Commands in this context specify the attributes to include in the RADIUS accounting messages.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

acct-delay-time *boolean*

Synopsis	Include the accounting delay time attribute
Context	configure aaa radius isa-policy string accounting include-attributes acct-delay-time boolean
Tree	acct-delay-time
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

acct-triggered-reason *boolean*

Synopsis	Include the accounting triggered reason attribute
Context	configure aaa radius isa-policy string accounting include-attributes acct-triggered-reason boolean
Tree	acct-triggered-reason
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	configure aaa radius isa-policy string accounting include-attributes called-station-id <i>boolean</i>
Tree	called-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	configure aaa radius isa-policy string accounting include-attributes calling-station-id <i>boolean</i>
Tree	calling-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Include the Agent-Circuit-Id attribute
Context	configure aaa radius isa-policy string accounting include-attributes circuit-id <i>boolean</i>
Tree	circuit-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

class *boolean*

Synopsis	Include the Class attribute
Context	configure aaa radius isa-policy string accounting include-attributes class <i>boolean</i>
Tree	class
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

credit-control-quota *boolean*

Synopsis Add unconsumed volume quota to Credit-Control-Quota

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [credit-control-quota](#) *boolean*

Tree [credit-control-quota](#)

Default false

Introduced 21.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-options *boolean*

Synopsis Include the Alc-ToServer-Dhcp-Options attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [dhcp-options](#) *boolean*

Tree [dhcp-options](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-vendor-class-id *boolean*

Synopsis Include the Alc-Dhcp-Vendor-Class-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [dhcp-vendor-class-id](#) *boolean*

Tree [dhcp-vendor-class-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frame-counters *boolean*

Synopsis Include Acct-Input-Packets and Acct-Output-Packets

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [frame-counters](#) *boolean*

Tree	frame-counters
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-address *boolean*

Synopsis	Include the Framed-IP-Address attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes framed-ip-address <i>boolean</i>
Tree	framed-ip-address
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-netmask *boolean*

Synopsis	Include the Framed-IP-Netmask attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes framed-ip-netmask <i>boolean</i>
Tree	framed-ip-netmask
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ipv6-prefix *boolean*

Synopsis	Include the Framed-IPv6-Prefix attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes framed-ipv6-prefix <i>boolean</i>
Tree	framed-ipv6-prefix
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hardware-timestamp *boolean*

Synopsis	Include the Event-Timestamp attribute
Context	configure aaa radius isa-policy string accounting include-attributes hardware-timestamp <i>boolean</i>
Tree	hardware-timestamp
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *boolean*

Synopsis	Include the Alc-Ipv6-Address attribute
Context	configure aaa radius isa-policy string accounting include-attributes ipv6-address <i>boolean</i>
Tree	ipv6-address
Description	When configured to true , the IA_NA address of the UE is included in the accounting message if an active IA_NA lease exists. When configured to false , the address is not included.
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *boolean*

Synopsis	Include the Alc-Client-Hardware-Addr attribute
Context	configure aaa radius isa-policy string accounting include-attributes mac-address <i>boolean</i>
Tree	mac-address
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

millisecond-event-timestamp *boolean*

Synopsis	Include the Alc-Millisecond-Event-Timestamp attribute
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Context	configure aaa radius isa-policy string accounting include-attributes millisecond-event-timestamp <i>boolean</i>
Tree	millisecond-event-timestamp
Description	When configured to true , the router includes the Alc-Millisecond-Event-Timestamp attribute in the accounting message. This attribute includes the time the accounting event was logged in milliseconds since Jan 1, 1970 00:00:00 UTC. When configured to false , the router does not include this attribute.
Default	false
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-session-id *boolean*

Synopsis	Include the Acct-Multi-Session-Id attribute
Context	configure aaa radius isa-policy string accounting include-attributes multi-session-id <i>boolean</i>
Tree	multi-session-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	configure aaa radius isa-policy string accounting include-attributes nas-identifier <i>boolean</i>
Tree	nas-identifier
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-address *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	configure aaa radius isa-policy string accounting include-attributes nas-ip-address <i>boolean</i>
Tree	nas-ip-address

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

nas-ipv6-address *boolean*

Synopsis	Include the NAS-IPv6-Address attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes nas-ipv6-address <i>boolean</i>
Tree	nas-ipv6-address
Description	<p>When configured to true, the router includes the NAS-IPv6-Address attribute in RADIUS accounting messages using the address specified in the configure aaa radius isa-policy nas-ip-address-origin command. The NAS-IPv6-Address attribute is included in both IPv4 and IPv6 RADIUS connections.</p> <p>When configured to false, the router does not include the NAS-IPv6-Address attribute in RADIUS accounting messages.</p>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port *boolean*

Synopsis	Include the NAS-Port attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes nas-port <i>boolean</i>
Tree	nas-port
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes nas-port-id <i>boolean</i>
Tree	nas-port-id
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-type *boolean*

Synopsis Include the NAS-Port-Type attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nas-port-type](#) *boolean*

Tree [nas-port-type](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-inside-service-id *boolean*

Synopsis Include NAT inside service ID in Alc-Serv-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-inside-service-id](#) *boolean*

Tree [nat-inside-service-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-outside-ip-address *boolean*

Synopsis Include the Alc-Nat-Outside-Ip-Addr attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-outside-ip-address](#) *boolean*

Tree [nat-outside-ip-address](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-outside-service-id *boolean*

Synopsis Include NAT outside service ID in Alc-Serv-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-outside-service-id](#) *boolean*

Tree	nat-outside-service-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-port-range-block *boolean*

Synopsis	Include the Alc-Nat-Port-Range attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes nat-port-range-block <i>boolean</i>
Tree	nat-port-range-block
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-subscriber-string *boolean*

Synopsis	Include the Alc-Subsc-ID-Str attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes nat-subscriber-string <i>boolean</i>
Tree	nat-subscriber-string
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octet-counters *boolean*

Synopsis	Include Acct-Input-Octets and Acct-Output-Octets
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes octet-counters <i>boolean</i>
Tree	octet-counters
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxied-subscriber-data *boolean*

Synopsis	Include subscriber data as RADIUS attributes
Context	configure aaa radius isa-policy string accounting include-attributes proxied-subscriber-data <i>boolean</i>
Tree	proxied-subscriber-data
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

release-reason *boolean*

Synopsis	Include reason in the Acct-Terminate-Cause attribute
Context	configure aaa radius isa-policy string accounting include-attributes release-reason <i>boolean</i>
Tree	release-reason
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Include the Agent-Remote-Id attribute
Context	configure aaa radius isa-policy string accounting include-attributes remote-id <i>boolean</i>
Tree	remote-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rsi *boolean*

Synopsis	Include the Alc-RSSI attribute
Context	configure aaa radius isa-policy string accounting include-attributes rsi <i>boolean</i>
Tree	rsi
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-time *boolean*

Synopsis Include the Acct-Session-Time attribute
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [session-time](#) *boolean*
Tree [session-time](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *boolean*

Synopsis Include the Alc-Subsc-ID-Str attribute
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [subscriber-id](#) *boolean*
Tree [subscriber-id](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

toserver-dhcp6-options *boolean*

Synopsis Include the Alc-ToServer-Dhcp6-Options attribute
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [toserver-dhcp6-options](#) *boolean*
Tree [toserver-dhcp6-options](#)
Default false
Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ue-creation-type *boolean*

Synopsis Include the Alc-Wlan-Ue-Creation-Type attribute
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [ue-creation-type](#) *boolean*

Tree	ue-creation-type
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-name *boolean*

Synopsis	Include the User-Name attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes user-name <i>boolean</i>
Tree	user-name
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-ssid-vlan *boolean*

Synopsis	Include per-SSID VLAN in Alc-Wlan-SSID-VLAN attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes wlan-ssid-vlan <i>boolean</i>
Tree	wlan-ssid-vlan
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-home-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes xconnect-tunnel-home-address <i>boolean</i>
Tree	xconnect-tunnel-home-address
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-local-ipv6-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Local-Ipv6 attribute
Context	configure aaa radius isa-policy string accounting include-attributes xconnect-tunnel-local-ipv6-address <i>boolean</i>
Tree	xconnect-tunnel-local-ipv6-address
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-remote-ipv6-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Remote-Ipv6 attribute
Context	configure aaa radius isa-policy string accounting include-attributes xconnect-tunnel-remote-ipv6-address <i>boolean</i>
Tree	xconnect-tunnel-remote-ipv6-address
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-service *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Service attribute
Context	configure aaa radius isa-policy string accounting include-attributes xconnect-tunnel-service <i>boolean</i>
Tree	xconnect-tunnel-service
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-type *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Type attribute
Context	configure aaa radius isa-policy string accounting include-attributes xconnect-tunnel-type <i>boolean</i>
Tree	xconnect-tunnel-type
Default	false

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

nat-periodic-update

Synopsis Enter the **nat-periodic-update** context
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [nat-periodic-update](#)
Tree [nat-periodic-update](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis Interval for periodic RADIUS Interim-Update messages
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [nat-periodic-update](#) [interval](#) *number*
Tree [interval](#)
Range 1 to 72
Units hours
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit (*number* | *keyword*)

Synopsis Rate limit for periodic RADIUS Interim-Update messages
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [nat-periodic-update](#) [rate-limit](#) (*number* | *keyword*)
Tree [rate-limit](#)
Range 1 to 100000
Default unlimited
Units packets per second
Options unlimited
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

update-triggers

Synopsis	Enter the update-triggers context
Context	configure aaa radius isa-policy <i>string</i> accounting update-triggers
Tree	update-triggers
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-state *boolean*

Synopsis	Send an Interim-Update when address allocated or freed
Context	configure aaa radius isa-policy <i>string</i> accounting update-triggers address-state <i>boolean</i>
Tree	address-state
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

soft-quota-exhausted *boolean*

Synopsis	Send interim update when soft volume quota is reached
Context	configure aaa radius isa-policy <i>string</i> accounting update-triggers soft-quota-exhausted <i>boolean</i>
Tree	soft-quota-exhausted
Default	false
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication

Synopsis	Enter the authentication context
Context	configure aaa radius isa-policy <i>string</i> authentication
Tree	authentication
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-attributes

Synopsis	Enter the include-attributes context
Context	configure aaa radius isa-policy string authentication include-attributes
Tree	include-attributes
Description	Commands in this context specify the attributes to include in the RADIUS authentication messages.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	configure aaa radius isa-policy string authentication include-attributes called-station-id <i>boolean</i>
Tree	called-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	configure aaa radius isa-policy string authentication include-attributes calling-station-id <i>boolean</i>
Tree	calling-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Include the Agent-Circuit-Id attribute
Context	configure aaa radius isa-policy string authentication include-attributes circuit-id <i>boolean</i>
Tree	circuit-id
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-vendor-class-id *boolean*

Synopsis Include the Alc-DHCP-Vendor-Class-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [dhcp-vendor-class-id](#) *boolean*

Tree [dhcp-vendor-class-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-address *boolean*

Synopsis Include the Framed-IP-Address attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [framed-ip-address](#) *boolean*

Tree [framed-ip-address](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *boolean*

Synopsis Include the Alc-IPv6-address attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [ipv6-address](#) *boolean*

Tree [ipv6-address](#)

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *boolean*

Synopsis Include the Alc-Client-Hardware-Addr attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [mac-address](#) *boolean*

Tree	mac-address
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes nas-identifier <i>boolean</i>
Tree	nas-identifier
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-address *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes nas-ip-address <i>boolean</i>
Tree	nas-ip-address
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ipv6-address *boolean*

Synopsis	Include the NAS-IPv6-Address attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes nas-ipv6-address <i>boolean</i>
Tree	nas-ipv6-address
Description	<p>When configured to true, the router includes the NAS-IPv6-Address attribute in RADIUS authentication messages using the address specified in the configure aaa radius isa-policy nas-ip-address-origin command. The NAS-IPv6-Address attribute is included in both IPv4 and IPv6 RADIUS connections.</p> <p>When configured to false, the router does not include the NAS-IPv6-Address attribute in RADIUS authentication messages.</p>

Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port *boolean*

Synopsis Include the NAS-Port attribute
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) **nas-port** *boolean*
Tree [nas-port](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis Include the NAS-Port-Id attribute
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) **nas-port-id** *boolean*
Tree [nas-port-id](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-type *boolean*

Synopsis Include the NAS-Port-Type attribute
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) **nas-port-type** *boolean*
Tree [nas-port-type](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis Include the Agent-Remote-Id attribute

Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes remote-id <i>boolean</i>
Tree	remote-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

toserver-dhcp-options *boolean*

Synopsis	Include the Alc-ToServer-Dhcp-Options attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes toserver-dhcp-options <i>boolean</i>
Tree	toserver-dhcp-options
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

toserver-dhcp6-options *boolean*

Synopsis	Include the Alc-ToServer-Dhcp6-Options attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes toserver-dhcp6-options <i>boolean</i>
Tree	toserver-dhcp6-options
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-ssid-vlan *boolean*

Synopsis	Include per-SSID VLAN in Alc-Wlan-SSID-VLAN attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes wlan-ssid-vlan <i>boolean</i>
Tree	wlan-ssid-vlan
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-home-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes xconnect-tunnel-home-address <i>boolean</i>
Tree	xconnect-tunnel-home-address
Default	false
Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure aaa radius isa-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-address-origin *keyword*

Synopsis	NAS-IP-Address attribute
Context	configure aaa radius isa-policy <i>string</i> nas-ip-address-origin <i>keyword</i>
Tree	nas-ip-address-origin
Default	system-ip
Options	system-ip, isa-ip
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password used in the RADIUS access requests
Context	configure aaa radius isa-policy <i>string</i> password <i>string</i>
Tree	password
String Length	1 to 42

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

python-policy *reference*

Synopsis Python policy used for modifying RADIUS messages
Context **configure** [aaa radius isa-policy string python-policy reference](#)
Tree [python-policy](#)
Reference **configure** [python python-policy string](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

servers

Synopsis Enter the **servers** context
Context **configure** [aaa radius isa-policy string servers](#)
Tree [servers](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-algorithm *keyword*

Synopsis Algorithm that accesses the RADIUS servers
Context **configure** [aaa radius isa-policy string servers access-algorithm keyword](#)
Tree [access-algorithm](#)
Default direct
Options direct, round-robin, hash-based, direct-priority
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis Enter the **ipv6** context
Context **configure** [aaa radius isa-policy string servers ipv6](#)
Tree [ipv6](#)

Description	Commands in this context configure how to communicate with IPv6 RADIUS servers.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu number

Synopsis	MTU used to fragment outgoing IPv6 RADIUS packets
Context	configure aaa radius isa-policy string servers ipv6 mtu number
Tree	mtu
Range	1280 to 9000
Default	9000
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-prefix string

Synopsis	Prefix containing individual source addresses per ISA
Context	configure aaa radius isa-policy string servers ipv6 source-prefix string
Tree	source-prefix
Description	This command configures an IPv6 prefix containing individual /128 addresses. These addresses are used as the source address for connections to IPv6 RADIUS servers. The prefix must be large enough to accommodate all BB-ISAs or ESA VMs in the system.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance string

Synopsis	Routing instance
Context	configure aaa radius isa-policy string servers router-instance string
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [*index*] *number*

Synopsis	Enter the server list instance
Context	configure aaa radius isa-policy <i>string</i> servers server <i>number</i>
Tree	server
Max. Instances	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*index*] *number*

Synopsis	RADIUS server ID
Context	configure aaa radius isa-policy <i>string</i> servers server <i>number</i>
Tree	server
Range	1 to 10
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the ISA RADIUS server
Context	configure aaa radius isa-policy <i>string</i> servers server <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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



WARNING:

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

Synopsis	IP address of the RADIUS server
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Context	configure <i>aaa radius isa-policy string servers server number ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ip-address
Description	This command configures the IP address of the RADIUS server. Two RADIUS servers cannot have the same IP address. An error message is generated if the server address is a duplicate.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

purpose



WARNING:

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

Synopsis	Enter the purpose context
Context	configure <i>aaa radius isa-policy string servers server number purpose</i>
Tree	purpose
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting



WARNING:

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

Synopsis	Enable the accounting context
Context	configure <i>aaa radius isa-policy string servers server number purpose accounting</i>
Tree	accounting
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port *number*



WARNING:

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

Synopsis	ISA RADIUS server accounting UDP port
Context	configure aaa radius isa-policy <i>string</i> servers server <i>number</i> purpose accounting udp-port <i>number</i>
Tree	udp-port
Range	1 to 65535
Default	1813
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication



WARNING:

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

Synopsis	Enable the authentication context
Context	configure aaa radius isa-policy <i>string</i> servers server <i>number</i> purpose authentication
Tree	authentication
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port *number*



WARNING:

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

Synopsis	ISA RADIUS server authentication UDP port
Context	configure aaa radius isa-policy <i>string</i> servers server <i>number</i> purpose authentication udp-port <i>number</i>
Tree	udp-port
Range	1 to 65535
Default	1812

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

coa



WARNING:

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

Synopsis Enable the **coa** context
Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [servers](#) [server](#) [number](#) [purpose](#) [coa](#)
Tree [coa](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port *number*



WARNING:

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

Synopsis ISA RADIUS server change of authorization UDP port
Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [servers](#) [server](#) [number](#) [purpose](#) [coa](#) [udp-port](#) [number](#)
Tree [udp-port](#)
Range 1 to 65535
Default 3799
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secret *string*



WARNING:

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

Synopsis Secret key to access the RADIUS server
Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [servers](#) [server](#) [number](#) [secret](#) [string](#)

Tree	secret
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-address-range *string*

Synopsis	Starting IP address of the IP address range
Context	configure aaa radius isa-policy <i>string</i> servers source-address-range <i>string</i>
Tree	source-address-range
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout for a response from the RADIUS server
Context	configure aaa radius isa-policy <i>string</i> servers timeout <i>number</i>
Tree	timeout
Range	1 to 90
Default	5
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

total-tries *number*

Synopsis	Maximum number of tries toward the same RADIUS server
Context	configure aaa radius isa-policy <i>string</i> servers total-tries <i>number</i>
Tree	total-tries
Range	1 to 10
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis	Enter the user-name context
Context	configure aaa radius isa-policy <i>string</i> user-name
Tree	user-name
Description	Commands in this context define the format of the username field in the UE authentication request sent to the RADIUS server. For authentication of IPv6 triggers (ICMPv6, DHCPv6, IPv6 data-trigger) the username format will always fall back to MAC only.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

format *keyword*

Synopsis	Username format in RADIUS message
Context	configure aaa radius isa-policy <i>string</i> user-name format <i>keyword</i>
Tree	format
Default	mac
Options	mac, mac-ip, dhcp-vendor, circuit-id
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *keyword*

Synopsis	MAC address format when contacting RADIUS server
Context	configure aaa radius isa-policy <i>string</i> user-name mac-format <i>keyword</i>
Tree	mac-format
Default	alu
Options	alu, ieee
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2tp-accounting-policy [[name](#)] *string*

Synopsis	Enter the l2tp-accounting-policy list instance
Context	configure aaa radius l2tp-accounting-policy <i>string</i>
Tree	l2tp-accounting-policy

Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	L2TP RADIUS accounting policy name
Context	configure aaa radius l2tp-accounting-policy <i>string</i>
Tree	l2tp-accounting-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-type

Synopsis	Enter the accounting-type context
Context	configure aaa radius l2tp-accounting-policy <i>string</i> accounting-type
Tree	accounting-type
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session *boolean*

Synopsis	Enable per-session accounting
Context	configure aaa radius l2tp-accounting-policy <i>string</i> accounting-type session <i>boolean</i>
Tree	session
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel *boolean*

Synopsis	Enable per-tunnel accounting
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Context	configure aaa radius l2tp-accounting-policy <i>string</i> accounting-type tunnel <i>boolean</i>
Tree	tunnel
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-tunnel-connection-fmt *string*

Synopsis	Accounting tunnel connection ASCII specification
Context	configure aaa radius l2tp-accounting-policy <i>string</i> acct-tunnel-connection-fmt <i>string</i>
Tree	acct-tunnel-connection-fmt
String Length	1 to 253
Default	%n
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure aaa radius l2tp-accounting-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis	Enter the include-radius-attribute context
Context	configure aaa radius l2tp-accounting-policy <i>string</i> include-radius-attribute
Tree	include-radius-attribute
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	configure aaa radius l2tp-accounting-policy <i>string</i> include-radius-attribute calling-station-id <i>boolean</i>
Tree	calling-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	configure aaa radius l2tp-accounting-policy <i>string</i> include-radius-attribute nas-identifier <i>boolean</i>
Tree	nas-identifier
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port

Synopsis	Enable the nas-port context
Context	configure aaa radius l2tp-accounting-policy <i>string</i> include-radius-attribute nas-port
Tree	nas-port
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis	RADIUS NAS-Port attribute
Context	configure aaa radius l2tp-accounting-policy <i>string</i> include-radius-attribute nas-port bit-spec <i>string</i>
Tree	bit-spec
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis Enable the **nas-port-id** context
Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute nas-port-id](#)
Tree [nas-port-id](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis Prefix string added to RADIUS NAS-Port attribute
Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute nas-port-id](#) [prefix-string](#) *string*
Tree [prefix-string](#)
String Length 1 to 8
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis NAS-Port-Id suffix type
Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute nas-port-id](#) [suffix](#) *keyword*
Tree [suffix](#)
Options circuit-id, remote-id
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis Enable the **nas-port-type** context
Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute nas-port-type](#)
Tree [nas-port-type](#)
Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type (*keyword* | *number*)

Synopsis Value for RADIUS NAS-Port-Type attribute

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-type](#) **type** (*keyword* | *number*)

Tree [type](#)

Range 0 to 255

Default rfc-aligned

Options rfc-aligned

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis RADIUS server policy referenced

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [radius-server-policy](#) *reference*

Tree [radius-server-policy](#)

Reference **configure** [aaa radius](#) [server-policy](#) *string*

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

route-downloader [[name](#)] *string*

Synopsis Enter the **route-downloader** list instance

Context **configure** [aaa radius](#) [route-downloader](#) *string*

Tree [route-downloader](#)

Max. Instances 1

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis RADIUS route downloader name

Context	configure aaa radius route-downloader <i>string</i>
Tree	route-downloader
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this route downloader
Context	configure aaa radius route-downloader <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

base-user-name *string*

Synopsis	Prefix of the username used as access requests
Context	configure aaa radius route-downloader <i>string</i> base-user-name <i>string</i>
Tree	base-user-name
Description	This command sets the prefix for the username that is used for access requests. The actual name used is a concatenation of this string, the “-” (dash) character and a monotonically increasing integer.
String Length	1 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-metric *number*

Synopsis	Default metric that RTM imported routes acquire
Context	configure aaa radius route-downloader <i>string</i> default-metric <i>number</i>
Tree	default-metric
Range	0 to 254

Default	2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-tag *number*

Synopsis	Default tag of this route downloader
Context	configure aaa radius route-downloader <i>string default-tag number</i>
Tree	default-tag
Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure aaa radius route-downloader <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

download-interval *number*

Synopsis	Wait time between consecutive runs of the process
Context	configure aaa radius route-downloader <i>string download-interval number</i>
Tree	download-interval
Range	1 to 1440
Default	720
Units	minutes
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-routes *number*

Synopsis	Maximum routes imported by this route downloader
Context	configure aaa radius route-downloader <i>string max-routes number</i>
Tree	max-routes
Range	1 to 200000
Default	200000
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Route downloader password for RADIUS access requests
Context	configure aaa radius route-downloader <i>string password string</i>
Tree	password
String Length	1 to 71
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*



WARNING:

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

Synopsis	RADIUS server policy referenced
Context	configure aaa radius route-downloader <i>string radius-server-policy reference</i>
Tree	radius-server-policy
Reference	configure aaa radius server-policy <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-interval

Synopsis	Enter the retry-interval context
Context	configure aaa radius route-downloader <i>string retry-interval</i>
Tree	retry-interval

Description	Commands in this context configure parameters of the retry interval timer, which is an exponential backoff timer. The system retries sending an Access Request message after the previous message was unanswered (for example, a RADIUS failure or ICMP port unreachable error).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis	Maximum duration of the retry interval
Context	configure aaa radius route-downloader <i>string</i> retry-interval max <i>number</i>
Tree	max
Range	1 to 1440
Default	20
Units	minutes
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min number

Synopsis	Minimum duration of the retry interval
Context	configure aaa radius route-downloader <i>string</i> retry-interval min <i>number</i>
Tree	min
Description	This command specifies the minimum duration of the retry interval. This duration grows exponentially after each sequential failure.
Range	1 to 1440
Default	10
Units	minutes
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-policy [[name](#)] *string*

Synopsis	Enter the server-policy list instance
Context	configure aaa radius server-policy <i>string</i>
Tree	server-policy

Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	RADIUS server policy name
Context	configure aaa radius server-policy <i>string</i>
Tree	server-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-on-off

Synopsis	Enable the acct-on-off context
Context	configure aaa radius server-policy <i>string</i> acct-on-off
Tree	acct-on-off
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor *reference*



WARNING:

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

Synopsis	Accounting on/off group name
Context	configure aaa radius server-policy <i>string</i> acct-on-off monitor <i>reference</i>
Tree	monitor
Reference	configure aaa radius acct-on-off-group <i>string</i>
Notes	The following elements are part of a choice: monitor or oper-state-change .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-state-change

Synopsis	Enable the oper-state-change context
Context	configure aaa radius server-policy <i>string</i> acct-on-off oper-state-change
Tree	oper-state-change
Notes	The following elements are part of a choice: monitor or oper-state-change .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group *reference*



WARNING:

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

Synopsis	Operational state for a group
Context	configure aaa radius server-policy <i>string</i> acct-on-off oper-state-change group <i>reference</i>
Tree	group
Reference	configure aaa radius acct-on-off-group <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure aaa radius server-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy for RADIUS packets to/from RADIUS servers
Context	configure aaa radius server-policy <i>string</i> python-policy <i>reference</i>
Tree	python-policy

Reference	configure python python-policy <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

servers

Synopsis	Enter the servers context
Context	configure aaa radius server-policy <i>string</i> servers
Tree	servers
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-algorithm *keyword*

Synopsis	Algorithm to select a RADIUS server from the pool
Context	configure aaa radius server-policy <i>string</i> servers access-algorithm <i>keyword</i>
Tree	access-algorithm
Default	direct
Options	direct, round-robin, hash-based
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

buffering

Synopsis	Enter the buffering context
Context	configure aaa radius server-policy <i>string</i> servers buffering
Tree	buffering
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-interim

Synopsis	Enable the acct-interim context
Context	configure aaa radius server-policy <i>string</i> servers buffering acct-interim
Tree	acct-interim

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

lifetime number

Synopsis Time accounting message can be in retransmission buffer
Context **configure** [aaa radius server-policy](#) [string servers buffering acct-interim lifetime number](#)
Tree [lifetime](#)
Range 1 to 25
Units hours
Notes This element is mandatory.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis Maximum time between accounting message resend attempts
Context **configure** [aaa radius server-policy](#) [string servers buffering acct-interim max number](#)
Tree [max](#)
Range 1 to 3600
Units seconds
Notes This element is mandatory.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min number

Synopsis Minimum time between accounting message resend attempts
Context **configure** [aaa radius server-policy](#) [string servers buffering acct-interim min number](#)
Tree [min](#)
Range 1 to 3600
Units seconds
Notes This element is mandatory.
Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-start

Synopsis Enable the **acct-start** context
Context **configure** [aaa radius server-policy](#) *string* [servers buffering acct-start](#)
Tree [acct-start](#)
Introduced 20.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lifetime number

Synopsis Time accounting message can be in retransmission buffer
Context **configure** [aaa radius server-policy](#) *string* [servers buffering acct-start lifetime number](#)
Tree [lifetime](#)
Range 1 to 25
Units hours
Notes This element is mandatory.
Introduced 20.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis Maximum time between accounting message resend attempts
Context **configure** [aaa radius server-policy](#) *string* [servers buffering acct-start max number](#)
Tree [max](#)
Range 1 to 3600
Units seconds
Notes This element is mandatory.
Introduced 20.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min number

Synopsis Minimum time between accounting message resend attempts

Context	configure <i>aaa radius server-policy string servers buffering acct-start min number</i>
Tree	<i>min</i>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-stop

Synopsis	Enable the acct-stop context
Context	configure <i>aaa radius server-policy string servers buffering acct-stop</i>
Tree	<i>acct-stop</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lifetime number

Synopsis	Time accounting message can be in retransmission buffer
Context	configure <i>aaa radius server-policy string servers buffering acct-stop lifetime number</i>
Tree	<i>lifetime</i>
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis	Maximum time between accounting message resend attempts
Context	configure <i>aaa radius server-policy string servers buffering acct-stop max number</i>
Tree	<i>max</i>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.

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

min number

Synopsis Minimum time between accounting message resend attempts
Context **configure** [aaa radius server-policy](#) *string* [servers buffering acct-stop min number](#)
Tree [min](#)
Range 1 to 3600
Units seconds
Notes This element is mandatory.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

health-check

Synopsis Enter the **health-check** context
Context **configure** [aaa radius server-policy](#) *string* [servers health-check](#)
Tree [health-check](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down-timeout number

Synopsis Wait time before declaring RADIUS server out-of-service
Context **configure** [aaa radius server-policy](#) *string* [servers health-check down-timeout number](#)
Tree [down-timeout](#)
Range 1 to 340
Units seconds
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

test-account

Synopsis Enter the **test-account** context

Context	configure aaa radius server-policy <i>string</i> servers health-check test-account
Tree	test-account
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the health check
Context	configure aaa radius server-policy <i>string</i> servers health-check test-account admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Time for test account to check health of RADIUS servers
Context	configure aaa radius server-policy <i>string</i> servers health-check test-account interval <i>number</i>
Tree	interval
Range	1 to 60
Default	3
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Test account password for RADIUS server health check
Context	configure aaa radius server-policy <i>string</i> servers health-check test-account password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name *string*

Synopsis Username to send access requests to probe RADIUS server
Context **configure** [aaa radius server-policy](#) *string* [servers health-check test-account user-name](#) *string*
Tree [user-name](#)
String Length 1 to 64
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-down-time *number*

Synopsis Hold time before reusing a RADIUS server that was down
Context **configure** [aaa radius server-policy](#) *string* [servers hold-down-time](#) *number*
Tree [hold-down-time](#)
Range 30 to 86400
Default 30
Units seconds
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-source-address *string*

Synopsis Source address for IPv6 RADIUS datagrams
Context **configure** [aaa radius server-policy](#) *string* [servers ipv6-source-address](#) *string*
Tree [ipv6-source-address](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis Number of retries for contacting the RADIUS server
Context **configure** [aaa radius server-policy](#) *string* [servers retry-count](#) *number*
Tree [retry-count](#)

Range	1 to 256
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	RADIUS routing instance
Context	configure aaa radius server-policy <i>string</i> servers router-instance <i>string</i>
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [[server-index](#)] *number*

Synopsis	Enter the server list instance
Context	configure aaa radius server-policy <i>string</i> servers server <i>number</i>
Tree	server
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[server-index] *number*

Synopsis	RADIUS server index
Context	configure aaa radius server-policy <i>string</i> servers server <i>number</i>
Tree	server
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-name *string*

Synopsis	RADIUS server name
Context	configure aaa radius server-policy <i>string</i> servers server <i>number</i> server-name <i>string</i>
Tree	server-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis	Source address of RADIUS messages
Context	configure aaa radius server-policy <i>string</i> servers source-address <i>string</i>
Tree	source-address
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stickiness *boolean*

Synopsis	Allow stickiness in a multi-server application
Context	configure aaa radius server-policy <i>string</i> servers stickiness <i>boolean</i>
Tree	stickiness
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time until the next retry to the RADIUS server
Context	configure aaa radius server-policy <i>string</i> servers timeout <i>number</i>
Tree	timeout
Range	1 to 340
Default	5
Units	seconds
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis Enter the **wpp** context

Context **configure** [aaa wpp](#)

Tree [wpp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal-group [[group-name](#)] *string*

Synopsis Enter the **portal-group** list instance

Context **configure** [aaa wpp portal-group](#) *string*

Tree [portal-group](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[\[group-name\]](#) *string*

Synopsis Portal group name

Context **configure** [aaa wpp portal-group](#) *string*

Tree [portal-group](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the portal group

Context **configure** [aaa wpp portal-group](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

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

description *string*

Synopsis Text description
Context **configure** [aaa wpp portal-group](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal [[router-instance](#)] *string* [name](#) *string*

Synopsis Add a list entry for **portal**
Context **configure** [aaa wpp portal-group](#) *string* [portal](#) *string* [name](#) *string*
Tree [portal](#)
Max. Instances 8
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[router-instance] *string*

Synopsis Router on which the portal is configured
Context **configure** [aaa wpp portal-group](#) *string* [portal](#) *string* [name](#) *string*
Tree [portal](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis Web portal server name
Context **configure** [aaa wpp portal-group](#) *string* [portal](#) *string* [name](#) *string*

Tree	portal
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-name *string*

Synopsis	System name used in WPP protocol messages
Context	configure aaa wpp system-name <i>string</i>
Tree	system-name
String Length	1 to 16
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

3.2 application-assurance commands

```

configure
- application-assurance
  - aarp number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - master-selection-mode keyword
    - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - peer-endpoint
      - sap
        - encap-type keyword
        - sap-id string
      - spoke-sdp string
    - priority number
  - apply-groups reference
  - apply-groups-exclude reference
  - cflowd
    - field string
      - apply-groups reference
      - apply-groups-exclude reference
      - comment string
  - flow-attribute
    - attribute string
      - apply-groups reference
      - apply-groups-exclude reference
      - comment string
  - group number
    - apply-groups reference
    - apply-groups-exclude reference
    - certificate-profile string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - file string
  - cflowd
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
    - comprehensive
      - apply-groups reference
      - apply-groups-exclude reference
      - flow-rate number
      - flow-rate-2 number
      - template
        - apply-groups reference
        - apply-groups-exclude reference
        - dynamic-fields
          - admin-state keyword
          - field string
        - field-selection keyword
  - direct-export
    - collector number

```

configure application-assurance group cflowd direct-export collector address

```

- address (ipv4-address-no-zone | ipv6-address-no-zone) port number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - vlan-id number
- export-override
  - mode keyword
  - prefix string
- obfuscation
  - aes-128-encryption-key string
  - aes-256-encryption-key string
- rtp-performance
  - apply-groups reference
  - apply-groups-exclude reference
  - audio-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
  - flow-rate number
  - flow-rate-2 number
  - video-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
  - voice-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- tcp-performance
  - apply-groups reference
  - apply-groups-exclude reference
  - flow-rate number
  - flow-rate-2 number
  - template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- template-retransmit number
- volume
  - rate number
  - template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- dns-ip-cache string
  - admin-state keyword

```


configure application-assurance group dns-ip-cache apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **dns-match**
 - **domain** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **expression** *string*
 - **trusted-server-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **server-name** *string*
- **ip-cache**
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **size** *number*
 - **static-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **http-enrich** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **field** *string*
 - **aes-initialization-vector** *string*
 - **anti-spoof** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **calling-line-id** *boolean*
 - **encode**
 - **cert-profile** *reference*
 - **key**
 - **type** *keyword*
 - **value** *string*
 - **md5-salt** *string*
 - **name** *string*
 - **static-string** *string*
 - **rat-type-enrichment**
 - **rat-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rat-string** *string*
- **http-error-redirect** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **error-code** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **custom-message-size** *number*
 - **http-host** *string*
 - **participant-id** *string*
 - **template** *number*
- **http-notification** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **interval** (*number | keyword*)
 - **script-url** *string*
 - **template** *number*
- **http-redirect** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure application-assurance group http-redirect apply-groups-exclude

- **apply-groups-exclude** *reference*
- **captive-redirect**
 - **vlan-id** *number*
- **description** *string*
- **redirect-https** *boolean*
- **redirect-url** *string*
- **tcp-client-reset** *boolean*
- **template** *number*
- **ip-identification-assist**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **passive-dns**
 - **monitor** *boolean*
 - **trusted-server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **comment** *string*
- **partition** *number*
 - **aa-sub-congestion-detection**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rat-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rtt-threshold** (*number* | *keyword*)
 - **rtt-threshold** (*number* | *keyword*)
 - **rtt-threshold-tolerance** *number*
 - **aa-sub-remote** *boolean*
 - **access-network-location**
 - **source** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rat-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rtt-threshold** (*number* | *keyword*)
 - **rtt-threshold** (*number* | *keyword*)
 - **rtt-threshold-tolerance** *number*
 - **source-level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **aqp-initial-lookup** *boolean*
 - **cflowd**
 - **export-type** *keyword*
 - **admin-state** *keyword*
 - **app-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate-choice** *keyword*
 - **application** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate-choice** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **event-log** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **buffer-type** *keyword*
 - **max-entries** *number*

configure application-assurance group partition event-log syslog

- **syslog**
 - **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **description** *string*
 - **facility** *keyword*
 - **port** *number*
 - **severity** *keyword*
 - **vlan-id** *number*
- **gtp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **gtp-filter** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **gtp-in-gtp** *keyword*
 - **gtp-tunnel-database**
 - **default-tunnel-endpoint-limit** *number*
 - **validate-gtp-tunnels** *boolean*
 - **validate-sequence-number** *boolean*
 - **validate-source-ip-addr** *boolean*
 - **imsi-apn-filter**
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apn** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **imsi-mcc-mnc-prefix** *string*
 - **src-gsn**
 - **ip-prefix** (*ipv4-prefix | ipv6-prefix*)
 - **ip-prefix-list** *reference*
 - **log**
 - **action** *keyword*
 - **event-log** *reference*
 - **max-payload-length** *number*
 - **message-type**
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** (*number | keyword*)
 - **message-type-gtp-v2**
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** (*number | keyword*)
 - **gtpc-inspection** *boolean*
 - **log**
 - **action** *keyword*
 - **event-log** *reference*
 - **mode** *keyword*
 - **http-match-all-requests** *boolean*
 - **http-x-online-host** *boolean*
 - **ip-identification-contribute** *boolean*
 - **ip-prefix-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **prefix** (*ipv4-prefix | ipv6-prefix*)
 - **apply-groups** *reference*

configure application-assurance group partition ip-prefix-list prefix apply-groups-exclude

```

    - apply-groups-exclude reference
    - name string
- policy
  - app-filter
    - entry number
      - admin-state keyword
      - application reference
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - expression number
        - apply-groups reference
        - apply-groups-exclude reference
        - eq string
        - neq string
        - type keyword
      - flow-setup-direction keyword
      - http-match-all-requests boolean
      - http-port
        - eq
          - port-list reference
          - port-number number
        - neq
          - port-list reference
          - port-number number
      - ip-identification-assist boolean
      - ip-protocol
        - eq (number | keyword)
        - neq (number | keyword)
      - network-address
        - eq
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
        - neq
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
      - protocol
        - eq (string | named-item)
        - neq (string | named-item)
      - server-address
        - eq
          - dns-ip-cache reference
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
          - masked-ip
            - address (ipv4-address-no-zone | ipv6-address-no-zone)
            - netmask (ipv4-address-no-zone | ipv6-address-no-zone)
        - neq
          - dns-ip-cache reference
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
          - masked-ip
            - address (ipv4-address-no-zone | ipv6-address-no-zone)
            - netmask (ipv4-address-no-zone | ipv6-address-no-zone)
      - server-port
        - eq
          - first-packet-policy keyword
          - port-list reference
          - port-number number
          - range
            - end number
            - start number
        - gt
          - port-number number

```

configure application-assurance group partition policy app-filter entry server-port lt

```

    - lt
      - port-number number
    - neq
      - port-list reference
      - port-number number
      - range
        - end number
        - start number
  - app-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - charging-group reference
    - description string
    - export-id number
  - app-profile string
    - aa-sub-suppressible boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - capacity-cost number
    - characteristic reference
      - apply-groups reference
      - apply-groups-exclude reference
      - value reference
    - description string
    - divert boolean
  - app-qos-policy
    - entry number
      - action
        - abandon-tcp-optimization boolean
        - apply-groups reference
        - apply-groups-exclude reference
        - bandwidth-policer
          - anl reference
          - dual-bucket reference
          - single-bucket reference
        - dns-ip-cache reference
        - drop boolean
        - error-drop
          - event-log reference
        - flow-count-limit-policer
          - event-log reference
          - policer-name reference
        - flow-setup-rate-policer
          - event-log reference
          - policer-name reference
        - fragment-drop
          - drop-scope keyword
          - event-log reference
        - gtp-filter reference
        - http-enrich reference
        - http-error-redirect reference
        - http-notification reference
        - http-redirect
          - flow-type keyword
          - name reference
        - mirror-source
          - all-inclusive boolean
          - mirror-service reference
        - overload-drop
          - event-log reference
      - remark
        - dscp
          - in-profile keyword
          - out-profile keyword

```

configure application-assurance group partition policy app-qos-policy entry action remark fc

```

- fc keyword
- priority keyword
- sctp-filter reference
- session-filter reference
- tcp-mss-adjust number
- tcp-validate reference
- tls-enrich reference
- url-filter
  - characteristic reference
  - name reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
  - aa-sub
    - esm
      - eq string
      - neq string
    - esm-mac
      - eq string
      - neq string
    - sap
      - eq string
      - neq string
    - spoke-sdp
      - eq string
      - neq string
    - transit
      - eq string
      - neq string
  - aa-sub-tethering keyword
  - app-group
    - eq reference
    - neq reference
  - application
    - eq reference
    - neq reference
  - apply-groups reference
  - apply-groups-exclude reference
  - characteristic reference
    - apply-groups reference
    - apply-groups-exclude reference
    - eq reference
    - neq reference
  - charging-group
    - eq reference
    - neq reference
  - dscp
    - eq keyword
    - neq keyword
  - dst-ip
    - eq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
    - neq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
  - dst-port
    - eq
      - port-list reference
      - port-number number
      - range
        - end number

```

configure application-assurance group partition policy app-qos-policy entry match dst-port eq range start

```

    - start number
  - neq
    - port-list reference
    - port-number number
    - range
      - end number
      - start number
  - flow-attribute string
  - apply-groups reference
  - apply-groups-exclude reference
  - confidence
    - eq number
    - gte number
    - lt number
  - ip-protocol
    - eq (number | keyword)
    - neq (number | keyword)
  - src-ip
    - eq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
    - neq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
  - src-port
    - eq
      - port-list reference
      - port-number number
      - range
        - end number
        - start number
    - neq
      - port-list reference
      - port-number number
      - range
        - end number
        - start number
  - traffic-direction keyword
- app-service-options
  - characteristic string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-value string
    - value string
- application string
  - app-group reference
  - apply-groups reference
  - apply-groups-exclude reference
  - charging-group reference
  - description string
  - export-id number
- apply-groups reference
- apply-groups-exclude reference
- charging-filter
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - charging-group reference
    - description string
  - match
    - app-group
      - eq reference
      - neq reference

```

configure application-assurance group partition policy charging-filter entry match application

```

    - application
      - eq reference
      - neq reference
    - flow-attribute string
      - apply-groups reference
      - apply-groups-exclude reference
    - confidence
      - eq number
      - gte number
      - lt number
    - tethered-flow
  - charging-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - export-id number
    - notify-start-stop keyword
  - custom-protocol string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - expression number
      - apply-groups reference
      - apply-groups-exclude reference
      - direction keyword
      - eq string
      - offset number
    - ip-protocol keyword
  - default-charging-group reference
  - default-tethered-charging-group reference
  - policy-override
    - aa-sub
      - sap string
        - apply-groups reference
        - apply-groups-exclude reference
        - characteristic reference
          - apply-groups reference
          - apply-groups-exclude reference
          - value reference
        - spoke-sdp string
          - apply-groups reference
          - apply-groups-exclude reference
          - characteristic reference
            - apply-groups reference
            - apply-groups-exclude reference
            - value reference
        - transit string
          - apply-groups reference
          - apply-groups-exclude reference
          - characteristic reference
            - apply-groups reference
            - apply-groups-exclude reference
            - value reference
      - port-list string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - port number
        - range start number end number
      - sctp-filter string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string

```


configure application-assurance group partition sctp-filter event-log

- **event-log** *reference*
- **ppid**
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** (*number* | *keyword*)
- **ppid-range**
 - **max** *number*
 - **min** *number*
- **session-filter** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **default-action**
 - **action** *keyword*
 - **event-log** *reference*
- **description** *string*
- **entry** *number*
 - **action**
 - **deny**
 - **event-log** *reference*
 - **http-redirect** *reference*
 - **permit**
 - **tcp-optimizer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match**
 - **dst-ip**
 - **dns-ip-cache** *reference*
 - **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **ip-prefix-list** *reference*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **ip-protocol** (*number* | *keyword*)
 - **src-ip**
 - **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **ip-prefix-list** *reference*
 - **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **shallow-inspection** *boolean*
 - **statistics**
 - **aa-admit-deny**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **gtp-filter-stats** *boolean*
 - **policer-stats** *boolean*
 - **policer-stats-resources** *boolean*
 - **sctp-filter-stats** *boolean*

configure application-assurance group partition statistics aa-admit-deny session-filter-stats

- **session-filter-stats** *boolean*
- **tcp-validate-stats** *boolean*
- **aa-app-group**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
- **aa-application**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
- **aa-partition**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **tethering-stats** *boolean*
 - **traffic-type-stats** *boolean*
- **aa-protocol**
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
- **aa-sub**
 - **accounting-policy** *reference*
 - **aggregate-stats-export-using** *keyword*
 - **app-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **export-using** *keyword*
 - **application** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **export-using** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **charging-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **export-using** *keyword*
 - **collect-stats** *boolean*
 - **exclude-tcp-retrans** *boolean*
 - **max-throughput-stats** *boolean*
 - **protocol** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **export-using** *keyword*
 - **radius-accounting-policy** *reference*
 - **usage-monitoring** *boolean*
- **aa-sub-study** *keyword*
 - **aa-sub**
 - **esm** *string*
 - **esm-mac** *string*
 - **sap** *string*
 - **spoke-sdp** *string*
 - **transit** *string*
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
- **tcp-validate** *string*
 - **apply-groups** *reference*

configure application-assurance group partition tcp-validate apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **log**
 - **all** *boolean*
 - **event-log** *reference*
- **strict** *boolean*
- **tethering-detection**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **single-device**
 - **expected-ttl** *number*
- **threshold-crossing-alert**
 - **criteria** *keyword* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **gtp-filter** *reference* **criteria** *keyword* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **gtp-filter-entry** *reference* **entry-id** *number* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **policer** *string* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **sctp-filter** *reference* **criteria** *keyword* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **sctp-filter-entry** *reference* **entry-id** *reference* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **session-filter** *reference* **criteria** *keyword* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **session-filter-entry** *reference* **entry-id** *reference* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **tcp-validate** *reference* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **transit-ip-policy** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-app-profile** *reference*
 - **description** *string*
 - **detect-seen-ip** *boolean*

configure application-assurance group partition transit-ip-policy dhcp

- **dhcp**
 - **admin-state** *keyword*
- **diameter**
 - **admin-state** *keyword*
 - **application-policy** *reference*
- **ipv6-address-prefix-length** *number*
- **radius**
 - **admin-state** *keyword*
 - **authentication-policy** *reference*
 - **seen-ip-radius-acct-policy** *reference*
- **static-aa-sub** *string*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip** (*ipv4-unicast-address | ipv6-prefix*)
- **sub-ident-policy** *reference*
- **transit-auto-create**
 - **admin-state** *keyword*
 - **inactivity-monitor** *boolean*
- **transit-prefix-policy** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **aa-sub** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **match**
 - **aa-sub-ip** (*ipv4-prefix | ipv6-prefix*)
 - **network-ip** (*ipv4-prefix | ipv6-prefix*)
 - **static-aa-sub** *string*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **is-remote** *boolean*
- **waplx**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **policer**
 - **anl-bandwidth-policer** *string*
 - **action** *keyword*
 - **adaptation-rule**
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **mbs** *number*
 - **rate-percentage** *number*
 - **rate-percentage-stage-2** *number*
 - **dual-bucket-bandwidth-policer** *string*
 - **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** *number*
 - **cir** (*number | keyword*)
 - **congestion-override**
 - **cbs** *number*
 - **cir** (*number | keyword*)
 - **mbs** *number*
 - **pir** (*number | keyword*)
 - **congestion-override-stage-2**

configure application-assurance group policer dual-bucket-bandwidth-policer congestion-override-stage-2 cbs

```

- cbs number
- cir (number | keyword)
- mbs number
- pir (number | keyword)
- description string
- mbs number
- pir (number | keyword)
- time-of-day-override number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cbs number
  - cir (number | keyword)
  - description string
  - mbs number
  - pir (number | keyword)
  - time-range
    - daily
      - all-days
      - end string
      - on keyword
      - start string
    - weekly
      - end
      - day keyword
      - time string
      - start
      - day keyword
      - time string
- flow-count-limit-policer string
  - action keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - granularity keyword
  - limit-gtp-flows boolean
  - peak-flow-count (number | keyword)
  - time-of-day-override number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - peak-flow-count (number | keyword)
    - time-range
      - daily
        - all-days
        - end string
        - on keyword
        - start string
      - weekly
        - end
        - day keyword
        - time string
        - start
        - day keyword
        - time string
- flow-setup-rate-policer string
  - action keyword
  - adaptation-rule
    - peak-flow-setup-rate keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - flow-setup-rate-burst-size number

```

configure application-assurance group policer flow-setup-rate-policer granularity

- **granularity** *keyword*
- **peak-flow-setup-rate** (*number* | *keyword*)
- **time-of-day-override** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **flow-setup-rate-burst-size** *number*
 - **peak-flow-setup-rate** (*number* | *keyword*)
 - **time-range**
 - **daily**
 - **all-days**
 - **end** *string*
 - **on** *keyword*
 - **start** *string*
 - **weekly**
 - **end**
 - **day** *keyword*
 - **time** *string*
 - **start**
 - **day** *keyword*
 - **time** *string*
- **single-bucket-bandwidth-policer** *string*
 - **action** *keyword*
 - **adaptation-rule**
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **congestion-override**
 - **mbs** *number*
 - **pir** (*number* | *keyword*)
 - **congestion-override-stage-2**
 - **mbs** *number*
 - **pir** (*number* | *keyword*)
 - **description** *string*
 - **granularity** *keyword*
 - **mbs** *number*
 - **pir** (*number* | *keyword*)
 - **time-of-day-override** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **mbs** *number*
 - **pir** (*number* | *keyword*)
 - **time-range**
 - **daily**
 - **all-days**
 - **end** *string*
 - **on** *keyword*
 - **start** *string*
 - **weekly**
 - **end**
 - **day** *keyword*
 - **time** *string*
 - **start**
 - **day** *keyword*
 - **time** *string*
 - **tcp-optimizer** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dack-timeout** *number*
 - **description** *string*
 - **initial-cwnd** *number*

configure application-assurance group tcp-optimizer initial-ss-threshold

- **initial-ss-threshold** *(number | keyword)*
- **network-rtt-threshold** *number*
- **tcp-stack** *keyword*
- **url-filter** *string*
- **admin-state** *keyword*
- **apply-function-specific-behaviour** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **default-action**
 - **allow**
 - **block-all**
 - **block-http-redirect** *reference*
- **description** *string*
- **http-redirect** *reference*
- **http-request-filtering** *keyword*
- **icap**
 - **custom-x-header** *string*
 - **default-action**
 - **allow**
 - **block-all**
 - **block-http-redirect** *reference*
 - **http-redirect** *reference*
- **server** *(ipv4-address-no-zone | ipv6-address-no-zone)* **port** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
- **vlan-id** *number*
- **local-filtering**
 - **allow-list** *reference*
 - **deny-list** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action**
 - **allow**
 - **block-all**
 - **block-http-redirect** *reference*
 - **http-redirect** *reference*
- **web-service**
 - **category-set** *number*
 - **classification-overrides**
 - **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **category-name** *string*
 - **expression** *string*
 - **classifier** *keyword*
 - **default-action**
 - **allow**
 - **block-all**
 - **block-http-redirect** *reference*
 - **default-profile** *reference*
 - **dns-server** *(ipv4-address-no-zone | ipv6-address-no-zone)*
 - **fqdn** *string*
 - **http-redirect** *reference*
 - **profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block**
 - **category** *string*
 - **description** *string*
 - **vlan-id** *number*
- **url-list** *string*
- **admin-state** *keyword*

configure application-assurance group url-list apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **file** *string*
- **host-expressions** *boolean*
- **key** *string*
- **size** *keyword*
- **http-enrich**
 - **field** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **comment** *string*
- **http-error-redirect**
 - **error-code** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **comment** *string*
 - **template** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **comment** *string*
- **http-notification**
 - **template** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **comment** *string*
- **http-redirect**
 - **template** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **comment** *string*
- **protocol** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **radius-accounting-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **interim-update-interval** *number*
 - **radius-accounting-server**
 - **access-algorithm** *keyword*
 - **retry** *number*
 - **router-instance** *string*
 - **server** *number*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **port** *number*
 - **secret** *string*
 - **source-address** *string*
 - **timeout** *number*
 - **significant-change** *number*
- **usage-alert-thresholds**
 - **bit-rate-high-wmark** (*number* | *keyword*)
 - **bit-rate-low-wmark** *number*
 - **datapath-cpu-high-wmark** (*number* | *keyword*)
 - **datapath-cpu-low-wmark** *number*
 - **flow-setup-rate-high-wmark** (*number* | *keyword*)
 - **flow-setup-rate-low-wmark** *number*
 - **flow-table-high-wmark** *number*
 - **flow-table-low-wmark** *number*
 - **packet-rate-high-wmark** (*number* | *keyword*)
 - **packet-rate-low-wmark** *number*

3.2.1 application-assurance command descriptions

application-assurance

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

aarp [[aarp-id](#)] *number*

Synopsis	Enter the aarp list instance
Context	configure application-assurance aarp <i>number</i>
Tree	aarp
Description	Commands in this context define an Application Assurance Redundancy Protocol (AARP) instance. This instance is paired with the same AARP ID in a peer node, as part of the configuration to provide flow and packet asymmetry removal for traffic of a multi-homed SAP or spoke SDP.
Max. Instances	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[aarp-id\]](#) *number*

Synopsis	AARP ID
Context	configure application-assurance aarp <i>number</i>
Tree	aarp
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AARP instance
Context	configure application-assurance aarp <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance aarp <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

master-selection-mode *keyword*



WARNING:

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

Synopsis	AARP master selection mode
Context	configure application-assurance aarp <i>number</i> master-selection-mode <i>keyword</i>
Tree	master-selection-mode
Description	This command configures the AARP mode of operation with the peer instance. The modes affect the AARP state machine behavior according to the specified behavior.
Default	minimize-switchovers
Options	minimize-switchovers, inter-chassis-efficiency, priority-based-balance
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

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

Synopsis	AARP peer IP address
Context	configure application-assurance aarp <i>number</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Description	This command defines the IP address of the AARP peer router, which must be a routable system IP address. If no peer is configured when the AARP is administratively enabled, it is configured as a single node AARP instance.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-endpoint

Synopsis	Enter the peer-endpoint context
Context	configure application-assurance aarp <i>number</i> peer-endpoint
Tree	peer-endpoint
Description	Commands in this context specify the attributes of the peer endpoint parent AA subscriber of the AARP peer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap

Synopsis	Enable the sap context
Context	configure application-assurance aarp <i>number</i> peer-endpoint sap
Tree	sap
Notes	The following elements are part of a choice: sap or spoke-sdp .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encap-type *keyword*

Synopsis	Encapsulation type for peer endpoint SAP
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Context	configure application-assurance aarp <i>number</i> peer-endpoint sap encap-type <i>keyword</i>
Tree	encap-type
Options	null, dot1q, qinq
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-id *string*

Synopsis	AARP peer endpoint SAP ID
Context	configure application-assurance aarp <i>number</i> peer-endpoint sap sap-id <i>string</i>
Tree	sap-id
String Length	1 to 45
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp *string*

Synopsis	AARP peer endpoint spoke SDP
Context	configure application-assurance aarp <i>number</i> peer-endpoint spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	The following elements are part of a choice: sap or spoke-sdp .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority *number*



WARNING:

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

Synopsis	AARP priority
Context	configure application-assurance aarp <i>number</i> priority <i>number</i>

Tree	priority
Description	This command defines the priority for the AARP instance. The priority value is used to determine the master and backup upon initialization or rebalance.
Range	0 to 255
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cflowd

Synopsis	Enter the cflowd context
Context	configure application-assurance cflowd
Tree	cflowd
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the field list instance
Context	configure application-assurance cflowd field <i>string</i>
Tree	field
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd record field name
Context	configure application-assurance cflowd field <i>string</i>
Tree	field
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance cflowd field <i>string</i> comment <i>string</i>
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-attribute

Synopsis	Enter the flow-attribute context
Context	configure application-assurance flow-attribute
Tree	flow-attribute
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the attribute list instance
Context	configure application-assurance flow-attribute attribute <i>string</i>
Tree	attribute
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Attribute name
Context	configure application-assurance flow-attribute attribute <i>string</i>
Tree	attribute
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance flow-attribute attribute <i>string</i> comment <i>string</i>
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the group list instance
Context	configure application-assurance group <i>number</i>
Tree	group
Description	Commands in this context configure an Application Assurance group and partition parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[aa-group-id] *number*

Synopsis	AA group ID
Context	configure application-assurance group <i>number</i>
Tree	group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

certificate-profile [[cert-prof-name](#)] *string*

Synopsis	Enter the certificate-profile list instance
Context	configure application-assurance group <i>number</i> certificate-profile <i>string</i>
Tree	certificate-profile
Description	Commands in this context create a certificate profile to be used for certificate-based encryption in HTTP header enrichment.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[cert-prof-name] *string*

Synopsis AA group certificate profile name
Context **configure** [application-assurance group number](#) [certificate-profile string](#)
Tree [certificate-profile](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the AA certificate profile
Context **configure** [application-assurance group number](#) [certificate-profile string](#) **admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [application-assurance group number](#) [certificate-profile string](#) **description string**
Tree [description](#)
String Length 1 to 80
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

file string



WARNING:

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

Synopsis	Certificate file name
Context	configure application-assurance group number certificate-profile string file string
Tree	file
String Length	1 to 95
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cflowd

Synopsis	Enter the cflowd context
Context	configure application-assurance group number cflowd
Tree	cflowd
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of cflowd export
Context	configure application-assurance group number cflowd admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the collector list instance
Context	configure application-assurance group number cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number
Tree	collector

Description	Commands in this context configure flow data collectors for cflowd data. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address of the remote cflowd collector host
Context	configure application-assurance group <i>number</i> cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	collector
Description	This command configures the IP address of the remote cflowd collector host. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port number

Synopsis	Cflowd collector host port number
Context	configure application-assurance group <i>number</i> cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	collector
Description	This command configures the UDP port number used by the remote cflowd collector host. In the MD-CLI, the default port is 4739.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the cflowd export
Context	configure application-assurance group number cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comprehensive

Synopsis	Enter the comprehensive context
Context	configure application-assurance group number cflowd comprehensive
Tree	comprehensive
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate *number*

Synopsis	Cflowd flow sampling rate
Context	configure application-assurance group number cflowd comprehensive flow-rate number
Tree	flow-rate
Range	1 to 1000
Units	flows per second

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate-2 *number*

Synopsis Cflowd per-flow second sampling rate
Context **configure** [application-assurance group](#) *number* [cflowd comprehensive flow-rate-2 number](#)
Tree [flow-rate-2](#)
Range 1 to 1000
Units flows per second
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template

Synopsis Enter the **template** context
Context **configure** [application-assurance group](#) *number* [cflowd comprehensive template](#)
Tree [template](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis Enter the **dynamic-fields** context
Context **configure** [application-assurance group](#) *number* [cflowd comprehensive template dynamic-fields](#)
Tree [dynamic-fields](#)
Description Commands in this context configure the fields that are included in the exported cflowd template.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the dynamic fields

Context	configure application-assurance group <i>number</i> cflowd comprehensive template dynamic-fields admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for field
Context	configure application-assurance group <i>number</i> cflowd comprehensive template dynamic-fields field <i>string</i>
Tree	field
Description	This command adds a dynamic field to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group <i>number</i> cflowd comprehensive template dynamic-fields field <i>string</i>
Tree	field
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> • Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postIpprecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisdN sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId cellId timeZone aaChargingGrp flowAttr_video flowAttr_abr_service flowAttr_audio flowAttr_encrypted flowAttr_download flowAttr_upload flowAttr_realtime_communication aaSubTetheringState imei ipTTL imei roamingStatus mcc uli chargingChar plmnid customerId • When AA is deployed in FWA SR, the following value applies: ApnExtended • For the rtp-voice template only, the following values apply: flowStartSeconds flow Duration Milliseconds postIpprecedence aaProt aaApp aaAppGrp rtpBurstCount rtpAvgBurstLengthMs rtpGapCount rtpAvgGapLengthMs MAPDV RBurst RGap SSRC

- For the rtp-video template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpcPrecedence | aaProt | aaApp | aaAppGrp | rtpRefClockRate | MOSAV | VSTQ | estimatedPSNR | GoPType | avgGoPLength | avgInterIframeGap | imageWidth | imageHeight | frameRate | slicesPerIframe | SSRC | videoInterlaced | IFrameReceived | IFrameImpaired | PFrameReceived | PFrameImpaired | BFrameReceived | BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired | frameInterArrivalJitter | IFrameInterArrivalJitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpcPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthPkts | rtpGapCount | rtpAvgGapLengthPkts | PPDVM | rtpNumAudioChannels | rtpRefClockRate | rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEstDelay | tcpRetransmittedBytes | tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection keyword

Synopsis Field selection method

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [comprehensive](#) [template](#) [field-selection](#) *keyword*

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the exported cflowd template.

Default legacy

Options legacy, dynamic

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direct-export

Synopsis Enter the **direct-export** context

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [direct-export](#)

Tree [direct-export](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collector [[collector-id](#)] *number*

Synopsis	Enter the collector list instance
Context	configure application-assurance group number cflowd direct-export collector number
Tree	collector
Max. Instances	16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[collector-id] *number*

Synopsis	Cflowd direct export collector ID
Context	configure application-assurance group number cflowd direct-export collector number
Tree	collector
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the address list instance
Context	configure application-assurance group number cflowd direct-export collector number address (ipv4-address-no-zone ipv6-address-no-zone) port number
Tree	address
Description	Commands in this context configure the cflowd direct export collector IP address. In the current release, the system supports IPv4 addresses only for the cflowd direct export collector.
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address of the remote cflowd collector host
Context	configure application-assurance group number cflowd direct-export collector number address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number
Tree	address
Description	This command configures the IP address of the remote cflowd collector host. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port number

Synopsis	Cflowd collector host port number
Context	configure application-assurance group number cflowd direct-export collector number address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number
Tree	address
Description	This command configures the UDP port number used by the remote cflowd collector host. In the MD-CLI, the default port is 4739.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the direct export collector
Context	configure application-assurance group number cflowd direct-export collector number address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number admin-state keyword
Tree	admin-state
Description	This command sets the administrative state of the cflowd direct export collector. In the current release, the system supports IPv4 addresses only for the cflowd direct export collector.

Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description of the collector
Context	configure application-assurance group number cflowd direct-export collector number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number*

Synopsis	Cflowd direct export VLAN ID
Context	configure application-assurance group number cflowd direct-export vlan-id number
Tree	vlan-id
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-override

Synopsis	Enter the export-override context
Context	configure application-assurance group number cflowd export-override
Tree	export-override
Description	<p>Commands in this context configure the AA subtype used in the cflowd record export. The cflowd statistics exported to the cflowd collector look identical to AA for the type of system defined by the mode. The following cflowd export fields are affected:</p> <ul style="list-style-type: none"> • The cflowd export observation point (field 138) mode is derived from the export-override category that is selected. • The cflowd export AA_Subscriber_Type (field 12) mode is modified as configured, using existing field types.

- The cflowd interface name is used as the sub-ID field, optionally modified to use the configured **mode** and **prefix** commands for global identifiers.

All AA cflowd record types are affected by export override. To change the export override or prefix, cflowd must first be disabled. When this command is set back to the default, the prefix is also set back to its default.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode keyword



WARNING:

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

Synopsis AA cflowd export override mode
Context **configure** application-assurance group number cflowd export-override mode keyword
Tree mode
Description This command specifies the type of system emulated for the cflowd export.
Options mobile, ifname-obfuscate
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix string



WARNING:

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

Synopsis AA group cflowd export override prefix
Context **configure** application-assurance group number cflowd export-override prefix string
Tree prefix
Description This command specifies the prefix-string associated with the export override. The prefix string specifies up to an 8 character string. If the 8 character prefix is "ABCDEFG_" for a particular node, the cflowd export override would generate IPv4 interface names such as ABCDEF_G_255.255.255.255 or IPv6 as ABCDEF_G_2001:DB8:EF01:2345::/64. By default, the prefix is left blank.
String Length 1 to 8
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

obfuscation

Synopsis	Enter the obfuscation context
Context	configure application-assurance group number cflowd obfuscation
Tree	obfuscation
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aes-128-encryption-key *string*

Synopsis	AES-128 encryption key
Context	configure application-assurance group number cflowd obfuscation aes-128-encryption-key string
Tree	aes-128-encryption-key
Description	This command specifies the AES-128 key used to encrypt export cflowd fields.
String Length	51
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aes-256-encryption-key *string*

Synopsis	AES-256 encryption key
Context	configure application-assurance group number cflowd obfuscation aes-256-encryption-key string
Tree	aes-256-encryption-key
Description	This command specifies the AES-256 key used to encrypt exported cflowd fields.
String Length	71
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtp-performance

Synopsis	Enter the rtp-performance context
Context	configure application-assurance group number cflowd rtp-performance
Tree	rtp-performance

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

audio-template

Synopsis Enter the **audio-template** context
Context **configure** [application-assurance group number cflowd rtp-performance audio-template](#)
Tree [audio-template](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis Enter the **dynamic-fields** context
Context **configure** [application-assurance group number cflowd rtp-performance audio-template dynamic-fields](#)
Tree [dynamic-fields](#)
Description Commands in this context configure dynamic fields to be included in the exported cflowd template.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the dynamic fields
Context **configure** [application-assurance group number cflowd rtp-performance audio-template dynamic-fields admin-state keyword](#)
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Add a list entry for **field**

Context	configure application-assurance group <i>number</i> cflowd rtp-performance audio-template dynamic-fields field <i>string</i>
Tree	field
Description	This command adds a list entry for fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group <i>number</i> cflowd rtp-performance audio-template dynamic-fields field <i>string</i>
Tree	field
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> • Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postIpPrecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisdn sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId cellId timeZone aaChargingGrp flowAttr_video flowAttr_abr_service flowAttr_audio flowAttr_encrypted flowAttr_download flowAttr_upload flowAttr_realtime_communication aaSubTetheringState imei ipTTL imei roamingStatus mcc uli chargingChar plmnid customerId • When AA is deployed in FWA SR, the following value applies: ApnExtended • For the rtp-voice template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurstCount rtpAvgBurstLengthMs rtpGapCount rtpAvgGapLengthMs MAPDV RBurst RGap SSRC • For the rtp-video template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpRefClock Rate MOSAV VSTQ estimatedPSNR GoPType avgGoPLength avgInterIframe Gap imageWidth imageHeight frameRate slicesPerIframe SSRC video Interlaced IFrameReceived IFrameImpaired PFrameReceived PFrameImpaired BFrameReceived BFrameImpaired SIFrameReceived SIFrameImpaired SPFrameReceived SPFrameImpaired frameInterArrivalJitter IFrameInterArrival Jitter avgFrameArrivalDelay • For the rtp-audio template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurst Count rtpAvgBurstLengthPkts rtpGapCount rtpAvgGapLengthPkts PPDVM rtp NumAudioChannels rtpRefClockRate rtpPeakAudioBw SSRC hostName • For volume and comprehensive templates, the following values apply: tcpSessionEst Delay tcpRetransmittedBytes tcpRetransmittedPackets

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	configure application-assurance group <i>number</i> cflowd rtp-performance audio-template field-selection <i>keyword</i>
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Default	legacy
Options	legacy, dynamic
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate *number*

Synopsis	Cflowd flow sampling rate
Context	configure application-assurance group <i>number</i> cflowd rtp-performance flow-rate <i>number</i>
Tree	flow-rate
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate-2 *number*

Synopsis	Cflowd per-flow second sampling rate
Context	configure application-assurance group <i>number</i> cflowd rtp-performance flow-rate-2 <i>number</i>
Tree	flow-rate-2
Range	1 to 1000

Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

video-template

Synopsis	Enter the video-template context
Context	configure application-assurance group number cflowd rtp-performance video-template
Tree	video-template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the dynamic-fields context
Context	configure application-assurance group number cflowd rtp-performance video-template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	configure application-assurance group number cflowd rtp-performance video-template dynamic-fields admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field [field-name] string

Synopsis	Add a list entry for field
Context	configure application-assurance group number cflowd rtp-performance video-template dynamic-fields field string
Tree	field
Description	This command adds a list entry for the fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] string

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group number cflowd rtp-performance video-template dynamic-fields field string
Tree	field
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> • Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postIpPrecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisdn sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId cellId timeZone aaChargingGrp flowAttr_video flowAttr_abr_service flowAttr_audio flowAttr_encrypted flowAttr_download flowAttr_upload flowAttr_realtime_communication aaSubTetheringState imei ipTTL imei roamingStatus mcc uli chargingChar plmnid customerId • When AA is deployed in FWA SR, the following value applies: ApnExtended • For the rtp-voice template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurstCount rtpAvgBurstLengthMs rtpGapCount rtpAvgGapLengthMs MAPDV RBurst RGap SSRC • For the rtp-video template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpRefClock Rate MOSAV VSTQ estimatedPSNR GoPType avgGoPLength avgInterIFrame Gap imageWidth imageHeight frameRate slicesPerIFrame SSRC video Interlaced IFrameReceived IFrameImpaired PFrameReceived PFrameImpaired BFrameReceived BFrameImpaired SIFrameReceived SIFrameImpaired SPFrameReceived SPFrameImpaired frameInterArrivalJitter IFrameInterArrival Jitter avgFrameArrivalDelay • For the rtp-audio template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurst Count rtpAvgBurstLengthPkts rtpGapCount rtpAvgGapLengthPkts PPDVM rtp NumAudioChannels rtpRefClockRate rtpPeakAudioBw SSRC hostName

- For volume and comprehensive templates, the following values apply: tcpSessionEst Delay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	configure application-assurance group number cflowd rtp-performance video-template field-selection keyword
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Default	legacy
Options	legacy, dynamic
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

voice-template

Synopsis	Enter the voice-template context
Context	configure application-assurance group number cflowd rtp-performance voice-template
Tree	voice-template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the dynamic-fields context
Context	configure application-assurance group number cflowd rtp-performance voice-template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	configure application-assurance group <i>number</i> cflowd rtp-performance voice-template dynamic-fields admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for field
Context	configure application-assurance group <i>number</i> cflowd rtp-performance voice-template dynamic-fields field <i>string</i>
Tree	field
Description	This command adds a cflowd record field to the list included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group <i>number</i> cflowd rtp-performance voice-template dynamic-fields field <i>string</i>
Tree	field
Description	This command specifies the name of the field to be included in the exported cflowd template. <ul style="list-style-type: none"> Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postIIPPrecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisdn sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId

cellId | timeZone | aaChargingGrp | flowAttr_video | flowAttr_abr_service | flowAttr_audio | flowAttr_encrypted | flowAttr_download | flowAttr_upload | flowAttr_realtime_communication | aaSubTetheringState | imei | ipTTL | imei_roamingStatus | mcc | uli | chargingChar | plmnid | customerId

- When AA is deployed in FWA SR, the following value applies: ApnExtended
- For the rtp-voice template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthMs | rtpGapCount | rtpAvgGapLengthMs | MAPDV | RBurst | RGap | SSRC
- For the rtp-video template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpRefClockRate | MOSAV | VSTQ | estimatedPSNR | GoPType | avgGoPLength | avgInterFrameGap | imageWidth | imageHeight | frameRate | slicesPerIFrame | SSRC | videoInterlaced | IFrameReceived | IFrameImpaired | PFrameReceived | PFrameImpaired | BFrameReceived | BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired | frameInterArrivalJitter | IFrameInterArrivalJitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthPkts | rtpGapCount | rtpAvgGapLengthPkts | PPDVM | rtpNumAudioChannels | rtpRefClockRate | rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEstDelay | tcpRetransmittedBytes | tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis Field selection method

Context **configure** [application-assurance group](#) *number* [cflowd](#) [rtp-performance](#) [voice-template](#) **field-selection** *keyword*

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the exported cflowd template.

Default legacy

Options legacy, dynamic

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-performance

Synopsis	Enter the tcp-performance context
Context	configure application-assurance group number cflowd tcp-performance
Tree	tcp-performance
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate *number*

Synopsis	Cflowd flow sampling rate
Context	configure application-assurance group number cflowd tcp-performance flow-rate number
Tree	flow-rate
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate-2 *number*

Synopsis	Cflowd per-flow second sampling rate
Context	configure application-assurance group number cflowd tcp-performance flow-rate-2 number
Tree	flow-rate-2
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template

Synopsis	Enter the template context
Context	configure application-assurance group number cflowd tcp-performance template
Tree	template
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis Enter the **dynamic-fields** context

Context **configure** [application-assurance group number cflowd tcp-performance template dynamic-fields](#)

Tree [dynamic-fields](#)

Description Commands in this context configure the fields to be included in the exported cflowd template.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the dynamic fields

Context **configure** [application-assurance group number cflowd tcp-performance template dynamic-fields admin-state keyword](#)

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Add a list entry for **field**

Context **configure** [application-assurance group number cflowd tcp-performance template dynamic-fields field string](#)

Tree [field](#)

Description This command adds a list entry for fields to include in the exported cflowd template.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group number cflowd tcp-performance template dynamic-fields field <i>string</i>
Tree	field
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> • Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postIppPrecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisdn sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId cellId timeZone aaChargingGrp flowAttr_video flowAttr_abr_service flowAttr_audio flowAttr_encrypted flowAttr_download flowAttr_upload flowAttr_realtime_communication aaSubTetheringState imei ipTTL imei roamingStatus mcc uli chargingChar plmnid customerId • When AA is deployed in FWA SR, the following value applies: ApnExtended • For the rtp-voice template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIppPrecedence aaProt aaApp aaAppGrp rtpBurstCount rtpAvgBurstLengthMs rtpGapCount rtpAvgGapLengthMs MAPDV RBurst RGap SSRC • For the rtp-video template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIppPrecedence aaProt aaApp aaAppGrp rtpRefClock Rate MOSAV VSTQ estimatedPSNR GoPType avgGoPLength avgInterFrame Gap imageWidth imageHeight frameRate slicesPerFrame SSRC video Interlaced IFrameReceived IFrameImpaired PFrameReceived PFrameImpaired BFrameReceived BFrameImpaired SIFrameReceived SIFrameImpaired SPFrameReceived SPFrameImpaired frameInterArrivalJitter IFrameInterArrival Jitter avgFrameArrivalDelay • For the rtp-audio template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIppPrecedence aaProt aaApp aaAppGrp rtpBurst Count rtpAvgBurstLengthPkts rtpGapCount rtpAvgGapLengthPkts PPDVM rtp NumAudioChannels rtpRefClockRate rtpPeakAudioBw SSRC hostName • For volume and comprehensive templates, the following values apply: tcpSessionEst Delay tcpRetransmittedBytes tcpRetransmittedPackets
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	configure application-assurance group number cflowd tcp-performance template field-selection keyword
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Default	legacy
Options	legacy, dynamic
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template-retransmit *number*

Synopsis	Template retransmit time
Context	configure application-assurance group number cflowd template-retransmit number
Tree	template-retransmit
Range	10 to 600
Default	600
Units	seconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

volume

Synopsis	Enter the volume context
Context	configure application-assurance group number cflowd volume
Tree	volume
Description	Commands in this context configure the cflowd volume export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate *number*

Synopsis	Cflowd packet sampling rate
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Context	configure application-assurance group number cflowd volume rate number
Tree	rate
Range	1 to 10000
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template

Synopsis	Enter the template context
Context	configure application-assurance group number cflowd volume template
Tree	template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the dynamic-fields context
Context	configure application-assurance group number cflowd volume template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	configure application-assurance group number cflowd volume template dynamic-fields admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field [**field-name**] *string*

Synopsis	Add a list entry for field
Context	configure application-assurance group <i>number</i> cflowd volume template dynamic-fields field <i>string</i>
Tree	field
Description	This command adds a list entry for the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group <i>number</i> cflowd volume template dynamic-fields field <i>string</i>
Tree	field
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> • Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postIpPrecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisdn sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId cellId timeZone aaChargingGrp flowAttr_video flowAttr_abr_service flowAttr_audio flowAttr_encrypted flowAttr_download flowAttr_upload flowAttr_realtime_communication aaSubTetheringState imei ipTTL imei roamingStatus mcc uli chargingChar plmnid customerId • When AA is deployed in FWA SR, the following value applies: ApnExtended • For the rtp-voice template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurstCount rtpAvgBurstLengthMs rtpGapCount rtpAvgGapLengthMs MAPDV RBurst RGap SSRC • For the rtp-video template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpRefClock Rate MOSAV VSTQ estimatedPSNR GoPType avgGoPLength avgInterIframe Gap imageWidth imageHeight frameRate slicesPerIframe SSRC video Interlaced IFrameReceived IFrameImpaired PFrameReceived PFrameImpaired BFrameReceived BFrameImpaired SIFrameReceived SIFrameImpaired SPFrameReceived SPFrameImpaired frameInterArrivalJitter IFrameInterArrival Jitter avgFrameArrivalDelay • For the rtp-audio template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurst

Count| rtpAvgBurstLengthPkts | rtpGapCount |rtpAvgGapLengthPkts | PPDVM | rtp
NumAudioChannels |rtpRefClockRate |rtpPeakAudioBw | SSRC | hostName

- For volume and comprehensive templates, the following values apply: tcpSessionEst
Delay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	configure application-assurance group <i>number</i> cflowd volume template field-selection <i>keyword</i>
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Default	legacy
Options	legacy, dynamic
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache [[dns-ip-cache-name](#)] *string*

Synopsis	Enter the dns-ip-cache list instance
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i>
Tree	dns-ip-cache
Description	Commands in this context configure a DNS IP cache that is used to snoop DNS requests generated by subscribers, to populate a cache of IP addresses that match a specified list of domain names. In the context of strengthening URL-content charging, Operators may also specify a list of trusted DNS servers to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[dns-ip-cache-name] *string*

Synopsis	DNS IP cache name within the AA group
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Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i>
Tree	dns-ip-cache
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA DNS IP cache object
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-match

Synopsis	Enter the dns-match context
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> dns-match
Tree	dns-match
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

domain [**domain-name**] *string*

Synopsis	Enter the domain list instance
Context	configure application-assurance group number dns-ip-cache string dns-match domain string
Tree	domain
Description	Commands in this context configure a domain expression to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[domain-name] *string*

Synopsis	DNS IP cache domain name
Context	configure application-assurance group number dns-ip-cache string dns-match domain string
Tree	domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expression *string*

Synopsis	AA DNS domain expression to match
Context	configure application-assurance group number dns-ip-cache string dns-match domain string expression string
Tree	expression
Description	This command specifies a domain name expression string used to define a pattern match. The domain expression uses the same syntax as the expressions used in configure application-assurance group partition policy app-filter entry app-filters configuration.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trusted-server-address [[dns-server-address](#)] ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	Enter the trusted-server-address list instance
Context	configure application-assurance group number dns-ip-cache string dns-match trusted-server-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	trusted-server-address
Description	Commands in this context configure a trusted DNS server address. DNS responses from this DNS server are used to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[dns-server-address] ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	Trusted DNS server address
Context	configure application-assurance group number dns-ip-cache string dns-match trusted-server-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	trusted-server-address
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server-name *string*

Synopsis	DNS server name
Context	configure application-assurance group number dns-ip-cache string dns-match trusted-server-address (ipv4-address-no-zone ipv6-address-no-zone) server-name string
Tree	server-name
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-cache

Synopsis	Enter the ip-cache context
Context	configure application-assurance group number dns-ip-cache string ip-cache
Tree	ip-cache

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark value for the DNS IP cache
Context	configure application-assurance group number dns-ip-cache string ip-cache high-watermark number
Tree	high-watermark
Description	This command configures the high watermark value for the DNS IP cache. When the number of cached IP addresses exceeds the threshold, the system generates a trap.
Range	0 to 100
Default	90
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark value for the DNS IP cache
Context	configure application-assurance group number dns-ip-cache string ip-cache low-watermark number
Tree	low-watermark
Description	This command configures the low watermark value for the DNS IP cache. When the number of cached IP addresses exceeds the high watermark threshold, the system generates a trap based on the high watermark. The trap clears after the number of cached IP addresses drops below the configured low watermark value.
Range	0 to 100
Default	80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

size *number*

Synopsis	Maximum number of IP addresses stored in the cache
Context	configure application-assurance group number dns-ip-cache string ip-cache size number
Tree	size

Range	10 to 64000
Default	10
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for static-address
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> ip-cache static-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	static-address
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[static-ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Trusted IP address for the DNS IP cache
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> ip-cache static-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	static-address
Description	This command configures an IP address to be used as a trusted IP address. For packets whose destination IP address matches that of the trusted IP address, a cache hit is assumed.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich [[http-enrich-name](#)] *string*

Synopsis	Enter the http-enrich list instance
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i>
Tree	http-enrich
Description	Commands in this context configure the attributes of the HTTP enrichment policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[http-enrich-name] *string*

Synopsis	HTTP header enrichment policy name
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i>
Tree	http-enrich
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the HTTP enrichment policy
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the field list instance
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i> field <i>string</i>
Tree	field
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis Field name to insert into the HTTP header

Context **configure** *application-assurance group number http-enrich string field string*

Tree *field*

Description This command specifies the field type to insert into the HTTP header. The command must be repeated for each field to be inserted. The same field cannot be inserted twice into the header under different header names.

Note: AA can insert two copies of the following fields in the same HTTP header (with a different header name):

imei-hyphenated, imei-hyphenated-2, imsi, imsi-2, static-string, static-string-2, user-location-raw, and user-location-raw2.

The following field types are supported in any deployment:

static-string - header name for the inserted string

static-string-2 - header name for the inserted string

subscriber-id - header name for the subscriber ID

subscriber-ip - header name for the subscriber IP address

The following field types are supported in Fixed Wireless Access (FWA) deployments only:

apn - complete APN string

apn-ni - APN Network Identifier (APN-NI) used by the UE

billing-type - UE charging type (charging characteristics)

dynamic-acr - dynamic Anonymous Customer Record (ACR)

static-acr - static ACR

imei-hyphenated - subscriber IMEI with format AABBBBBB-CCCCCC-EE

imei-hyphenated-2 - subscriber IMEI with format AABBBBBB-CCCCCC-EE

imei-sv - subscriber IMEI with format AABBBBBBCCCCCEE

imsi - subscriber IMSI

imsi-2 - subscriber IMSI

msisdn - subscriber MSISDN

msisdn-ts - subscriber MSISDN appended with the UNIX timestamp

msisdn-without-cc - subscriber MSISDN without a country code

pgw-ggsn-address - PGW/GGSN address serving the UE

plmn-id - Public Land Mobile Network (PLMN) ID of the SGSN/MME

rat-type - Radio Access Technology (RAT) type

timestamp - timestamp inserted in UNIX time format; for example, 1531204313

user-location - UE LOCATION (ULI)
 user-location-3gpp - ULI encoded as defined in 3GPP 29.061
 user-location-raw - ULI in raw format:<ULI-TYPE1>[+<ULI-TYPE2>]=<ULI HEX>
 Example: x-locinfo: TAI+ECGI=1300622c46130062014adf16
 user-location-raw-2 - ULI in raw format:<ULI-TYPE1>[+<ULI-TYPE2>]=<ULI HEX>
 Example: x-locinfo: TAI+ECGI=1300622c46130062014adf16

String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aes-initialization-vector *string*

Synopsis Initialization vector for the AES CBC encryption
 Context **configure** [application-assurance group number http-enrich string field string aes-initialization-vector string](#)
 Tree [aes-initialization-vector](#)
 Description This command configures the initialization vector used for the AES CBC encryption. The vector consists of 34 characters, that is, 0x followed by exactly 32 hexadecimal characters.
 String Length 34
 Introduced 22.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *boolean*

Synopsis Enable anti-spoofing
 Context **configure** [application-assurance group number http-enrich string field string anti-spoof boolean](#)
 Tree [anti-spoof](#)
 Description When configured to **true**, this command enables the HTTP header enrichment anti-spoofing functionality.
 Default false
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-line-id *boolean*

Synopsis	Enable calling line identification
Context	configure application-assurance group number http-enrich string field string calling-line-id boolean
Tree	calling-line-id
Description	When configured to true , this command configures the HTTP header for “x-up-calling-line-id” anti-spoofing.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encode

Synopsis	Enter the encode context
Context	configure application-assurance group number http-enrich string field string encode
Tree	encode
Description	Commands in this context configure the encoding applied to the HTTP header enrichment field.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name used for encryption
Context	configure application-assurance group number http-enrich string field string encode cert-profile reference
Tree	cert-profile
Reference	configure application-assurance group number certificate-profile string
Notes	The following elements are part of a choice: cert-profile or key .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key

Synopsis	Enter the key context
Context	configure application-assurance group number http-enrich string field string encode key

Tree	key
Description	Commands in this context configure the encryption fields.
Notes	The following elements are part of a choice: cert-profile or key .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Encoding type
Context	configure application-assurance group number http-enrich string field string encode key type keyword
Tree	type
Description	This command configures the encoding/ encryption method.
Options	md5, rc4, rc4-md5-base64, aes128, aes256, aes128cbc, aes256cbc
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *string*

Synopsis	Secret key for encrypting the field
Context	configure application-assurance group number http-enrich string field string encode key value string
Tree	value
String Length	1 to 114
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

md5-salt *string*

Synopsis	MD5 salt string
Context	configure application-assurance group number http-enrich string field string md5-salt string
Tree	md5-salt
Description	This command configures an MD5 salt string. The configured string is appended to the parameter before performing MD5 hashing of the field.
String Length	1 to 16

Introduced 22.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*



WARNING:

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

Synopsis HTTP header field name
Context **configure** [application-assurance](#) [group](#) [number](#) [http-enrich](#) [string](#) [field](#) [string](#) [name](#) [string](#)
Tree [name](#)
String Length 1 to 32
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-string *string*

Synopsis HTTP header enrichment template field static string
Context **configure** [application-assurance](#) [group](#) [number](#) [http-enrich](#) [string](#) [field](#) [string](#) [static-string](#) [string](#)
Tree [static-string](#)
String Length 1 to 16
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type-enrichment

Synopsis Enter the **rat-type-enrichment** context
Context **configure** [application-assurance](#) [group](#) [number](#) [http-enrich](#) [string](#) [rat-type-enrichment](#)
Tree [rat-type-enrichment](#)
Description Commands in this context configure Radio Access Type (RAT) enrichment.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type [[rat-type-name](#)] *keyword*

Synopsis	Enter the rat-type list instance
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i> rat-type-enrichment rat-type <i>keyword</i>
Tree	rat-type
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[rat-type-name] *keyword*

Synopsis	RAT type name
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i> rat-type-enrichment rat-type <i>keyword</i>
Tree	rat-type
Description	This command configures a customised RAT value for the specified RAT-Type.
Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-string *string*

Synopsis	Customised RAT type value
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i> rat-type-enrichment rat-type <i>keyword</i> rat-string <i>string</i>
Tree	rat-string
String Length	1 to 31
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-error-redirect [[http-error-redirect-name](#)] *string*

Synopsis	Enter the http-error-redirect list instance
Context	configure application-assurance group <i>number</i> http-error-redirect <i>string</i>

Tree	http-error-redirect
Description	Commands in this context configure an HTTP error redirect policy that contains important information relevant to the redirect server.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[http-error-redirect-name] string

Synopsis	HTTP error redirect policy name
Context	configure application-assurance group <i>number</i> http-error-redirect <i>string</i>
Tree	http-error-redirect
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the HTTP error redirect object
Context	configure application-assurance group <i>number</i> http-error-redirect <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure application-assurance group <i>number</i> http-error-redirect <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

error-code [**error-code-value**] *number*

Synopsis	Enter the error-code list instance
Context	configure application-assurance group number http-error-redirect string error-code number
Tree	error-code
Description	Commands in this context configure the HTTP error status codes to which a redirect action is applied. Only messages with sizes less than that configured for the custom-message-size command are eligible for redirect action.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[error-code-value] *number*

Synopsis	HTTP error code value for an HTTP error redirect
Context	configure application-assurance group number http-error-redirect string error-code number
Tree	error-code
Range	400 to 999
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

custom-message-size *number*

Synopsis	HTTP error redirect error code custom message size
Context	configure application-assurance group number http-error-redirect string error-code number custom-message-size number
Tree	custom-message-size
Description	This command specifies the maximum message size above which an HTTP error redirect is not performed.
Max. Range	0 to 4294967295
Default	1024
Units	octets
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-host *string*

Synopsis	HTTP host for the HTTP error redirect object
Context	configure application-assurance group <i>number</i> http-error-redirect string http-host string
Tree	http-host
Description	This command specifies the HTTP hostname of the landing server (Barefruit or Xerocole). It is used in the HTTP GET operation from the client (which is being redirected) to the redirect search landing server. The hostname must contain a valid IP address or HTTP hostname or URI for the HTTP GET from the client to the landing server.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

participant-id *string*

Synopsis	Participant ID for the HTTP error redirect object
Context	configure application-assurance group <i>number</i> http-error-redirect string participant-id string
Tree	participant-id
Description	This command specifies a string assigned to the operator by Barefruit. It is used by Barefruit landing servers (applies to template # 1 only).
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template *number*

Synopsis	Template ID for the HTTP error redirect object
Context	configure application-assurance group <i>number</i> http-error-redirect string template number
Tree	template
Description	This command configures the template of parameters passed from the AA-ISA to the redirect server using JavaScript in the redirect packet. The template is specific to the redirect server used in the network. Currently, two partners are supported with AA-ISA redirect solution, Barefruit, and Xerocole.
Max. Range	0 to 4294967295
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-notification [[http-notification-name](#)] *string*

Synopsis Enter the **http-notification** list instance

Context **configure** [application-assurance group number http-notification string](#)

Tree [http-notification](#)

Description Commands in this context configure an HTTP notification object for the subscriber in-browser notification.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[http-notification-name] *string*

Synopsis HTTP notification policy name

Context **configure** [application-assurance group number http-notification string](#)

Tree [http-notification](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the AA HTTP notification object

Context **configure** [application-assurance group number http-notification string admin-state keyword](#)

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context	configure application-assurance group number http-notification string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval (*number* | *keyword*)

Synopsis	Minimum HTTP response notification interval
Context	configure application-assurance group number http-notification string interval (number keyword)
Tree	interval
Range	1 to 1440
Default	one-time
Units	minutes
Options	one-time
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

script-url *string*

Synopsis	Script URL inserted into the HTTP response
Context	configure application-assurance group number http-notification string script-url string
Tree	script-url
Description	This command configures the URL of the script used by the HTTP notification policy.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template *number*

Synopsis	Template ID for the AA HTTP notification object
Context	configure application-assurance group number http-notification string template number
Tree	template

Description	This command configures the template that defines the format and attributes included in the HTTP notification message.
Max. Range	0 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect [[http-redirect-name](#)] *string*

Synopsis	Enter the http-redirect list instance
Context	configure application-assurance group <i>number</i> http-redirect <i>string</i>
Tree	http-redirect
Description	Commands in this context configure the parameters of the HTTP redirect policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[http-redirect-name] *string*

Synopsis	HTTP redirect policy name
Context	configure application-assurance group <i>number</i> http-redirect <i>string</i>
Tree	http-redirect
Description	This command specifies the applied HTTP redirect name. If no redirect name is specified, HTTP redirect is not enabled.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA HTTP redirect object
Context	configure application-assurance group <i>number</i> http-redirect <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

captive-redirect

Synopsis Enter the **captive-redirect** context

Context **configure** [application-assurance group number](#) [http-redirect string](#) [captive-redirect](#)

Tree [captive-redirect](#)

Description Commands in this context configure the captive redirect capability for an HTTP redirect policy. HTTP redirect policies using captive redirect can be used in conjunction with a session-filter policy to terminate TCP flows in the ISA-AA card before reaching the Internet to redirect subscribers to the predefined redirect URL.

Non-HTTP TCP flows are TCP reset. Captive redirect uses the provisioned VLAN ID to send the HTTP response to subscribers; therefore, this VLAN ID must be properly assigned in the same VPN as the subscriber.

The operator can select the URL arguments to include in the redirect URL using either a specific template ID or by configuring the redirect URL using a supported macro substitution keyword.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id number

Synopsis Captive redirect VLAN ID

Context **configure** [application-assurance group number](#) [http-redirect string](#) [captive-redirect vlan-id number](#)

Tree [vlan-id](#)

Description This command configures the VLAN ID for a captive redirect. Captive redirect uses the provisioned VLAN ID to send the HTTP response to subscribers; therefore, this VLAN ID must be properly assigned in the same VPN as the subscriber.

Range 1 to 4094

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis Text description

Context **configure** [application-assurance group number](#) [http-redirect string](#) [description string](#)

Tree [description](#)

String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redirect-https *boolean*

Synopsis	Enable HTTPS redirect
Context	configure application-assurance group number http-redirect string redirect-https <i>boolean</i>
Tree	redirect-https
Description	When set to true , the HTTP redirect policy redirects HTTPS sessions to the configured redirect URL.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redirect-url *string*

Synopsis	HTTP redirect URL
Context	configure application-assurance group number http-redirect string redirect-url <i>string</i>
Tree	redirect-url
Description	<p>This command configures the HTTP redirect URL which is the URL (page) that the user is redirected to when an HTTP redirect takes effect.</p> <p>The operator can select the URL arguments to include in the redirect URL, using either a specific template ID or by configuring any of the following macro substitution keywords:</p> <ul style="list-style-type: none"> • \$URL - The Request-URI in the HTTP GET Request received • \$SUB - The subscriber ID • \$IP - The IP address of the subscriber host • \$RTRID - The router ID • \$URLPRM - The HTTP URL parameter associated with the subscriber • \$MAC - The UE MAC address • \$SAP - The UE SAP • \$CID - The circuit ID or interface ID of the subscriber • \$RID - The remote ID of the subscriber • \$CATID - The URL filter web-service rating category identifier • \$CATNAME - The URL filter web-service rating category name

Only ESM and ESM-MAC sub types support \$MAC, \$SAP, \$CID, and \$RID macro substitution.

String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-client-reset *boolean*

Synopsis	Enable TCP client reset
Context	configure application-assurance group number http-redirect string tcp-client-reset <i>boolean</i>
Tree	tcp-client-reset
Description	When set to true , this command enables an HTTP-redirect policy to initiate a TCP reset towards the client if the AA policy results in a redirect with packet drop but the HTTP redirect cannot be delivered. Scenarios for this include HTTP (TLS) sessions, blocking of non-HTTP TCP traffic, and blocking of existing flows after a policy re-evaluation of an existing subscriber.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template *number*

Synopsis	Template ID for the HTTP redirect object
Context	configure application-assurance group number http-redirect string template <i>number</i>
Tree	template
Description	This command configures the template that defines which parameters are appended to the HTTP host redirect field in the redirect message. The HTTP redirect template provides HTTP 302 redirect containing only the URL specified in the redirect policy, with no other parameters.
Max. Range	0 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-identification-assist

Synopsis	Enter the ip-identification-assist context
Context	configure application-assurance group number ip-identification-assist

Tree	ip-identification-assist
Description	<p>Commands in this context configure the IP identification assist feature, which uses IP addresses to assist in traffic identification.</p> <p>This optional mechanism is enabled by default and consults an internally generated and stored database when app-filters fail to classify the traffic as one of the configured applications from the AppDB.</p> <p>Use the configure application-assurance group ip-identification-assist admin-state command to disable the administrative state of the IP identification assist feature.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IP identification assist
Context	configure application-assurance group number ip-identification-assist admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

passive-dns

Synopsis	Enter the passive-dns context
Context	configure application-assurance group number ip-identification-assist passive-dns
Tree	passive-dns
Description	Commands in this context configure passive DNS monitoring for the IP identification assist feature.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor *boolean*



WARNING:

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

Synopsis	Use passive DNS monitoring to collect IP addresses
Context	configure application-assurance group number ip-identification-assist passive-dns monitor <i>boolean</i>
Tree	monitor
Description	When configured to true , the router collects IP addresses by passively monitoring DNS traffic. The router uses the collected IP addresses to build its internal database.
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trusted-server [[ip-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Enter the trusted-server list instance
Context	configure application-assurance group number ip-identification-assist passive-dns trusted-server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	trusted-server
Description	Commands in this context configure a DNS server that the IP identification assist feature is allowed to passively monitor.
Max. Instances	64
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address of the DNS server
Context	configure application-assurance group number ip-identification-assist passive-dns trusted-server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	trusted-server
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment string

Synopsis	Name or description to associate with the DNS server
----------	--

Context	configure application-assurance group number ip-identification-assist passive-dns trusted-server (ipv4-address-no-zone ipv6-address-no-zone) comment string
Tree	comment
String Length	0 to 32
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

partition [[aa-partition-id](#)] *number*

Synopsis	Enter the partition list instance
Context	configure application-assurance group number partition number
Tree	partition
Description	Commands in this context configure the AA partition-related policies.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[aa-partition-id] *number*

Synopsis	Partition ID within the AA group
Context	configure application-assurance group number partition number
Tree	partition
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-congestion-detection

Synopsis	Enter the aa-sub-congestion-detection context
Context	configure application-assurance group number partition number aa-sub-congestion-detection
Tree	aa-sub-congestion-detection
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of congestion detection
Context	configure application-assurance group number partition number aa-sub-congestion-detection admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type [[rat-type-name](#)] *keyword*

Synopsis	Enter the rat-type list instance
Context	configure application-assurance group number partition number aa-sub-congestion-detection rat-type <i>keyword</i>
Tree	rat-type
Description	Commands in this context configure the RAT types for which unique RTT thresholds are configured.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[rat-type-name] *keyword*

Synopsis	Mobile radio access technology (RAT) type
Context	configure application-assurance group number partition number aa-sub-congestion-detection rat-type <i>keyword</i>
Tree	rat-type
Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold (*number* | *keyword*)

Synopsis	Round trip time congestion threshold for a RAT type
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Context	configure application-assurance group number partition number aa-sub-congestion-detection rat-type keyword rtt-threshold (<i>number keyword</i>)
Tree	rtt-threshold
Description	This command configures the maximum acceptable round trip time (RTT) under no congestion. Any measured RTT above the threshold is considered an indication of possible congestion.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold (*number | keyword*)

Synopsis	Round trip time congestion threshold
Context	configure application-assurance group number partition number aa-sub-congestion-detection rtt-threshold (<i>number keyword</i>)
Tree	rtt-threshold
Description	This command configures the default round trip delay threshold used by the DEM gateway algorithm to determine subscriber congestion for NLB-DEM. This default value is used when the current RAT-Type is not known, or has no associated configured RTT threshold.
Range	1 to 500
Default	173
Units	milliseconds
Options	not-applicable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold-tolerance *number*

Synopsis	RTT threshold tolerance for congestion detection
Context	configure application-assurance group number partition number aa-sub-congestion-detection rtt-threshold-tolerance <i>number</i>
Tree	rtt-threshold-tolerance

Description	This command configures the round trip delay threshold tolerance used by the DEM gateway algorithm to determine subscriber-level congestion.
Range	0 to 100
Default	50
Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-remote *boolean*

Synopsis	Reverse subscriber traffic direction
Context	configure application-assurance group number partition number aa-sub-remote <i>boolean</i>
Tree	aa-sub-remote
Description	When configured to true , the direction of the from-subscriber and to-subscriber traffic is reversed for this group partition.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-network-location

Synopsis	Enter the access-network-location context
Context	configure application-assurance group number partition number access-network-location
Tree	access-network-location
Description	Commands in this context configure parameters related to dynamic experience management, also known as Access Network Location (ANL).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source [[source-type](#)] *keyword*

Synopsis	Enter the source list instance
Context	configure application-assurance group number partition number access-network-location source <i>keyword</i>
Tree	source

Description	Commands in this context configure location sources for dynamic experience management.
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[source-type] keyword

Synopsis	Access network location source
Context	configure application-assurance group number partition number access-network-location source keyword
Tree	source
Description	This command specifies the location or access technology. AA supports access points for WLGW access points or ULI-2gpp for mobile (for example, FWA).
Options	mobile-3g, access-point, uli-3gpp
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type [rat-type-name] keyword

Synopsis	Enter the rat-type list instance
Context	configure application-assurance group number partition number access-network-location source keyword rat-type keyword
Tree	rat-type
Description	Commands in this context configure the RAT types for which unique RTT thresholds are configured.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[rat-type-name] keyword

Synopsis	Access network location RAT type
Context	configure application-assurance group number partition number access-network-location source keyword rat-type keyword
Tree	rat-type

Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold (*number* | *keyword*)

Synopsis	RTT congestion threshold for a RAT type
Context	configure application-assurance group <i>number</i> partition <i>number</i> access-network-location source <i>keyword</i> rat-type <i>keyword</i> rtt-threshold (<i>number</i> <i>keyword</i>)
Tree	rtt-threshold
Description	This command specifies the maximum acceptable round trip time (RTT) under no congestion. Any measured RTT above the threshold is considered an indication of possible congestion.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold (*number* | *keyword*)

Synopsis	Source round trip time congestion threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> access-network-location source <i>keyword</i> rtt-threshold (<i>number</i> <i>keyword</i>)
Tree	rtt-threshold
Description	This command configures the default round trip delay threshold used by the DEM gateway algorithm to determine ANL congestion. This default value is used when either the ANL RAT-Type is not known or has no associated configured RTT threshold.
Range	1 to 500
Default	173
Units	milliseconds
Options	not-applicable
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold-tolerance *number*

Synopsis Source round trip time congestion threshold tolerance

Context **configure** [application-assurance group number partition number access-network-location source keyword rtt-threshold-tolerance number](#)

Tree [rtt-threshold-tolerance](#)

Description This command configures the ANL round trip delay threshold tolerance used by the DEM gateway algorithm to determine ANL-level congestion.

Range 0 to 100

Default 50

Units percent

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-level *keyword*



WARNING:

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

Synopsis Access network location source level

Context **configure** [application-assurance group number partition number access-network-location source keyword source-level keyword](#)

Tree [source-level](#)

Default cell

Options cell, transport-network-link, mac-vlan

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aqp-initial-lookup *boolean*

Synopsis Enable AQP initial lookup

Context **configure** [application-assurance group number partition number aqp-initial-lookup boolean](#)

Tree [aqp-initial-lookup](#)

Description	<p>When configured to true, this command allows AA to perform application QoS policy (AQP) lookups on flows prior to complete application identification. As usual, AQP will be looked up again when identification is complete. Without this, AA executes AQPs that are part of the sub-default policy. The sub-default policy is formed by regular AQPs that contain ASOs, subID, or flow direction as matching conditions.</p> <p>This behavior is required, for example, to apply GTP and SCTP filtering on the first packet of a new GTP/SCTP flow (AQP matching conditions).</p> <p>When configured to false, AA only performs AQP lookups when identification is complete.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cflowd

Synopsis	Enter the cflowd context
Context	configure application-assurance group number partition number cflowd
Tree	cflowd
Description	Commands in this context configure the AA partition-based cflowd fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-type [[flow-export-type](#)] *keyword*

Synopsis	Enter the export-type list instance
Context	configure application-assurance group number partition number cflowd export-type keyword
Tree	export-type
Description	Commands in this context configure the scope of traffic subjected to AA cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[flow-export-type] *keyword*

Synopsis	Cflowd flow export type for the partition
Context	configure application-assurance group number partition number cflowd export-type keyword

Tree	export-type
Description	This command allows the operator to configure the scope of traffic that can be sampled for cflowd export for the configured cflowd template.
Options	volume, tcp-performance, rtp-performance, comprehensive
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of cflowd export
Context	configure application-assurance group <i>number</i> partition <i>number</i> cflowd export-type <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group [[app-group-name](#)] *reference*

Synopsis	Enter the app-group list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> cflowd export-type <i>keyword</i> app-group <i>reference</i>
Tree	app-group
Description	Commands in this context configure application groups for flow sampling and cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[app-group-name](#)] *reference*

Synopsis	Application group name
Context	configure application-assurance group <i>number</i> partition <i>number</i> cflowd export-type <i>keyword</i> app-group <i>reference</i>
Tree	app-group
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-group <i>string</i>

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

rate-choice *keyword*

Synopsis	Cflowd rate to use for sampling
Context	configure application-assurance group number partition number cflowd export-type keyword app-group reference rate-choice keyword
Tree	rate-choice
Default	flow-rate
Options	flow-rate, flow-rate-2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application [[application-name](#)] *reference*

Synopsis	Enter the application list instance
Context	configure application-assurance group number partition number cflowd export-type keyword application reference
Tree	application
Description	Commands in this context configure applications for flow sampling and cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[application-name] *reference*

Synopsis	Application name
Context	configure application-assurance group number partition number cflowd export-type keyword application reference
Tree	application
Reference	configure application-assurance group number partition number policy application string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-choice *keyword*

Synopsis	Cflowd rate to use for sampling
Context	configure application-assurance group <i>number</i> partition <i>number</i> cflowd export-type keyword application reference rate-choice <i>keyword</i>
Tree	rate-choice
Default	flow-rate
Options	flow-rate, flow-rate-2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> partition <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log [[event-log-name](#)] *string*

Synopsis	Enter the event-log list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> event-log <i>string</i>
Tree	event-log
Description	Commands in this context configure an event log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[event-log-name](#)] *string*

Synopsis	Partition event log name
Context	configure application-assurance group <i>number</i> partition <i>number</i> event-log <i>string</i>
Tree	event-log
String Length	1 to 32

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

admin-state *keyword*

Synopsis	Administrative state of the event log
Context	configure application-assurance group number partition number event-log string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

buffer-type *keyword*



WARNING:

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

Synopsis	Event log buffer type
Context	configure application-assurance group number partition number event-log string buffer-type keyword
Tree	buffer-type
Default	linear
Options	linear, circular, syslog
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-entries *number*



WARNING:

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

Synopsis	Maximum number of entries for the event log
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Context	configure application-assurance group <i>number</i> partition <i>number</i> event-log <i>string</i> max-entries <i>number</i>
Tree	max-entries
Range	1 to 100000
Default	500
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syslog



WARNING:

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

Synopsis	Enter the syslog context
Context	configure application-assurance group <i>number</i> partition <i>number</i> event-log <i>string</i> syslog
Tree	syslog
Description	Commands in this context configure the syslog options for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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



WARNING:

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

Synopsis	Syslog host IP address
Context	configure application-assurance group <i>number</i> partition <i>number</i> event-log <i>string</i> syslog address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
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Context	configure application-assurance group number partition number event-log string syslog description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

facility *keyword*



WARNING:

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

Synopsis	AA syslog facility
Context	configure application-assurance group number partition number event-log string syslog facility keyword
Tree	facility
Description	This command configures the syslog facility. The syslog facility is an information field associated with a syslog message. It is defined by the syslog protocol and provides an indication of which part of the system originated the message.
Default	local7
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*



WARNING:

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

Synopsis	Syslog host UDP port
Context	configure application-assurance group number partition number event-log string syslog port number
Tree	port
Description	This command specifies the UDP port used by application assurance for the syslog events.
Max. Range	0 to 65535

Default	514
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*



WARNING:

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

Synopsis	Syslog message severity level threshold
Context	configure application-assurance group number partition number event-log string syslog severity keyword
Tree	severity
Default	info
Options	emergency, alert, critical, error, warning, notice, info, debug
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number*



WARNING:

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

Synopsis	ISA service port VLAN ID for sending syslog traffic
Context	configure application-assurance group number partition number event-log string syslog vlan-id number
Tree	vlan-id
Description	This command configures the service port VLAN ID to be used by application assurance to provide syslog events. This VLAN ID also needs to be configured for the application assurance interface.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp

Synopsis	Enter the gtp context
Context	configure application-assurance group number partition number gtp
Tree	gtp
Description	Commands in this context configure GTP parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of GTP
Context	configure application-assurance group number partition number gtp admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter [[gtp-filter-name](#)] *string*

Synopsis	Enter the gtp-filter list instance
Context	configure application-assurance group number partition number gtp gtp-filter string
Tree	gtp-filter
Description	Commands in this context allow AA to treat traffic on UDP port number 2152 as GTP-U. Without further specifying any other parameters within this GTP context, AA performs basic GTP-U header sanity checks and discards packets that are malformed. This GTP context also allows the operator to configure various GTP filters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[gtp-filter-name](#)] *string*

Synopsis	GTP filter name
Context	configure application-assurance group number partition number gtp gtp-filter string
Tree	gtp-filter

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure application-assurance group number partition number gtp gtp-filter string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-in-gtp keyword

Synopsis	GTP in GTP packet filtering
Context	configure application-assurance group number partition number gtp gtp-filter string gtp-in-gtp keyword
Tree	gtp-in-gtp
Default	permit
Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-tunnel-database

Synopsis	Enter the gtp-tunnel-database context
Context	configure application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database
Tree	gtp-tunnel-database
Description	Commands in this context configure GTP advanced firewall functions, such as validating GTP tunnels, sequence numbers, and source IP addresses).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-tunnel-endpoint-limit *number*

Synopsis	Default GTP tunnel endpoint limit
Context	configure application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database default-tunnel-endpoint-limit number
Tree	default-tunnel-endpoint-limit
Description	This command configures the maximum number of GTP endpoints requested in GTP-C messages by using, for example, the PDP Context Create message type. The validate-gtp-tunnels command must be enabled before using this command.
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

validate-gtp-tunnels *boolean*

Synopsis	Enable GTP tunnel validation
Context	configure application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database validate-gtp-tunnels boolean
Tree	validate-gtp-tunnels
Description	When configured to true , this command configures GTP tunnel validation. This allows for the validation of TEIDs and is a prerequisite for sequence checking and UE IP address validation. This command is only applicable when AA GTP FW is deployed on S8/S5/Gp/Gn interfaces. The gtpc-inspection command in the configure application-assurance group partition gtp context must be configured to true before using this command. When configured to false , the GTP tunnels cannot be validated.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

validate-sequence-number *boolean*

Synopsis	Enable GTP sequence number checking
Context	configure application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database validate-sequence-number boolean
Tree	validate-sequence-number

Description	<p>When configured to true, this command enables GTP sequence number checking. GTP packets that fail the sequence number check are discarded.</p> <p>The validate-gtp-tunnels command in the configure application-assurance group partition gtp gtp-filter gtp-tunnel-database context must be configured to true before using this command.</p> <p>When configured to false, the GTP packet sequence number cannot be checked.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

validate-source-ip-addr *boolean*

Synopsis	Validate source IP address in GTP frames
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> gtp-tunnel-database validate-source-ip-addr <i>boolean</i>
Tree	validate-source-ip-addr
Description	<p>When configured to true, this command enables checking for spoofed or invalid UE IP addresses. Upstream GTP packets that contain invalid UE IP addresses are discarded. When a packet is dropped due to source-ip-address “invalid source IP add”, the statistics counter is updated.</p> <p>The validate-gtp-tunnels command in the configure application-assurance group partition gtp gtp-filter gtp-tunnel-database context must be configured to true before using this command.</p> <p>When configured to false, the spoofed or invalid UE IP addresses cannot be checked.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi-apn-filter

Synopsis	Enter the imsi-apn-filter context
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> imsi-apn-filter
Tree	imsi-apn-filter
Description	<p>Commands in this context configure IMSI and APN filtering.</p> <p>The gtpc-inspection command in the configure application-assurance group partition gtp context must be configured to true before using this command.</p> <p>This command is only applicable to the GTP packets that contain IMSI or APN information elements (IEs).</p>

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	IMSI APN filter default action
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> imsi-apn-filter default-action <i>keyword</i>
Tree	default-action
Default	permit
Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> imsi-apn-filter entry <i>number</i>
Tree	entry
Description	Commands in this context configure an entry within the IMSI-APN filter to allow for IMSI-APN match and action configuration.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	AA IMSI-APN filter entry ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> imsi-apn-filter entry <i>number</i>
Tree	entry
Description	This command specifies the index in the IMSI-APN list that defines a custom filtering action.
Range	1031 to 2030
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis IMSI APN filter entry action

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [gtp gtp-filter](#) *string*
[imsi-apn-filter entry](#) *number* **action** *keyword*

Tree [action](#)

Default permit

Options deny, permit

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn *string*

Synopsis APN as GTP filter match criterion

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [gtp gtp-filter](#) *string*
[imsi-apn-filter entry](#) *number* **apn** *string*

Tree [apn](#)

Description This command configures a matching condition for an APN configured as a GTP filter. If no APN is specified, the entry is not checked for the APN IE in GTP-C packets. The values for this command are:

- `string`: The extracted APN must match string exactly.
- `^string`: The extracted APN must start with string.
- `string$`: The extracted APN must end with string.
- `WILDCARD_APN`: Special string that indicates that the extracted APN must be "*" (that is, a length octet with value one, followed by the ASCII code for the asterisk)
- `EMPTY_APN`: Special string that indicates that the extracted APN must be empty (that is, "")
- `ANY_APN`: Special string that indicates that the extracted APN IE must be present and can have any value in order for the filter entry to match

String Length 1 to 100

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi-mcc-mnc-prefix *string*

Synopsis	IMSI (MCC-MNC) prefix as GTP filter match criterion
Context	configure application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number imsi-mcc-mnc-prefix string
Tree	imsi-mcc-mnc-prefix
Description	This command configures a matching condition for the IMSI (MCC-MNC) prefix. This string represents the IMSI prefix to be matched against the IMSI IE of the packet, or the special value ANY_IMSI to indicate that an IMSI IE must be present as a matching condition regardless of the IMSI IE value. If no MCC-MNC prefix is specified, the entry will match GTP packets that have an IMSI IE containing any value.
String Length	1 to 8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-gsn

Synopsis	Enter the src-gsn context
Context	configure application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number src-gsn
Tree	src-gsn
Description	Commands in this context configure a matching condition for the GSN IP address. The IP address value is checked only against the source IP address of the GTP packets that contain an APN IE or an IMSI IE.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Source GSN IP address prefix as GTP filter match criterion
Context	configure application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number src-gsn ip-prefix (ipv4-prefix ipv6-prefix)
Tree	ip-prefix
Description	This command specifies a valid unicast address associated with the IMSI-APN filter entry.
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	Source GSN IP address prefix list as match criterion
Context	configure application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number src-gsn ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list string
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log

Synopsis	Enter the log context
Context	configure application-assurance group number partition number gtp gtp-filter string log
Tree	log
Description	Commands in this context configure the AA group partition GTP filter log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	GTP filter action to be logged
Context	configure application-assurance group number partition number gtp gtp-filter string log action keyword
Tree	action
Default	deny
Options	deny, permit, all
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event-log name to capture GTP filter events
Context	configure application-assurance group number partition number gtp gtp-filter string log event-log reference

Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-payload-length *number*

Synopsis	Maximum allowed GTP payload length
Context	configure application-assurance group number partition number gtp gtp-filter string max-payload-length number
Tree	max-payload-length
Range	0 to 65535
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-type

Synopsis	Enter the message-type context
Context	configure application-assurance group number partition number gtp gtp-filter string message-type
Tree	message-type
Description	Commands in this context configure the GTP message-type filtering. If no message type is specified within a filter, all GTP message types are allowed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	GTP message type default action
Context	configure application-assurance group number partition number gtp gtp-filter string message-type default-action keyword
Tree	default-action
Default	permit
Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [**entry-id**] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> message-type entry <i>number</i>
Tree	entry
Description	Commands in this context configure an entry for a specific GTPv1 message type value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	GTP filter entry ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> message-type entry <i>number</i>
Tree	entry
Description	This command specifies the index in the GTPv1 message value list that defines a custom message-type action.
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	GTPv1 filter message entry action
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> message-type entry <i>number</i> action <i>keyword</i>
Tree	action
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value (number | keyword)



WARNING:

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

Synopsis	GTPv1 filter message type value
Context	configure application-assurance group number partition number gtp gtp-filter string message-type entry number value (number keyword)
Tree	value
Range	1 to 255
Options	echo-request, echo-response, version-not-supported, node-alive-request, node-alive-response, redirection-request, redirection-response, create-pdp-context-request, create-pdp-context-response, update-pdp-context-request, update-pdp-context-response, delete-pdp-context-request, delete-pdp-context-response, initiate-pdp-context-activation-request, initiate-pdp-context-activation-response, error-indication, pdu-notification-request, pdu-notification-response, pdu-notification-reject-request, pdu-notification-reject-response, supported-extension-headers-notification, send-routing-information-for-gprs-request, send-routing-information-for-gprs-response, failure-report-request, failure-report-response, note-ms-gprs-present-request, note-ms-gprs-present-response, identification-request, identification-response, sgsn-context-request, sgsn-context-response, sgsn-context-acknowledge, forward-relocation-request, forward-relocation-response, forward-relocation-complete, relocation-cancel-request, relocation-cancel-response, forward-srns-context, forward-relocation-complete-acknowledge, forward-srns-context-acknowledge, ran-information-relay, mbms-notification-request, mbms-notification-response, mbms-notification-reject-request, mbms-notification-reject-response, create-mbms-context-request, create-mbms-context-response, update-mbms-context-request, update-mbms-context-response, delete-mbms-context-request, delete-mbms-context-response, mbms-registration-request, mbms-registration-response, mbms-de-registration-request, mbms-de-registration-response, mbms-session-start-request, mbms-session-start-response, mbms-session-stop-request, mbms-session-stop-response, mbms-session-update-request, mbms-session-update-response, ms-info-change-notification-request, ms-info-change-notification-response, data-record-transfer-request, data-record-transfer-response, end-marker, g-pdu
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-type-gtp-v2

Synopsis	Enter the message-type-gtp-v2 context
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Context	configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2
Tree	message-type-gtp-v2
Description	<p>Commands in this context configure the GTPv2 message-type filtering.</p> <p>If message-type GTPv2 is not specified within a filter, all GTP message types are allowed, except for the messages that are dropped by GTP-C inspection because they violate the expected GTP protocol for the deployment interface (for example, roaming deployment).</p> <p>The gtpc-inspection command in the configure application-assurance group partition gtp context must be configured to true before configuring GTPv2 message-type filtering.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	GTPv2 message type default action
Context	configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 default-action keyword
Tree	default-action
Default	permit
Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*entry-id*] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number
Tree	entry
Description	Commands in this context configure an entry for a specific GTPv2 message type value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	GTPv2 filter entry ID
Context	configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number
Tree	entry
Description	This command configures the index in the GTP message value list that defines a custom message-type action.
Range	516 to 770
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	GTPv2 filter message entry action
Context	configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number action keyword
Tree	action
Description	This command specifies the action to take for packets that match this GTPv2 filter message entry.
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value (*number* | *keyword*)



WARNING:

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

Synopsis	GTPv2 filter message type value
Context	configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number value (number keyword)
Tree	value
Range	1 to 255

Options	echo-request, echo-response, version-not-supported-indication, create-session-request, create-session-response, modify-bearer-request, modify-bearer-response, delete-session-request, delete-session-response, change-notification-request, change-notification-response, remote-ue-report-notification, remote-ue-report-acknowledge, modify-bearer-command, modify-bearer-failure-indication, delete-bearer-command, delete-bearer-failure-indication, bearer-resource-command, bearer-resource-failure-indication, downlink-data-notification-failure-indication, trace-session-activation, trace-session-deactivation, stop-paging-indication, create-bearer-request, create-bearer-response, update-bearer-request, update-bearer-response, delete-bearer-request, delete-bearer-response, delete-pdn-connection-set-request, delete-pdn-connection-set-response, pgw-downlink-triggering-notification, pgw-downlink-triggering-acknowledge, identification-request, identification-response, context-request, context-response, context-acknowledge, forward-relocation-request, forward-relocation-response, forward-relocation-complete-notification, forward-relocation-complete-acknowledge, forward-access-context-notification, forward-access-context-acknowledge, relocation-cancel-request, relocation-cancel-response, configuration-transfer-tunnel, detach-notification, detach-acknowledge, cs-paging-indication, ran-information-relay, alert-mme-notification, alert-mme-acknowledge, ue-activity-notification, ue-activity-acknowledge, isr-status-indication, create-forwarding-tunnel-request, create-forwarding-tunnel-response, suspend-notification, suspend-acknowledge, resume-notification, resume-acknowledge, create-indirect-data-forwarding-tunnel-request, create-indirect-data-forwarding-tunnel-response, delete-indirect-data-forwarding-tunnel-request, delete-indirect-data-forwarding-tunnel-response, release-access-bearers-request, release-access-bearers-response, downlink-data-notification, downlink-data-notification-acknowledge, pgw-restart-notification, pgw-restart-notification-acknowledge, update-pdn-connection-set-request, update-pdn-connection-set-response, modify-access-bearers-request, modify-access-bearers-response, mbms-session-start-request, mbms-session-start-response, mbms-session-update-request, mbms-session-update-response, mbms-session-stop-request, mbms-session-stop-response
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtpc-inspection *boolean*

Synopsis	Enable inspection of GTP-C packets
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtpc-inspection <i>boolean</i>
Tree	gtpc-inspection

Description	When configured to true , this command enables the inspection of GTP-C packets. This is relevant only when AA GTP FW is deployed on S8/S5/Gp/Gn interfaces. This command must be enabled before configuring related features, such as APN filtering, GTP tunnel validation, message-type-v2 filtering, sequence number validation, and SRC IP validation. When configured to false , GTP-C packet inspection cannot be performed.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log

Synopsis	Enter the log context
Context	configure application-assurance group number partition number gtp log
Tree	log
Description	Commands in this context configure the AA group partition GTP log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action keyword

Synopsis	GTP log action
Context	configure application-assurance group number partition number gtp log action keyword
Tree	action
Description	This command specifies the action on which the GTP log is raised.
Default	deny
Options	deny, permit, all
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log reference

Synopsis	Event log reference for logging GTP events
Context	configure application-assurance group number partition number gtp log event-log reference
Tree	event-log

Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*



WARNING:

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

Synopsis	GTP mode
Context	configure application-assurance group number partition number gtp mode keyword
Tree	mode
Default	filtering
Options	filtering, untunneling
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-match-all-requests *boolean*

Synopsis	Enable HTTP matching for all requests for an expression
Context	configure application-assurance group number partition number http-match-all-requests boolean
Tree	http-match-all-requests
Description	When configured to true , this command enables HTTP matching for all requests for an HTTP expression. When configured to false , this command restores the default and removes the matching request for this particular expression.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-x-online-host *boolean*

Synopsis	Enable X-Online-Host header field
Context	configure application-assurance group number partition number http-x-online-host boolean

Tree	http-x-online-host
Description	When configured to true , this command enables the X-Online-Host header field as a replacement for the HTTP Host header field.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-identification-contribute *boolean*

Synopsis	Contribute traffic info from this partition to group
Context	configure application-assurance group <i>number</i> partition <i>number</i> ip-identification-contribute <i>boolean</i>
Tree	ip-identification-contribute
Description	When configured to true , the router collects information from traffic in this partition and contributes it to the database that is built by the IP identification assist feature at the group level.
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list [[ip-prefix-list-name](#)] *string*

Synopsis	Enter the ip-prefix-list list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> ip-prefix-list <i>string</i>
Tree	ip-prefix-list
Description	Commands in this context configure an IP prefix list.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-prefix-list-name] *string*

Synopsis	AA IP prefix list name
Context	configure application-assurance group <i>number</i> partition <i>number</i> ip-prefix-list <i>string</i>
Tree	ip-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [ip-prefix-list](#) *string*
[description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **prefix** list instance
Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [ip-prefix-list](#) *string*
[prefix](#) (*ipv4-prefix* | *ipv6-prefix*)
Tree [prefix](#)
Description Commands in this context configure an IP prefix within the list.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis AA IP prefix
Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [ip-prefix-list](#) *string*
[prefix](#) (*ipv4-prefix* | *ipv6-prefix*)
Tree [prefix](#)
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis AA IP prefix name

Context	configure application-assurance group <i>number</i> partition <i>number</i> ip-prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) name <i>string</i>
Tree	name
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy

Synopsis	Enter the policy context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy
Tree	policy
Description	Commands in this context configure the fields for the Application Assurance policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-filter

Synopsis	Enter the app-filter context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter
Tree	app-filter
Description	Commands in this context configure an application filter for Application Assurance.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i>
Tree	entry
Description	<p>Commands in this context create an application filter entry.</p> <p>Application filter entries are an ordered list. The lowest numerical entry that matches the flow defines the application for that flow.</p> <p>An application filter entry or entries configure match attributes of an application.</p>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] number

Synopsis Application filter entry ID

Context **configure** application-assurance group number partition number policy app-filter entry number

Tree entry

Range 1 to 65535

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of the AA application filter entry

Context **configure** application-assurance group number partition number policy app-filter entry number admin-state keyword

Tree admin-state

Default disable

Options enable, disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application reference

Synopsis Application name

Context **configure** application-assurance group number partition number policy app-filter entry number application reference

Tree application

Reference **configure** application-assurance group number partition number policy application string

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number policy app-filter entry number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expression [[expr-index](#)] *number*

Synopsis	Enter the expression list instance
Context	configure application-assurance group number partition number policy app-filter entry number expression number
Tree	expression
Description	Commands in this context configure string values to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[expr-index](#)] *number*

Synopsis	Application filter matching expression identifier
Context	configure application-assurance group number partition number policy app-filter entry number expression number
Tree	expression
Range	1 to 4
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *string*

Synopsis	Exact match for application filter matching expression
Context	configure application-assurance group number partition number policy app-filter entry number expression number eq string
Tree	eq

String Length	1 to 255
Notes	The following elements are part of a mandatory choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match for application filter matching expression
Context	configure application-assurance group number partition number policy app-filter entry number expression number neq string
Tree	neq
String Length	1 to 255
Notes	The following elements are part of a mandatory choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis	Application filter matching expression type
Context	configure application-assurance group number partition number policy app-filter entry number expression number type keyword
Tree	type
Options	http-host, http-uri, http-referer, sip-ua, sip-uri, sip-mt, citrix-app, http-user-agent, h323-product-id, tls-cert-subj-org-name, tls-cert-subj-common-name, rtsp-host, rtsp-uri, rtsp-ua, rtmp-page-host, rtmp-page-uri, rtmp-swf-host, rtmp-swf-uri, rtmp-tc-host, rtmp-tc-uri, dns-domain-name
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-direction keyword

Synopsis	Traffic flow direction for the application filter entry
Context	configure application-assurance group number partition number policy app-filter entry number flow-setup-direction keyword
Tree	flow-setup-direction
Default	both

Options	subscriber-to-network, network-to-subscriber, both
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-match-all-requests *boolean*

Synopsis	Enable HTTP matching for all requests
Context	configure application-assurance group number partition number policy app-filter entry number http-match-all-requests boolean
Tree	http-match-all-requests
Description	When configured to true , this command enables HTTP matching for all requests for an HTTP expression. When configured to false , this command restores the default for this app-filter entry which matches the first request.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-port

Synopsis	Enter the http-port context
Context	configure application-assurance group number partition number policy app-filter entry number http-port
Tree	http-port
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group number partition number policy app-filter entry number http-port eq
Tree	eq
Description	Commands in this context configure the exact value as the match criterion.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis Port list name

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-filter entry](#) *number* [http-port eq port-list reference](#)

Tree [port-list](#)

Reference **configure** [application-assurance group](#) *number* [partition](#) *number* [port-list](#) *string*

Notes The following elements are part of a choice: **port-list** or **port-number**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis Server port number

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-filter entry](#) *number* [http-port eq port-number](#) *number*

Tree [port-number](#)

Range 0 | 1 to 65535

Default 0

Notes The following elements are part of a choice: **port-list** or **port-number**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis Enter the **neq** context

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-filter entry](#) *number* [http-port neq](#)

Tree [neq](#)

Description Commands in this context configure the non-match criterion used.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Port list name
Context	configure application-assurance group number partition number policy app-filter entry number http-port neq port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: port-list or port-number .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number
Context	configure application-assurance group number partition number policy app-filter entry number http-port neq port-number number
Tree	port-number
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: port-list or port-number .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-identification-assist *boolean*

Synopsis	Enable IP identification assist for this entry
Context	configure application-assurance group number partition number policy app-filter entry number ip-identification-assist boolean
Tree	ip-identification-assist
Description	<p>When configured to true, the router performs a network IP address lookup that overrides the assigned application if it finds the network IP address in its internal application-IP database.</p> <p>If an IP match is found, the application assigned from the app-filter is overridden with the application from the IP lookup. This also affects the app-group and charging group.</p> <p>If an IP match is not found, the application assigned from the app-filter is not overridden and remains (including the app-group and charging group).</p>

When configured to **false**, this command disables the router from performing a network IP address lookup and overriding the assigned application.

Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol

Synopsis	Enter the ip-protocol context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> ip-protocol
Tree	ip-protocol
Description	Commands in this context configure the IP protocol to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq (*number* | *keyword*)

Synopsis	Exact match criterion used for the IP protocol number
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> ip-protocol eq (<i>number</i> <i>keyword</i>)
Tree	eq
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq (*number* | *keyword*)

Synopsis	Non-match criterion used for the IP protocol number
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> ip-protocol neq (<i>number</i> <i>keyword</i>)
Tree	neq
Range	0 to 255

Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

network-address

Synopsis	Enter the network-address context
Context	configure application-assurance group number partition number policy app-filter entry number network-address
Tree	network-address
Description	Commands in this context configure the network address to use for the application filter entry. The network address is the address on the network side of AA, independent of whether the subscriber is acting as a client or server and is not normally used in AA app-filters. The network address will match the destination IP address in a from-sub flow or the source IP address in a to-sub flow.
Notes	The following elements are part of a choice: network-address or server-address .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group number partition number policy app-filter entry number network-address eq
Tree	eq
Description	Commands in this context specify an exact value as the match criterion for the network address.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP prefix
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> network-address eq ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP prefix list
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> network-address eq ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure application-assurance group <i>number</i> partition <i>number</i> ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> network-address neq
Tree	neq
Description	Commands in this context specify the non-match criterion used for the network address.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP prefix
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> network-address neq ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP prefix list
Context	configure application-assurance group number partition number policy app-filter entry number network-address neq ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list string
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol

Synopsis	Enter the protocol context
Context	configure application-assurance group number partition number policy app-filter entry number protocol
Tree	protocol
Description	Commands in this context configure the protocol signature in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq (*string* | *named-item*)

Synopsis	Exact match criterion used for the AA protocol name
Context	configure application-assurance group number partition number policy app-filter entry number protocol eq (string named-item)
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq (*string* | *named-item*)

Synopsis	Non-match criterion used for the AA protocol name
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> protocol neq (<i>string</i> <i>named-item</i>)
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server-address

Synopsis	Enter the server-address context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-address
Tree	server-address
Description	Commands in this context configure the server address to use for the application filter entry. The server address is the address on the server end of a client-server session.
Notes	The following elements are part of a choice: network-address or server-address .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-address eq
Tree	eq
Description	Commands in this context configure the attributes of the IP address used for the exact match criterion for the application flow.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache *reference*

Synopsis	DNS IP cache name
Context	configure application-assurance group number partition number policy app-filter entry number server-address eq dns-ip-cache reference
Tree	dns-ip-cache
Reference	configure application-assurance group number dns-ip-cache string
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP prefix
Context	configure application-assurance group number partition number policy app-filter entry number server-address eq ip-prefix (ipv4-prefix ipv6-prefix)
Tree	ip-prefix
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP prefix list
Context	configure application-assurance group number partition number policy app-filter entry number server-address eq ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list string
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

masked-ip

Synopsis	Enter the masked-ip context
Context	configure application-assurance group number partition number policy app-filter entry number server-address eq masked-ip
Tree	masked-ip
Description	Commands in this context configure the attributes of a masked IP address.
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IPv4 or IPv6 address mask
Context	configure application-assurance group number partition number policy app-filter entry number server-address eq masked-ip address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	address
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IPv4 or IPv6 address mask
Context	configure application-assurance group number partition number policy app-filter entry number server-address eq masked-ip netmask (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	netmask
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
Context	configure application-assurance group number partition number policy app-filter entry number server-address neq
Tree	neq

Description	Commands in this context configure the attributes of the IP address used for non-matching criteria in the application flow.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache *reference*

Synopsis	DNS IP cache name
Context	configure application-assurance group number partition number policy app-filter entry number server-address neq dns-ip-cache reference
Tree	dns-ip-cache
Reference	configure application-assurance group number dns-ip-cache string
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP prefix
Context	configure application-assurance group number partition number policy app-filter entry number server-address neq ip-prefix (ipv4-prefix ipv6-prefix)
Tree	ip-prefix
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP prefix list
Context	configure application-assurance group number partition number policy app-filter entry number server-address neq ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list string

Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

masked-ip

Synopsis	Enter the masked-ip context
Context	configure application-assurance group number partition number policy app-filter entry number server-address neq masked-ip
Tree	masked-ip
Description	Commands in this context configure the attributes of a masked IP address.
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IPv4 or IPv6 address mask
Context	configure application-assurance group number partition number policy app-filter entry number server-address neq masked-ip address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	address
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IPv4 or IPv6 address mask
Context	configure application-assurance group number partition number policy app-filter entry number server-address neq masked-ip netmask (ipv4-address-no-zone ipv6-address-no-zone)
Tree	netmask
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server-port

Synopsis	Enter the server-port context
Context	configure application-assurance group number partition number policy app-filter entry number server-port
Tree	server-port
Description	Commands in this context specify the server TCP or UDP port number to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group number partition number policy app-filter entry number server-port eq
Tree	eq
Description	Commands in this context configure the exact value as the match criterion for the server TCP or UDP number in the app-filter.
Notes	The following elements are part of a choice: eq , gt , lt , or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-packet-policy *keyword*

Synopsis	First packet policy
Context	configure application-assurance group number partition number policy app-filter entry number server-port eq first-packet-policy <i>keyword</i>
Tree	first-packet-policy
Description	This command configures the action to perform on the first packet.
Options	first-packet-trusted, first-packet-validate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Port-list name used in application filter criteria
Context	configure application-assurance group number partition number policy app-filter entry number server-port eq port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	configure application-assurance group number partition number policy app-filter entry number server-port eq port-number number
Tree	port-number
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the range context
Context	configure application-assurance group number partition number policy app-filter entry number server-port eq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	TCP/UDP ending port number
Context	configure application-assurance group number partition number policy app-filter entry number server-port eq range end number
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	TCP/UDP starting port number
Context	configure application-assurance group number partition number policy app-filter entry number server-port eq range start number
Tree	start
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gt

Synopsis	Enter the gt context
Context	configure application-assurance group number partition number policy app-filter entry number server-port gt
Tree	gt
Description	Commands in this context specify the greater than value as the match criterion for the server port number for the app-filter.
Notes	The following elements are part of a choice: eq , gt , lt , or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number number

Synopsis	Server port number used as match criterion
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Context	configure application-assurance group number partition number policy app-filter entry number server-port gt port-number number
Tree	port-number
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt

Synopsis	Enter the lt context
Context	configure application-assurance group number partition number policy app-filter entry number server-port lt
Tree	lt
Description	Commands in this context specify the less than value as the match criterion for the server port number for the app-filter.
Notes	The following elements are part of a choice: eq , gt , lt , or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	configure application-assurance group number partition number policy app-filter entry number server-port lt port-number number
Tree	port-number
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
Context	configure application-assurance group number partition number policy app-filter entry number server-port neq

Tree	neq
Description	Commands in this context configure non-match criterion used for the server TCP or UDP number in the app-filter.
Notes	The following elements are part of a choice: eq , gt , lt , or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Port-list name used in application filter criteria
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-port neq port-list <i>reference</i>
Tree	port-list
Reference	configure application-assurance group <i>number</i> partition <i>number</i> port-list <i>string</i>
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-port neq port-number <i>number</i>
Tree	port-number
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the range context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-port neq range
Tree	range

Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	TCP/UDP ending port number
Context	configure application-assurance group number partition number policy app-filter entry number server-port neq range end number
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	TCP/UDP starting port number
Context	configure application-assurance group number partition number policy app-filter entry number server-port neq range start number
Tree	start
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group [\[application-group-name\]](#) *string*

Synopsis	Enter the app-group list instance
Context	configure application-assurance group number partition number policy app-group string
Tree	app-group
Description	Commands in this context create an application group for an application assurance policy.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[application-group-name] string

Synopsis Application group name

Context **configure** [application-assurance group number partition number policy app-group string](#)

Tree [app-group](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group reference

Synopsis Charging group used in the AA application group policy

Context **configure** [application-assurance group number partition number policy app-group string charging-group reference](#)

Tree [charging-group](#)

Reference **configure** [application-assurance group number partition number policy charging-group string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis Text description

Context **configure** [application-assurance group number partition number policy app-group string description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-id number

Synopsis App group export ID used in RADIUS accounting export

Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-group <i>string</i> export-id <i>number</i>
Tree	export-id
Description	<p>This command assigns an export ID value to a charging group, an application group, or an application that RADIUS accounting uses for accounting export identification. This export ID is encoded in the top two bytes of the RADIUS accounting VSA to identify which charging group the counter value represents.</p> <p>If no export ID is assigned, the counter cannot be added to the AA subscriber stats RADIUS export-type. After a charging group index is referenced, it cannot be deleted without removing the reference.</p>
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile [[app-profile-name](#)] *string*

Synopsis	Enter the app-profile list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Tree	app-profile
Description	Commands in this context create an application profile and configure the profile parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[app-profile-name] *string*

Synopsis	App-profile name
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Tree	app-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-suppressible *boolean*

Synopsis	Enable AA suppression for subs with this app profile
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> aa-sub-suppressible <i>boolean</i>
Tree	aa-sub-suppressible
Description	When configured to true , this command configures the ability to suppress Application Assurance for subscribers with this application profile. This function is used in the context of an SRRP group interface. If an SRRP group interface is configured as configure service ies subscriber-interface group-interface suppress-aa-sub or configure service vprn subscriber-interface group-interface suppress-aa-sub , then subscribers with an application profile configured as suppressible are not diverted to Application Assurance.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

capacity-cost *number*

Synopsis	Application profile capacity cost
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> capacity-cost <i>number</i>
Tree	capacity-cost
Description	This command configures an application profile capacity cost. Capacity cost based load balancing allows a cost to be assigned to diverted SAPs (with the application profile). This allows for load balancing SAPs between ISAs and acts as a threshold to notify the operator if capacity planning is exceeded.
Range	1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [[characteristic-name](#)] *reference*

Synopsis	Enter the characteristic list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> characteristic <i>reference</i>
Tree	characteristic
Description	Commands in this context assign one of the existing values of an existing application service option characteristic to the application profile.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[characteristic-name] *reference*

Synopsis Application service option characteristic name

Context **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [app-profile](#) [string](#) [characteristic](#) [reference](#)

Tree [characteristic](#)

Reference **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [app-service-options](#) [characteristic](#) [string](#)

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *reference*

Synopsis ASO characteristic value name

Context **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [app-profile](#) [string](#) [characteristic](#) [reference](#) [value](#) [reference](#)

Tree [value](#)

Reference **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [app-service-options](#) [characteristic](#) [string](#) [value](#) [string](#)

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [app-profile](#) [string](#) [description](#) [string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

divert *boolean*

Synopsis	Enable traffic redirection to AA ISAs or ESA VMs
Context	configure application-assurance group number partition number policy app-profile string divert <i>boolean</i>
Tree	divert
Description	<p>When configured to true, this command enables the redirection of traffic to AA ISAs or ESA VMs for the system-wide forwarding classes diverted to Application Assurance (configure isa application-assurance-group divert-fc) for AA subscribers using this application profile.</p> <p>When configured to false, this command stops the redirection of traffic to AA ISAs or ESA VMs for the AA subscribers using this application profile.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-qos-policy

Synopsis	Enter the app-qos-policy context
Context	configure application-assurance group number partition number policy app-qos-policy
Tree	app-qos-policy
Description	Commands in this context configure an application QoS policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group number partition number policy app-qos-policy entry <i>number</i>
Tree	entry
Description	<p>Commands in this context create an application QoS policy (AQP) entry.</p> <p>A flow that matches multiple AQP entries will have multiple AQP entries actions applied. If a conflict occurs for two or more actions, the action from the AQP entry with the lowest numerical value takes precedence.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	AQP entry ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the action context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> action
Tree	action
Description	Commands in this context configure AQP actions to be performed on flows that match the match criteria of the AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

abandon-tcp-optimization *boolean*

Synopsis	Abandon TCPO for this entry
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> action abandon-tcp-optimization <i>boolean</i>
Tree	abandon-tcp-optimization
Description	When configured to true , this command disables TCPO for flows matching this AQP entry.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth-policer

Synopsis	Enter the bandwidth-policer context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action bandwidth-policer
Tree	bandwidth-policer
Description	<p>Commands in this context assign an existing bandwidth policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used by another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers apply to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks packet out of profile, the final marking will reflect that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

anl reference

Synopsis	Access network locator bandwidth policer
Context	configure application-assurance group number partition number policy app-qos-policy entry number action bandwidth-policer anl reference
Tree	anl
Description	This command creates an Application Assurance policy profile for a policer instance for each ANL that limits traffic bandwidth in the scope of that ANL. For ANL, only single-bucket bandwidth policers can be configured.
Reference	configure application-assurance group number policer anl-bandwidth-policer string
Notes	The following elements are part of a choice: anl , dual-bucket , or single-bucket .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-bucket reference

Synopsis	Dual bucket bandwidth limiting policer
Context	configure application-assurance group number partition number policy app-qos-policy entry number action bandwidth-policer dual-bucket reference
Tree	dual-bucket

Description	This command creates an Application Assurance policy profile for a dual bucket (PIR) bandwidth limiting policer.
Reference	configure application-assurance group number policer dual-bucket-bandwidth-policer string
Notes	The following elements are part of a choice: anl , dual-bucket , or single-bucket .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

single-bucket *reference*

Synopsis	Single bucket bandwidth limiting policer
Context	configure application-assurance group number partition number policy app-qos-policy entry number action bandwidth-policer single-bucket reference
Tree	single-bucket
Description	This command creates an Application Assurance policy profile for a single bucket (PIR) bandwidth limiting policer.
Reference	configure application-assurance group number policer single-bucket-bandwidth-policer string
Notes	The following elements are part of a choice: anl , dual-bucket , or single-bucket .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache *reference*

Synopsis	DNS IP cache name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action dns-ip-cache reference
Tree	dns-ip-cache
Reference	configure application-assurance group number dns-ip-cache string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop *boolean*

Synopsis	Enable drop action for the AQP entry
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Context	configure application-assurance group number partition number policy app-qos-policy entry number action drop boolean
Tree	drop
Description	When configured to true , all flow traffic matching this AQP entry is dropped. The drop action is performed first and no other action is invoked on that flow even if multiple other actions exist for the flow because of one or more AQP entry matches. When configured to false , this command disables the drop action on flows matching this AQP entry.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

error-drop

Synopsis	Enable the error-drop context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action error-drop
Tree	error-drop
Description	Commands in this context configure a drop action for error flows (for instance, bad IP checksums or TCP/UDP port 0).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log reference

Synopsis	Event log action for the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action error-drop event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-count-limit-policer

Synopsis	Enter the flow-count-limit-policer context
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Context	configure application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer
Tree	flow-count-limit-policer
Description	<p>Commands in this context assign an existing flow count limit policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used by another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers are applied to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks packet out of profile, the final marking will reflect that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer-name *reference*

Synopsis	Policer name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer policer-name reference
Tree	policer-name
Description	This command specifies the name of the flow count limit policer for flows matching the AQP entry. The policer name is configured in the configure application-assurance group policer context.
Reference	configure application-assurance group number policer flow-count-limit-policer string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-policer

Synopsis	Enter the flow-setup-rate-policer context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer
Tree	flow-setup-rate-policer
Description	<p>Commands in this context assign an existing flow setup rate policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used for another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers are applied to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks a packet out of profile, the final marking reflects that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Flow drop events log name due to flow-setup rate policer
Context	configure application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer-name *reference*

Synopsis	Policer name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer policer-name reference
Tree	policer-name
Description	This command specifies the name of the flow setup rate policer for flows matching this AQP entry.
Reference	configure application-assurance group number policer flow-setup-rate-policer string
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fragment-drop

Synopsis Enter the **fragment-drop** context

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action fragment-drop](#)

Tree [fragment-drop](#)

Description Commands in this context specify the drop action options to apply to fragments.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-scope *keyword*

Synopsis Fragment-drop scope

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action fragment-drop drop-scope keyword](#)

Tree [drop-scope](#)

Description This command specifies which fragments to drop as an action on flows matching this AQP entry.

Options all, out-of-order

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis Event log name

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action fragment-drop event-log reference](#)

Tree [event-log](#)

Reference **configure** [application-assurance group number partition number event-log string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter *reference*

Synopsis	GTP filter executed for flows matching this AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action gtp-filter reference
Tree	gtp-filter
Reference	configure application-assurance group number partition number gtp gtp-filter string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich *reference*

Synopsis	HTTP header enrichment action for the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action http-enrich reference
Tree	http-enrich
Description	This command configures the HTTP header enrichment template name that is applied as defined in the tmnxBsxHttpEnrichTable. An empty value specifies no HTTP header enrichment template.
Reference	configure application-assurance group number http-enrich string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-error-redirect *reference*

Synopsis	HTTP error redirect for the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action http-error-redirect reference
Tree	http-error-redirect
Description	This command specifies the HTTP error redirect that is applied as defined in the redirect table. An empty value specifies no HTTP error redirect.
Reference	configure application-assurance group number http-error-redirect string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-notification *reference*

Synopsis	HTTP notification to use for flows matching AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action http-notification reference
Tree	http-notification
Reference	configure application-assurance group number http-notification string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enter the http-redirect context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action http-redirect
Tree	http-redirect
Description	Commands in this context assign an existing HTTP redirect policy as an action on flows matching this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-type *keyword*

Synopsis	Flow type for HTTP redirect of flows matching the entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action http-redirect flow-type keyword
Tree	flow-type
Description	<p>This command assigns an existing HTTP redirect policy as an action on flows matching this AQP entry. The redirect only takes effect if the matching flows are HTTP and the condition specified is met.</p> <p>The condition specified by dropped flows means the flow is dropped due to an AQP action, such as flow rate, count policers, or drop actions. The admitted flows condition allows the operator to redirect HTTP traffic to a web portal while allowing non-HTTP traffic matching the same AQP rule to be forwarded.</p> <p>No HTTP redirect takes place if the HTTP redirect action and a drop/flow-police action are part of the default AQP policy. In this case, any flow drop actions take place before identification of the application/application-group.</p>
Options	dropped-flows, admitted-flows
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *reference*

Synopsis HTTP redirect policy name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [http-redirect](#) *name* *reference*

Tree [name](#)

Description This command specifies the name of an existing HTTP policy redirect.

Reference **configure** [application-assurance](#) [group](#) *number* [http-redirect](#) *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mirror-source

Synopsis Enter the **mirror-source** context

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [mirror-source](#)

Tree [mirror-source](#)

Description Commands in this context configure an application-based policy mirroring service that uses the AQP entry of this AA ISA as a mirror source.

When configured, the AQP entry becomes a mirror source for IP packets seen by AA. The mirrored packet is an IP packet analyzed by AA and does not include encapsulations present on the incoming interfaces.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-inclusive *boolean*

Synopsis Mirror flows matching the AQP subscriber default policy

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [mirror-source](#) [all-inclusive](#) *boolean*

Tree [all-inclusive](#)

Description This command specifies that all packets during the identification phase that could match a given AQP rule are mirrored in addition to packets after an application identification completes that match the AQP rule. This ensures that all packets of a flow are mirrored at a cost of sending some unidentified packets, which after the application is identified no longer match this AQP entry.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mirror-service *reference*

Synopsis	Mirror source service ID for flows matching the entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action mirror-source mirror-service reference
Tree	mirror-service
Description	This command specifies the mirror source service ID to use for flows that match this policy.
Reference	configure mirror mirror-dest string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overload-drop

Synopsis	Enable the overload-drop context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action overload-drop
Tree	overload-drop
Description	Commands in this context configure a drop action for cases where flow records are not created (overload). This command is only applicable to ISA2 hardware.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action overload-drop event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remark

Synopsis	Enter the remark context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action remark
Tree	remark
Description	Commands in this context configure the remark action on flows matching this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dscp

Synopsis	Enter the dscp context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action remark dscp
Tree	dscp
Description	<p>Commands in this context configure the DSCP remark action or actions on flows matching this AQP entry.</p> <p>All packets for all flows matching this AQP entry are remarked to the configured DSCP name.</p> <p>DSCP remark can only be applied when the entry remarks forwarding class or forwarding class and priority. In-profile and out-of-profile of a packet for DSCP remark is assessed after all AQP policing and priority remarking actions have taken place.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

in-profile keyword

Synopsis	DSCP name to remark matching in-profile flows
Context	configure application-assurance group number partition number policy app-qos-policy entry number action remark dscp in-profile keyword
Tree	in-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

out-profile *keyword*

Synopsis DSCP name to remark matching out-of-profile flows

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#)
[entry](#) *number* [action](#) [remark](#) [dscp](#) **out-profile** *keyword*

Tree [out-profile](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fc *keyword*

Synopsis FC remark action for flows matching this entry

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#)
[entry](#) *number* [action](#) [remark](#) **fc** *keyword*

Tree [fc](#)

Options be, l2, af, l1, h2, ef, h1, nc

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority *keyword*

Synopsis Priority to use to remark flows matching this entry

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#)
[entry](#) *number* [action](#) [remark](#) **priority** *keyword*

Tree [priority](#)

Default auto

Options low, high, auto

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter *reference*

Synopsis	SCTP filter to use for flows matching the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action sctp-filter reference
Tree	sctp-filter
Reference	configure application-assurance group number partition number sctp-filter string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter *reference*

Synopsis	Session filter to use for flows matching the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action session-filter reference
Tree	session-filter
Reference	configure application-assurance group number partition number session-filter string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-mss-adjust *number*

Synopsis	TCP MSS adjustment traffic action and size
Context	configure application-assurance group number partition number policy app-qos-policy entry number action tcp-mss-adjust number
Tree	tcp-mss-adjust
Range	160 to 10240
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate *reference*

Synopsis	TCP validation policy action for entry matching flows
Context	configure application-assurance group number partition number policy app-qos-policy entry number action tcp-validate reference
Tree	tcp-validate

Description	This command assigns an existing TCP validation policy as an action on flows matching this AQP entry. TCP validation can only be called from AQP entries that: <ul style="list-style-type: none"> • have no matching conditions that relate to information extracted from the incoming IP packets; for example, no application or IP address. • allow the following match conditions: none, aa-sub, characteristic, traffic-direction (both only), traffic-direction cannot be unidirectional (from or to sub). It can either be set to both or left unspecified.
Reference	configure application-assurance group number partition number tcp-validate string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tls-enrich *reference*

Synopsis	HTTP TLS enrichment action for the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action tls-enrich reference
Tree	tls-enrich
Reference	configure application-assurance group number http-enrich string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-filter

Synopsis	Enter the url-filter context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action url-filter
Tree	url-filter
Description	Commands in this context configure a URL filter action for flows matching this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic *reference*

Synopsis	URL filter characteristic used for matching AQP entries
Context	configure application-assurance group number partition number policy app-qos-policy entry number action url-filter characteristic reference

Tree	characteristic
Reference	configure application-assurance group number partition number policy app-service-options characteristic string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name reference

Synopsis	URL filter name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action url-filter name reference
Tree	name
Reference	configure application-assurance group number url-filter string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the AA AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure application-assurance group number partition number policy app-qos-policy entry number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the match context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match
Tree	match
Description	Commands in this context configure flow match rules for this AQP entry. A flow matches this AQP entry only if it matches all match rules defined (logical AND of all rules). If no match rule is specified, the entry will match all flows.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub

Synopsis	Enter the aa-sub context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub
Tree	aa-sub
Description	Commands in this context specify a Service Access Point (SAP) or an Enhanced Subscriber Management (ESM) subscriber as matching criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm

Synopsis	Enter the esm context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm
Tree	esm
Description	Commands in this context configure the ESM fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: esm , esm-mac , sap , spoke-sdp , or transit .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion used for the ESM subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm eq string
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match criterion used for ESM subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm neq string
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm-mac

Synopsis	Enter the esm-mac context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac
Tree	esm-mac
Description	Commands in this context configure the ESM MAC fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: esm , esm-mac , sap , spoke-sdp , or transit .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion used for ESM MAC subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac eq string
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match criterion used for AA subscriber ESM MAC
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac neq string
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap

Synopsis	Enter the sap context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub sap
Tree	sap
Description	Commands in this context configure the SAP fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: esm , esm-mac , sap , spoke-sdp , or transit .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion used for the SAP subscriber
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Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub sap eq string
Tree	eq
String Length	1 to 45
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match criterion used for the SAP subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub sap neq string
Tree	neq
String Length	1 to 45
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp

Synopsis	Enter the spoke-sdp context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub spoke-sdp
Tree	spoke-sdp
Description	Commands in this context configure the spoke SDP fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: esm , esm-mac , sap , spoke-sdp , or transit .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion used for a spoke SDP subscriber
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Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub spoke-sdp eq string
Tree	eq
String Length	3 to 16
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match criterion used for a spoke SDP subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub spoke-sdp neq string
Tree	neq
String Length	3 to 16
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit

Synopsis	Enter the transit context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub transit
Tree	transit
Description	Commands in this context configure the transit fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: esm , esm-mac , sap , spoke-sdp , or transit .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion used for a transit AA subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub transit eq string

Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match criterion used for a transit AA subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub transit neq string
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-tethering keyword

Synopsis	Tethering detection status for flow match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub-tethering keyword
Tree	aa-sub-tethering
Description	This command configures the match criteria for subscribers in a tethering state.
Default	not-applicable
Options	not-applicable, detected, not-detected
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group

Synopsis	Enter the app-group context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match app-group
Tree	app-group

Description	Commands in this context add an application group to the match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq reference

Synopsis	Exact match criterion used for the application group
Context	configure application-assurance group number partition number policy app-qos-policy entry number match app-group eq reference
Tree	eq
Reference	configure application-assurance group number partition number policy app-group string
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq reference

Synopsis	Non-match criterion used for the application group
Context	configure application-assurance group number partition number policy app-qos-policy entry number match app-group neq reference
Tree	neq
Reference	configure application-assurance group number partition number policy app-group string
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application

Synopsis	Enter the application context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match application
Tree	application
Description	Commands in this context add an application to match criteria used by this AQP entry.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *reference*

Synopsis Exact match criterion used for the application

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match application eq reference](#)

Tree [eq](#)

Reference **configure** [application-assurance group number partition number policy application string](#)

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis Non-match criterion used for the application

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match application neq reference](#)

Tree [neq](#)

Reference **configure** [application-assurance group number partition number policy application string](#)

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [[characteristic-name](#)] *reference*

Synopsis Enter the **characteristic** list instance

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match characteristic reference](#)

Tree [characteristic](#)

Description Commands in this context configure an existing characteristic and its value to the match criteria used by this AQP entry.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**characteristic-name**] *reference*

Synopsis	ASO characteristic name for AQP entry matching
Context	configure application-assurance group number partition number policy app-qos-policy entry number match characteristic reference
Tree	characteristic
Reference	configure application-assurance group number partition number policy app-service-options characteristic string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *reference*

Synopsis	Match criterion used for AQP match characteristic
Context	configure application-assurance group number partition number policy app-qos-policy entry number match characteristic reference eq reference
Tree	eq
Reference	configure application-assurance group number partition number policy app-service-options characteristic string value string
Notes	The following elements are part of a mandatory choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis	Non-match criterion used for AQP match characteristic
Context	configure application-assurance group number partition number policy app-qos-policy entry number match characteristic reference neq reference
Tree	neq
Reference	configure application-assurance group number partition number policy app-service-options characteristic string value string
Notes	The following elements are part of a mandatory choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group

Synopsis	Enter the charging-group context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match charging-group
Tree	charging-group
Description	Commands in this context add a charging group to match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq reference

Synopsis	Match criterion used for the charging group
Context	configure application-assurance group number partition number policy app-qos-policy entry number match charging-group eq reference
Tree	eq
Reference	configure application-assurance group number partition number policy charging-group string
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq reference

Synopsis	Non-match criterion used for the charging group
Context	configure application-assurance group number partition number policy app-qos-policy entry number match charging-group neq reference
Tree	neq
Reference	configure application-assurance group number partition number policy charging-group string
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dscp

Synopsis	Enter the dscp context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dscp
Tree	dscp
Description	Commands in this context add a DSCP name to the match criteria used by this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq keyword

Synopsis	Exact match criterion used for the DSCP
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dscp eq keyword
Tree	eq
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq keyword

Synopsis	Non-match criterion used for the DSCP
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dscp neq keyword
Tree	neq
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-ip

Synopsis	Enter the dst-ip context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-ip
Tree	dst-ip
Description	Commands in this context configure a destination IP address to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-ip eq
Tree	eq
Description	Commands in this context specify the exact match value as the match criterion. A successful match occurs when the flow matches the specified address or prefix.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address prefix used for match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-ip eq ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-ip eq ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure application-assurance group <i>number</i> partition <i>number</i> ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-ip neq
Tree	neq
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified address or prefix.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address prefix used for match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-ip neq ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-ip neq ip-prefix-list <i>reference</i>
Tree	ip-prefix-list

Reference	configure application-assurance group number partition number ip-prefix-list string
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the dst-port context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-port
Tree	dst-port
Description	Commands in this context configure a destination TCP/UDP port, a destination port list, or a destination range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-port eq
Tree	eq
Description	Commands in this context specify the exact match criterion. A successful match occurs when the flow matches the specified port.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	IP port list used as match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-port eq port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: port-list , port-number , or range .

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis Server port number used as match criterion
Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match dst-port eq port-number number](#)
Tree [port-number](#)
Range 0 | 1 to 65535
Default 0
Notes The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis Enter the **range** context
Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range](#)
Tree [range](#)
Description Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis TCP/UDP ending port number
Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range end number](#)
Tree [end](#)
Range 0 | 1 to 65535
Default 1
Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis TCP/UDP starting port number

Context **configure** application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range start number

Tree start

Range 0 | 1 to 65535

Default 0

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis Enter the **neq** context

Context **configure** application-assurance group number partition number policy app-qos-policy entry number match dst-port neq

Tree neq

Description Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified port.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list reference

Synopsis IP port list used as match criterion

Context **configure** application-assurance group number partition number policy app-qos-policy entry number match dst-port neq port-list reference

Tree port-list

Reference **configure** application-assurance group number partition number port-list string

Notes The following elements are part of a choice: **port-list**, **port-number**, or **range**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-port neq port-number <i>number</i>
Tree	port-number
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the range context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-port neq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	TCP/UDP ending port number
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-port neq range end <i>number</i>
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	TCP/UDP starting port number
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-port neq range start number
Tree	start
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-attribute [[flow-attribute-name](#)] *string*

Synopsis	Enter the flow-attribute list instance
Context	configure application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string
Tree	flow-attribute
Description	Commands in this context configure a flow attribute to use as match criteria. The supported options are: <ul style="list-style-type: none"> • abr_service • audio • download • encrypted • esni • real_time_communication • upload • video
Max. Instances	10
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[flow-attribute-name] *string*

Synopsis	Flow attribute name used as match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string

Tree	flow-attribute
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

confidence

Synopsis	Enter the confidence context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence
Tree	confidence
Description	Commands in this context configure the confidence level of the flow attribute for use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq number

Synopsis	Exact match criterion used for the flow-attribute confidence
Context	configure application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence eq number
Tree	eq
Range	0 to 100
Notes	The following elements are part of a choice: eq , gte , or lt .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gte number

Synopsis	Greater than or equal to for confidence match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence gte number
Tree	gte
Range	0 to 100
Notes	The following elements are part of a choice: eq , gte , or lt .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Less than value for confidence match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence lt number
Tree	lt
Range	1 to 100
Notes	The following elements are part of a choice: eq , gte , or lt .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol

Synopsis	Enter the ip-protocol context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match ip-protocol
Tree	ip-protocol
Description	Commands in this context configure the IP protocol to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq (*number* | *keyword*)

Synopsis	Exact match criterion used for the IP protocol
Context	configure application-assurance group number partition number policy app-qos-policy entry number match ip-protocol eq (number keyword)
Tree	eq
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq (*number* | *keyword*)

Synopsis Non-match criterion used for the IP protocol

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-qos-policy entry](#) *number* [match ip-protocol neq](#) (*number* | *keyword*)

Tree [neq](#)

Range 0 to 255

Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-ip

Synopsis Enter the **src-ip** context

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-qos-policy entry](#) *number* [match src-ip](#)

Tree [src-ip](#)

Description Commands in this context configure a source IP address to use as match criteria.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis Enter the **eq** context

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-qos-policy entry](#) *number* [match src-ip eq](#)

Tree [eq](#)

Description Commands in this context specify the exact match value as the match criterion. A successful match occurs when the flow matches the specified address or prefix.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis IP address prefix used for match criterion

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-ip eq ip-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [ip-prefix](#)

Notes The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis IP address prefix list used for match criterion

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-ip eq ip-prefix-list reference](#)

Tree [ip-prefix-list](#)

Reference **configure** [application-assurance group number partition number ip-prefix-list string](#)

Notes The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis Enter the **neq** context

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-ip neq](#)

Tree [neq](#)

Description Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified address or prefix.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address prefix used for match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-ip neq ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-ip neq ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list string
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the src-port context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port
Tree	src-port
Description	Commands in this context specify a source IP port, a source port list, or a source range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq

Tree	eq
Description	Commands in this context specify the exact match criterion. A successful match occurs when the flow matches the specified port.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	IP port list used as match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq port-number number
Tree	port-number
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the range context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq range
Tree	range

Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	TCP/UDP ending port number
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq range end number
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	TCP/UDP starting port number
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq range start number
Tree	start
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port neq
Tree	neq
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified port.

Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	IP port list used as match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port neq port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port neq port-number number
Tree	port-number
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the range context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port neq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: port-list , port-number , or range .

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis TCP/UDP ending port number
Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-port neq range end number](#)
Tree [end](#)
Range 0 | 1 to 65535
Default 1
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis TCP/UDP starting port number
Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-port neq range start number](#)
Tree [start](#)
Range 0 | 1 to 65535
Default 0
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

traffic-direction keyword

Synopsis Traffic direction to which AQP match entry is applied
Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match traffic-direction keyword](#)
Tree [traffic-direction](#)
Default both
Options subscriber-to-network, network-to-subscriber, both
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-service-options

Synopsis	Enter the app-service-options context
Context	configure application-assurance group number partition number policy app-service-options
Tree	app-service-options
Description	Commands in this context configure application service option characteristics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the characteristic list instance
Context	configure application-assurance group number partition number policy app-service-options characteristic string
Tree	characteristic
Description	Commands in this context create the characteristic of the application service options.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	ASO characteristic name
Context	configure application-assurance group number partition number policy app-service-options characteristic string
Tree	characteristic
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-value *string*

Synopsis	ASO characteristic default value
Context	configure application-assurance group number partition number policy app-service-options characteristic string default-value string

Tree	default-value
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for value
Context	configure application-assurance group number partition number policy app-service-options characteristic string value string
Tree	value
Description	Commands in this context configure a characteristic value.
Max. Instances	64
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[value-name] *string*

Synopsis	ASO characteristic value name
Context	configure application-assurance group number partition number policy app-service-options characteristic string value string
Tree	value
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the application list instance
Context	configure application-assurance group number partition number policy application string
Tree	application
Description	Commands in this context configure the policy application of the Application Assurance group partition.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[application-name] *string*

Synopsis Application name
Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [application](#)
string
Tree [application](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group *reference*

Synopsis Application group associated with the application
Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [application](#)
string [app-group](#) *reference*
Tree [app-group](#)
Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-group](#) *string*
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group *reference*

Synopsis Charging group associated with the application
Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [application](#)
string [charging-group](#) *reference*
Tree [charging-group](#)
Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [charging-group](#)
string
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number policy application string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-id *number*

Synopsis	Application export ID used for RADIUS accounting
Context	configure application-assurance group number partition number policy application string export-id number
Tree	export-id
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-filter

Synopsis	Enter the charging-filter context
Context	configure application-assurance group number partition number policy charging-filter
Tree	charging-filter
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group number partition number policy charging-filter entry number
Tree	entry
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	Charging filter entry ID in the AA partition policy
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy charging-filter entry <i>number</i>
Tree	entry
Description	This command defines a charging filter entry ID. Charging filter entries are an ordered list; the lowest numerical entry that matches the flow, defines the charging filter for this flow.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA charging filter entry
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy charging-filter entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group *reference*

Synopsis	Charging group to associate to flows matching the entry
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy charging-filter entry <i>number</i> charging-group <i>reference</i>
Tree	charging-group
Description	This command associates a charging group to the flows that match the charging filter entry.
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy charging-group <i>string</i>
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *description string*

Tree [description](#)

String Length 1 to 80

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis Enter the **match** context

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *match*

Tree [match](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group

Synopsis Enter the **app-group** context

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *match app-group*

Tree [app-group](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *reference*

Synopsis Exact value as the match criterion

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *match app-group eq reference*

Tree [eq](#)

Description	This command specifies that the value configured and the value in the flow must be equal for a match to occur.
Reference	configure application-assurance group number partition number policy app-group string
Notes	The following elements are part of a choice: eq or neq .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq reference

Synopsis	Non-matching application to resolve to a charging group
Context	configure application-assurance group number partition number policy charging-filter entry number match app-group neq reference
Tree	neq
Description	This command specifies that the value configured and the value in the flow must differ for a match to occur.
Reference	configure application-assurance group number partition number policy app-group string
Notes	The following elements are part of a choice: eq or neq .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application

Synopsis	Enter the application context
Context	configure application-assurance group number partition number policy charging-filter entry number match application
Tree	application
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq reference

Synopsis	Exact value as the match criterion
Context	configure application-assurance group number partition number policy charging-filter entry number match application eq reference
Tree	eq

Description	This command specifies that the value configured and the value in the flow must be equal for a match to occur.
Reference	configure application-assurance group number partition number policy application string
Notes	The following elements are part of a choice: eq or neq .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis	Non-matching application to resolve to a charging group
Context	configure application-assurance group number partition number policy charging-filter entry number match application neq reference
Tree	neq
Description	This command specifies that the value configured and the value in the flow must differ for a match to occur.
Reference	configure application-assurance group number partition number policy application string
Notes	The following elements are part of a choice: eq or neq .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-attribute [\[flow-attribute-name\]](#) *string*

Synopsis	Enter the flow-attribute list instance
Context	configure application-assurance group number partition number policy charging-filter entry number match flow-attribute string
Tree	flow-attribute
Max. Instances	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[flow-attribute-name\]](#) *string*

Synopsis	Flow attribute name match criteria
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Context	configure application-assurance group number partition number policy charging-filter entry number match flow-attribute string
Tree	flow-attribute
Description	This command adds a flow attribute to the match criteria used by this charging filter entry.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

confidence

Synopsis	Enter the confidence context
Context	configure application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence
Tree	confidence
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq number

Synopsis	Exact value as the match criterion
Context	configure application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence eq number
Tree	eq
Description	This command specifies that a successful match occurs when the flow attribute confidence level is equal to the specified value.
Range	0 to 100
Notes	The following elements are part of a choice: eq , gte , or lt .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gte number

Synopsis	Confidence value to resolve to a charging group
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Context	configure application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence gte number
Tree	gte
Description	This command specifies that a successful match occurs when the flow attribute confidence level is greater than or equal to the specified value.
Range	0 to 100
Notes	The following elements are part of a choice: eq , gte , or lt .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt number

Synopsis	Less than value as the match criterion
Context	configure application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence lt number
Tree	lt
Description	This command specifies that a successful match occurs when the flow attribute confidence level is less than the specified value.
Range	1 to 100
Notes	The following elements are part of a choice: eq , gte , or lt .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tethered-flow

Synopsis	Enable the tethered-flow context
Context	configure application-assurance group number partition number policy charging-filter entry number match tethered-flow
Tree	tethered-flow
Description	Commands in this context add the tethering status to the match criteria used by this charging filter entry.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group [**charging-group-name**] *string*

Synopsis	Enter the charging-group list instance
Context	configure application-assurance group number partition number policy charging-group string
Tree	charging-group
Description	Commands in this context create a charging group for an Application Assurance policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[charging-group-name] *string*

Synopsis	Charging group name
Context	configure application-assurance group number partition number policy charging-group string
Tree	charging-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number policy charging-group string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-id *number*

Synopsis	Charging group export ID used for RADIUS accounting
Context	configure application-assurance group number partition number policy charging-group string export-id number
Tree	export-id

Description	This command assigns an export ID value to a charging group, an app application group, or an application to be used for accounting export identification in RADIUS accounting. This ID is encoded in the top 2 bytes of the RADIUS accounting VSA to identify which charging group the counter value represents.
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

notify-start-stop *keyword*

Synopsis	Start and stop notification for the charging group
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy charging-group <i>string</i> notify-start-stop <i>keyword</i>
Tree	notify-start-stop
Default	none
Options	none, flow, charging-group
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

custom-protocol [[custom-protocol-id](#)] *string*

Synopsis	Enter the custom-protocol list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy custom-protocol <i>string</i>
Tree	custom-protocol
Description	<p>Commands in this context configure custom protocols.</p> <p>Custom protocols allow the creation of TCP and UDP-based custom protocols that employ pattern-match at offset in the protocol signature definition.</p> <p>Operator-configurable custom protocols are evaluated ahead of any Nokia-provided protocol signature in order of custom protocol ID within the context the protocol is defined. The lower ID is matched first in case of flow matching multiple custom protocols.</p> <p>Custom protocols must be created before they can be used in an application definition but do not have to be enabled. To reference a custom protocol in an application definition, or any other CLI configuration one must use the protocol name that is a concatenation of “custom_” and, (for example, custom_01, custom_02 ... custom_10, and so on). This concatenation is also used when reporting custom protocol statistics.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**custom-protocol-id**] *string*

Synopsis	Custom protocol ID for the AA policy custom protocol
Context	configure application-assurance group number partition number policy custom-protocol string
Tree	custom-protocol
Description	This command configures the index into the protocol list that defines a custom protocol for Application Assurance.
String Length	9
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the custom protocol
Context	configure application-assurance group number partition number policy custom-protocol string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number policy custom-protocol string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expression [[expr-index](#)] *number*

Synopsis	Enter the expression list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy custom-protocol string expression <i>number</i>
Tree	expression
Description	Commands in this context configure an expression string value for pattern-based custom protocols match. A flow matches a custom protocol if the specified string is found at an offset of a TCP/UDP of the first payload packet.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[expr-index] *number*

Synopsis	Expression substring index for custom protocol matching
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy custom-protocol string expression <i>number</i>
Tree	expression
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Flow direction for custom-protocol expression matching
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy custom-protocol string expression <i>number</i> direction <i>keyword</i>
Tree	direction
Description	This command configures the protocol direction to match against for a custom protocol.
Options	client-to-server, server-to-client, any
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion for custom protocol expression
Context	configure application-assurance group number partition number policy custom-protocol string expression number eq string
Tree	eq
String Length	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

offset number

Synopsis	Offset in protocol flow to start custom-protocol match
Context	configure application-assurance group number partition number policy custom-protocol string expression number offset number
Tree	offset
Description	This command configures the offset into the protocol payload where the expr-string match criteria starts.
Range	0 to 127
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol keyword



WARNING:

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

Synopsis	IP protocol number for custom-protocol match criterion
Context	configure application-assurance group number partition number policy custom-protocol string ip-protocol keyword
Tree	ip-protocol
Description	This command configures the IP protocol number of the TCP and UDP-based custom protocols.
Options	tcp, udp
Notes	This element is mandatory.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-charging-group *reference*

Synopsis	Default charging group
Context	configure application-assurance group number partition number policy default-charging-group reference
Tree	default-charging-group
Description	This command associates a charging group with any applications or application groups that do not have an explicitly assigned charging group for the Application Assurance policy.
Reference	configure application-assurance group number partition number policy charging-group string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-tethered-charging-group *reference*

Synopsis	Default charging group for tethered traffic
Context	configure application-assurance group number partition number policy default-tethered-charging-group reference
Tree	default-tethered-charging-group
Description	This command configures the default charging group to be assigned to all flows which are classified as tethered. For flows that have been identified as tethered, the AA will replace the charging group configured at the application level with the charging group configured for tethered traffic (that is, configured with default-tethered-charging-group).
Reference	configure application-assurance group number partition number policy charging-group string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-override

Synopsis	Enter the policy-override context
Context	configure application-assurance group number partition number policy-override
Tree	policy-override

Description	Commands in this context configure policy override parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub

Synopsis	Enter the aa-sub context
Context	configure application-assurance group number partition number policy-override aa-sub
Tree	aa-sub
Description	Commands in this context configure the AA policy override subscriber fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis	Enter the sap list instance
Context	configure application-assurance group number partition number policy-override aa-sub sap string
Tree	sap
Description	Commands in this context configure the Service Access Point (SAP) within the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[sap-id](#)] *string*

Synopsis	AA subscriber SAP ID
Context	configure application-assurance group number partition number policy-override aa-sub sap string
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [[characteristic-name](#)] *reference*

Synopsis	Enter the characteristic list instance
Context	configure application-assurance group number partition number policy-override aa-sub sap string characteristic reference
Tree	characteristic
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[characteristic-name] *reference*

Synopsis	ASO characteristic name
Context	configure application-assurance group number partition number policy-override aa-sub sap string characteristic reference
Tree	characteristic
Reference	configure application-assurance group number partition number policy app-service-options characteristic string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *reference*

Synopsis	Characteristic value used in subscriber policy override
Context	configure application-assurance group number partition number policy-override aa-sub sap string characteristic reference value reference
Tree	value
Reference	configure application-assurance group number partition number policy app-service-options characteristic string value string
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Enter the spoke-sdp list instance
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy-override aa-sub spoke-sdp <i>string</i>
Tree	spoke-sdp
Description	Commands in this context configure the Service Distribution Point (SDP) for the policy override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sdp-bind-id] *string*

Synopsis	Spoke SDP ID for an AA subscriber
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy-override aa-sub spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [[characteristic-name](#)] *reference*

Synopsis	Enter the characteristic list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy-override aa-sub spoke-sdp <i>string</i> characteristic <i>reference</i>
Tree	characteristic
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[characteristic-name] *reference*

Synopsis	ASO characteristic name
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy-override aa-sub spoke-sdp <i>string</i> characteristic <i>reference</i>
Tree	characteristic

Reference	configure application-assurance group number partition number policy app-service-options characteristic string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value reference

Synopsis	Characteristic value used in subscriber policy override
Context	configure application-assurance group number partition number policy-override aa-sub spoke-sdp string characteristic reference value reference
Tree	value
Reference	configure application-assurance group number partition number policy app-service-options characteristic string value string
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit [[transit-sub-name](#)] string

Synopsis	Enter the transit list instance
Context	configure application-assurance group number partition number policy-override aa-sub transit string
Tree	transit
Description	Commands in this context configure the AA transit subscriber fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[transit-sub-name\]](#) string

Synopsis	Transit subscriber name
Context	configure application-assurance group number partition number policy-override aa-sub transit string
Tree	transit
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [[characteristic-name](#)] *reference*

Synopsis Enter the **characteristic** list instance
Context **configure** [application-assurance group number partition number policy-override aa-sub transit string characteristic reference](#)
Tree [characteristic](#)
Description Commands in this context configure an override characteristic and value.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[characteristic-name] *reference*

Synopsis ASO characteristic name
Context **configure** [application-assurance group number partition number policy-override aa-sub transit string characteristic reference](#)
Tree [characteristic](#)
Reference **configure** [application-assurance group number partition number policy app-service-options characteristic string](#)
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *reference*

Synopsis Characteristic value used in subscriber policy override
Context **configure** [application-assurance group number partition number policy-override aa-sub transit string characteristic reference value reference](#)
Tree [value](#)
Reference **configure** [application-assurance group number partition number policy app-service-options characteristic string value string](#)
Notes This element is mandatory.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list [[port-list-name](#)] *string*

Synopsis	Enter the port-list list instance
Context	configure application-assurance group number partition number port-list string
Tree	port-list
Description	<p>Commands in this context define an AA group or partition named port list, which contains a list of port numbers or port ranges.</p> <p>The port list is then referenced in AA policy application filters, allowing increased flexibility in the use of server ports or HTTP proxy ports for application definition.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[port-list-name] *string*

Synopsis	Port list name
Context	configure application-assurance group number partition number port-list string
Tree	port-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number port-list string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port [[port-number](#)] *number*

Synopsis	Add a list entry for port
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Context	configure application-assurance group number partition number port-list string port number
Tree	port
Description	Commands in this context specify the server TCP or UDP port number to use in the port list definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[port-number] *number*

Synopsis	Port number
Context	configure application-assurance group number partition number port-list string port number
Tree	port
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range [start](#) *number* [end](#) *number*

Synopsis	Add a list entry for range
Context	configure application-assurance group number partition number port-list string range start number end number
Tree	range
Description	Commands in this context configure the AA group or partition named port-list range.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Start value for the port range in the AA port list
Context	configure application-assurance group number partition number port-list string range start number end number
Tree	range
Range	0 to 65534

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

end number

Synopsis	End value for the port range in the AA port list
Context	configure application-assurance group number partition number port-list string range start number end number
Tree	range
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter [[sctp-filter-name](#)] *string*

Synopsis	Enter the sctp-filter list instance
Context	configure application-assurance group number partition number sctp-filter string
Tree	sctp-filter
Description	Commands in this context configure the Stream Control Transmission Protocol (SCTP) fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sctp-filter-name] *string*

Synopsis	SCTP filter name
Context	configure application-assurance group number partition number sctp-filter string
Tree	sctp-filter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number sctp-filter string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log for packets dropped by the SCTP filter
Context	configure application-assurance group number partition number sctp-filter string event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ppid

Synopsis	Enter the ppid context
Context	configure application-assurance group number partition number sctp-filter string ppid
Tree	ppid
Description	Commands in this context configure actions for specific or default Payload Protocol Identifiers (PPIDs).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	Default action for all SCTP PPIDs
Context	configure application-assurance group number partition number sctp-filter string ppid default-action keyword
Tree	default-action
Default	permit

Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [**entry-id**] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> sctp-filter <i>string</i> ppid entry <i>number</i>
Tree	entry
Description	Commands in this context specify SCTP PPID values and the corresponding action to apply.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	SCTP filter PPID entry ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> sctp-filter <i>string</i> ppid entry <i>number</i>
Tree	entry
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	SCTP filter PPID entry action
Context	configure application-assurance group <i>number</i> partition <i>number</i> sctp-filter <i>string</i> ppid entry <i>number</i> action <i>keyword</i>
Tree	action
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value (number | keyword)



WARNING:

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

Synopsis	PPID entry value
Context	configure application-assurance group <i>number</i> partition <i>number</i> sctp-filter <i>string</i> ppid entry <i>number</i> value (<i>number</i> <i>keyword</i>)
Tree	value
Range	0 to 4294967295
Options	iaa, m2ua, m3ua, sua, m2pa, v5ua, h.248, bicc/q.2150.3, tali, dua, asap, enr, h.323, q.ipc/q.2150.3, simco, ddp-segment-chunk, ddp-stream-session-control, s1-application-protocol, rua, hnbap, forces-hp, forces-mp, forces-lp, sbc-ap, nbap, x2ap, ircp, lcs-ap, mpich2, service-area-broadcast-protocol, fractal-generator-protocol, ping-pong-protocol, calcapp-protocol, scripting-service-protocol, netperformer-protocol-control-channel, netperformer-protocol-data-channel, echo, discard, daytime, character-generator, 3gpp-rna, 3gpp-m2ap, 3gpp-m3ap, ssh-over-sctp, diameter-in-a-sctp-data-chunk, diameter-in-a-dtls/sctp-data-chunk, r14p.-ber-encoded-asn.1-over-sctp, webrtc-control, domstring-last, binary-data-partial, binary-data-last, domstring-partial, 3gpp-pua, webrtc-string-empty, webrtc-binary-empty, 3gpp-xwap, 3gpp-xw-control-plane, 3gpp-ng-application-protocol, 3gpp-xn-application-protocol, 3gpp-f1-application-protocol, http-sctp, 3gpp-e1-application-protocol, ele2-lawful-interception, 3gpp-ngap-over-dtls-over-sctp, 3gpp-xnap-over-dtls-over-sctp, 3gpp-f1ap-over-dtls-over-sctp, 3gpp-e1ap-over-dtls-over-sctp, e2-cp, e2-up, e2-du, 3gpp-w1ap
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ppid-range

Synopsis	Enter the ppid-range context
Context	configure application-assurance group <i>number</i> partition <i>number</i> sctp-filter <i>string</i> ppid-range
Tree	ppid-range
Description	Commands in this context specify the range of PPID values that are allowed by the AA SCTP filter firewall.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis	Maximum PPID value
Context	configure application-assurance group number partition number sctp-filter string ppid-range max number
Tree	max
Description	This command configures the maximum SCTP Payload Protocol Identifier (PPID) to be permitted by the SCTP filter. The value must be greater or equal to the minimum PPID value.
Range	0 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min number

Synopsis	Minimum PPID value
Context	configure application-assurance group number partition number sctp-filter string ppid-range min number
Tree	min
Description	This command configures the minimum SCTP Payload Protocol Identifier (PPID) to be permitted by the SCTP filter. The value must be less than or equal to the maximum PPID value.
Range	0 to 4294967295
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter [[session-filter-name](#)] *string*

Synopsis	Enter the session-filter list instance
Context	configure application-assurance group number partition number session-filter string
Tree	session-filter
Description	Commands in this context create a session filter.
Max. Instances	300
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[session-filter-name] *string*

Synopsis Session filter name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string*

Tree [session-filter](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis Enter the **default-action** context

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string*
[default-action](#)

Tree [default-action](#)

Description Commands in this context specify the default action to take for packets that do not match any filter entries.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis Default action for packets not matching filter entries

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string*
[default-action](#) [action](#) *keyword*

Tree [action](#)

Default deny

Options deny, permit

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event logging of default action
Context	configure application-assurance group number partition number session-filter string default-action event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number session-filter string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group number partition number session-filter string entry number
Tree	entry
Description	Commands in this context configure an AA session filter match entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[entry-id](#)] *number*

Synopsis	Entry ID for the session filter entry
Context	configure application-assurance group number partition number session-filter string entry number
Tree	entry
Range	1 to 65535

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

action

Synopsis	Enter the action context
Context	configure application-assurance group number partition number session-filter string entry number action
Tree	action
Description	Commands in this context configure the action for this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deny

Synopsis	Deny sessions matching the criteria
Context	configure application-assurance group number partition number session-filter string entry number action deny
Tree	deny
Notes	The following elements are part of a choice: deny , http-redirect , permit , or tcp-optimizer .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log reference

Synopsis	Event log name used to log the action
Context	configure application-assurance group number partition number session-filter string entry number action event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	HTTP redirect for matching sessions
Context	configure application-assurance group number partition number session-filter string entry number action http-redirect reference
Tree	http-redirect
Reference	configure application-assurance group number http-redirect string
Notes	The following elements are part of a choice: deny , http-redirect , permit , or tcp-optimizer .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

permit

Synopsis	Permit sessions that match the criteria
Context	configure application-assurance group number partition number session-filter string entry number action permit
Tree	permit
Notes	The following elements are part of a choice: deny , http-redirect , permit , or tcp-optimizer .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-optimizer *reference*

Synopsis	TCP optimizer to handle sessions matching the criteria
Context	configure application-assurance group number partition number session-filter string entry number action tcp-optimizer reference
Tree	tcp-optimizer
Reference	configure application-assurance group number tcp-optimizer string
Notes	The following elements are part of a choice: deny , http-redirect , permit , or tcp-optimizer .
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number session-filter string entry number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the match context
Context	configure application-assurance group number partition number session-filter string entry number match
Tree	match
Description	Commands in this context configure session conditions for this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-ip

Synopsis	Enter the dst-ip context
Context	configure application-assurance group number partition number session-filter string entry number match dst-ip
Tree	dst-ip
Description	Commands in this context configure the destination IP address to match.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache *reference*

Synopsis	Destination IPs in specified DNS IP Cache
Context	configure application-assurance group number partition number session-filter string entry number match dst-ip dns-ip-cache reference
Tree	dns-ip-cache
Reference	configure application-assurance group number dns-ip-cache string

Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Destination IP address prefix as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match dst-ip ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match dst-ip ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list string
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the dst-port context
Context	configure application-assurance group number partition number session-filter string entry number match dst-port
Tree	dst-port
Description	Commands in this context specify a destination TCP/UDP port, a destination port list, or a destination range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Match criterion used for destination or source port
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match dst-port eq <i>number</i>
Tree	eq
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Greater than match criterion for the port number
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match dst-port gt <i>number</i>
Tree	gt
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Less than match criterion for the port
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match dst-port lt <i>number</i>
Tree	lt
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list reference

Synopsis	Destination or source port list
Context	configure application-assurance group number partition number session-filter string entry number match dst-port port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure application-assurance group number partition number session-filter string entry number match dst-port range
Tree	range
Description	Commands in this context specify a destination IP port, a destination port list, or a destination range to use as match criteria.
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match dst-port range end number
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the port range as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match dst-port range start number
Tree	start
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol (*number* | *keyword*)

Synopsis	IP protocol as a match criterion
Context	configure application-assurance group number partition number session-filter string entry number match ip-protocol (<i>number</i> <i>keyword</i>)
Tree	ip-protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-ip

Synopsis	Enter the src-ip context
Context	configure application-assurance group number partition number session-filter string entry number match src-ip
Tree	src-ip
Description	Commands in this context specify a source IP address to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Source IP address prefix as match criterion
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Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match src-ip ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	Source IP address prefix list as match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match src-ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure application-assurance group <i>number</i> partition <i>number</i> ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the src-port context
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match src-port
Tree	src-port
Description	Commands in this context specify a source IP port, a source port list, or a source range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Match criterion used for destination or source port
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 1 to 65535

Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Greater than match criterion for the port number
Context	configure application-assurance group <i>number</i> partition number session-filter string entry number match src-port gt <i>number</i>
Tree	gt
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Less than match criterion for the port
Context	configure application-assurance group <i>number</i> partition number session-filter string entry number match src-port lt <i>number</i>
Tree	lt
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Destination or source port list
Context	configure application-assurance group <i>number</i> partition number session-filter string entry number match src-port port-list <i>reference</i>
Tree	port-list

Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure application-assurance group number partition number session-filter string entry number match src-port range
Tree	range
Description	Commands in this context specify a destination IP port, a destination port list, or a destination range to use as match criteria.
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match src-port range end number
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the port range as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match src-port range start number
Tree	start
Range	0 1 to 65535
Default	0

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

shallow-inspection *boolean*

Synopsis Enable shallow inspection
Context **configure** [application-assurance group number partition number shallow-inspection boolean](#)
Tree [shallow-inspection](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

statistics

Synopsis Enter the **statistics** context
Context **configure** [application-assurance group number partition number statistics](#)
Tree [statistics](#)
Description Commands in this context configure accounting and billing statistics for this AA group.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-admit-deny

Synopsis Enter the **aa-admit-deny** context
Context **configure** [application-assurance group number partition number statistics aa-admit-deny](#)
Tree [aa-admit-deny](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy
Context **configure** [application-assurance group number partition number statistics aa-admit-deny accounting-policy reference](#)

Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-admit-deny collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter-stats *boolean*

Synopsis	Include GTP filter statistics in admit-deny accounting records
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-admit-deny gtp-filter-stats <i>boolean</i>
Tree	gtp-filter-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer-stats *boolean*

Synopsis	Include admit-deny policer statistics in accounting records
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-admit-deny policer-stats <i>boolean</i>
Tree	policer-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer-stats-resources *boolean*

Synopsis	Allocate ISA/ ESA resources for policer admit-deny statistics
Context	configure application-assurance group number partition number statistics aa-admit-deny policer-stats-resources <i>boolean</i>
Tree	policer-stats-resources
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter-stats *boolean*

Synopsis	Include SCTP filter admit-deny statistics in accounting
Context	configure application-assurance group number partition number statistics aa-admit-deny sctp-filter-stats <i>boolean</i>
Tree	sctp-filter-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter-stats *boolean*

Synopsis	Include session filter admit-deny statistics in accounting
Context	configure application-assurance group number partition number statistics aa-admit-deny session-filter-stats <i>boolean</i>
Tree	session-filter-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate-stats *boolean*

Synopsis	Include TCP validate admit-deny statistics in accounting
Context	configure application-assurance group number partition number statistics aa-admit-deny tcp-validate-stats <i>boolean</i>
Tree	tcp-validate-stats
Default	false

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-app-group

Synopsis Enter the **aa-app-group** context
Context **configure** [application-assurance group number partition number statistics aa-app-group](#)
Tree [aa-app-group](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy ID
Context **configure** [application-assurance group number partition number statistics aa-app-group accounting-policy reference](#)
Tree [accounting-policy](#)
Reference **configure** [log accounting-policy number](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis Collect statistics
Context **configure** [application-assurance group number partition number statistics aa-app-group collect-stats boolean](#)
Tree [collect-stats](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-application

Synopsis Enter the **aa-application** context
Context **configure** [application-assurance group number partition number statistics aa-application](#)

Tree [aa-application](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy ID
Context **configure** [application-assurance group number partition number statistics aa-application accounting-policy reference](#)
Tree [accounting-policy](#)
Reference **configure** [log accounting-policy number](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis Collect statistics
Context **configure** [application-assurance group number partition number statistics aa-application collect-stats boolean](#)
Tree [collect-stats](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-partition

Synopsis Enter the **aa-partition** context
Context **configure** [application-assurance group number partition number statistics aa-partition](#)
Tree [aa-partition](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy

Context	configure application-assurance group number partition number statistics aa-partition accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure application-assurance group number partition number statistics aa-partition collect-stats boolean
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tethering-stats *boolean*

Synopsis	Collect tethering statistics
Context	configure application-assurance group number partition number statistics aa-partition tethering-stats boolean
Tree	tethering-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

traffic-type-stats *boolean*

Synopsis	Collect traffic type statistics
Context	configure application-assurance group number partition number statistics aa-partition traffic-type-stats boolean
Tree	traffic-type-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-protocol

Synopsis	Enter the aa-protocol context
Context	configure application-assurance group number partition number statistics aa-protocol
Tree	aa-protocol
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure application-assurance group number partition number statistics aa-protocol accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of protocol statistics
Context	configure application-assurance group number partition number statistics aa-protocol admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure application-assurance group number partition number statistics aa-protocol collect-stats boolean
Tree	collect-stats
Default	false

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub

Synopsis Enter the **aa-sub** context
Context **configure** [application-assurance group number partition number statistics aa-sub](#)
Tree [aa-sub](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy ID
Context **configure** [application-assurance group number partition number statistics aa-sub](#)
[accounting-policy reference](#)
Tree [accounting-policy](#)
Reference **configure** [log accounting-policy number](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aggregate-stats-export-using *keyword*

Synopsis Method of statistics export to be used
Context **configure** [application-assurance group number partition number statistics aa-sub](#)
[aggregate-stats-export-using keyword](#)
Tree [aggregate-stats-export-using](#)
Options accounting-policy, radius-accounting-policy
Max. 2
Instances
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group [[app-group-name](#)] *reference*

Synopsis Enter the **app-group** list instance

Context	configure application-assurance group number partition number statistics aa-sub app-group reference
Tree	app-group
Description	Commands in this context configure accounting and statistics collection parameters for AA application groups for a specific AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[app-group-name] reference

Synopsis	Application group name
Context	configure application-assurance group number partition number statistics aa-sub app-group reference
Tree	app-group
Reference	configure application-assurance group number partition number policy app-group string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using keyword

Synopsis	Method used to export statistics
Context	configure application-assurance group number partition number statistics aa-sub app-group reference export-using keyword
Tree	export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application [application-name] reference

Synopsis	Enter the application list instance
Context	configure application-assurance group number partition number statistics aa-sub application reference
Tree	application

Description	Commands in this context configure the AA subscriber accounting statistics for the export of AA applications for an AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[application-name] *reference*

Synopsis	Application name
Context	configure application-assurance group number partition number statistics aa-sub application reference
Tree	application
Reference	configure application-assurance group number partition number policy application string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using *keyword*

Synopsis	Method used to export statistics
Context	configure application-assurance group number partition number statistics aa-sub application reference export-using keyword
Tree	export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group [[charging-group-name](#)] *reference*

Synopsis	Enter the charging-group list instance
Context	configure application-assurance group number partition number statistics aa-sub charging-group reference
Tree	charging-group
Description	Commands in this context configure AA subscriber accounting statistics for the export of AA charging groups of an AA group/partition.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[charging-group-name] reference

Synopsis Charging group name
Context **configure** [application-assurance group number partition number statistics aa-sub charging-group reference](#)
Tree [charging-group](#)
Description This command specifies the AA charging group to be included in the exported accounting records.
Reference **configure** [application-assurance group number partition number policy charging-group string](#)
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using keyword

Synopsis Method used to export statistics
Context **configure** [application-assurance group number partition number statistics aa-sub charging-group reference export-using keyword](#)
Tree [export-using](#)
Options accounting-policy, radius-accounting-policy
Max. 2
Instances
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats boolean

Synopsis Collect statistics
Context **configure** [application-assurance group number partition number statistics aa-sub collect-stats boolean](#)
Tree [collect-stats](#)
Default false
Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

exclude-tcp-retrans *boolean*

Synopsis Exclude TCP retransmission and error statistics

Context **configure** [application-assurance group number partition number statistics aa-sub](#)
[exclude-tcp-retrans boolean](#)

Tree [exclude-tcp-retrans](#)

Description When configured to **true**, TCP errors and retransmission packets are not counted for the purpose of content-based billing. **Note:** This command is only applicable to EPC. This setting has no impact on app/app-group aggregate AA stats.

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-stats *boolean*

Synopsis Collect maximum throughput statistics

Context **configure** [application-assurance group number partition number statistics aa-sub](#)
[max-throughput-stats boolean](#)

Tree [max-throughput-stats](#)

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Enter the **protocol** list instance

Context **configure** [application-assurance group number partition number statistics aa-sub](#)
[protocol string](#)

Tree [protocol](#)

Description Commands in this context configure AA subscriber accounting statistics for the export of aa-sub protocols of an AA group/partition.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[protocol-name] *string*

Synopsis	AA protocol name
Context	configure application-assurance group number partition number statistics aa-sub protocol string
Tree	protocol
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using *keyword*

Synopsis	Method used to export statistics
Context	configure application-assurance group number partition number statistics aa-sub protocol string export-using keyword
Tree	export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy name
Context	configure application-assurance group number partition number statistics aa-sub radius-accounting-policy reference
Tree	radius-accounting-policy
Reference	configure application-assurance radius-accounting-policy string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

usage-monitoring *boolean*

Synopsis	Collect usage monitoring statistics
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Context	configure application-assurance group number partition number statistics aa-sub usage-monitoring boolean
Tree	usage-monitoring
Description	When configured to true , this command allows the system to activate Gx usage monitoring at AA group/partition level, if enough usage monitoring resources exist for all existing subs. When configured to false , this command silently removes all monitoring instances (no PCRF notifications) for AA subscribers and all subsequent AA Gx usage monitoring messages are ignored.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-study [study-type] keyword

Synopsis	Enter the aa-sub-study list instance
Context	configure application-assurance group number partition number statistics aa-sub-study keyword
Tree	aa-sub-study
Description	Commands in this context configure accounting and statistics collection parameters per AA special study subscribers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[study-type] keyword

Synopsis	Statistic type that the study is using
Context	configure application-assurance group number partition number statistics aa-sub-study keyword
Tree	aa-sub-study
Options	protocol, application
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub

Synopsis	Enter the aa-sub context
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword</i> aa-sub
Tree	aa-sub
Description	Commands in this context add an existing subscriber identification to a group of special study subscribers. Identifying a group of special study subscribers allows statistics and accounting records for those subscribers to be collected for protocols and applications through Application Assurance. When adding a subscriber to the special study group, accounting records and statistics generation commence immediately. When removing a subscriber from the group, special study statistics and accounting records for that subscriber in the current interval are lost.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm [[esm-sub-name](#)] *string*

Synopsis	Add a list entry for esm
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword</i> aa-sub esm <i>string</i>
Tree	esm
Description	Commands in this context configure the ESM fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[esm-sub-name\]](#) *string*

Synopsis	ESM subscriber name
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword</i> aa-sub esm <i>string</i>
Tree	esm
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm-mac [*esm-mac-sub-name*] *string*

Synopsis	Add a list entry for esm-mac
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword</i> aa-sub esm-mac <i>string</i>
Tree	esm-mac
Description	Commands in this context configure the ESM MAC fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*esm-mac-sub-name*] *string*

Synopsis	ESM MAC subscriber name
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword</i> aa-sub esm-mac <i>string</i>
Tree	esm-mac
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap [*sap-id*] *string*

Synopsis	Add a list entry for sap
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword</i> aa-sub sap <i>string</i>
Tree	sap
Description	Commands in this context configure the Service Access Point (SAP) for the purpose of enabling special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*sap-id*] *string*

Synopsis	AA subscriber SAP ID
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword</i> aa-sub sap <i>string</i>

Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Add a list entry for spoke-sdp
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub-study <i>keyword</i> aa-sub spoke-sdp <i>string</i>
Tree	spoke-sdp
Description	Commands in this context specify the spoke SDP ID and VC ID for the purpose of including the subscriber into AA special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sdp-bind-id] *string*

Synopsis	Spoke SDP ID for an AA subscriber
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub-study <i>keyword</i> aa-sub spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit [[transit-sub-name](#)] *string*

Synopsis	Add a list entry for transit
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub-study <i>keyword</i> aa-sub transit <i>string</i>
Tree	transit
Description	Commands in the context specify an existing transit subscriber to be included in AA sub special study statistics.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[transit-sub-name] *string*

Synopsis Transit subscriber name
Context **configure** [application-assurance group number partition number statistics aa-sub-study](#)
keyword aa-sub transit string
Tree [transit](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy ID
Context **configure** [application-assurance group number partition number statistics aa-sub-study](#)
keyword accounting-policy reference
Tree [accounting-policy](#)
Reference **configure** [log accounting-policy number](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis Collect statistics
Context **configure** [application-assurance group number partition number statistics aa-sub-study](#)
keyword collect-stats boolean
Tree [collect-stats](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate [[tcp-validate-name](#)] *string*

Synopsis	Enter the tcp-validate list instance
Context	configure application-assurance group number partition number tcp-validate string
Tree	tcp-validate
Description	Commands in this context configure a TCP validation policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tcp-validate-name] *string*

Synopsis	TCP validation policy name
Context	configure application-assurance group number partition number tcp-validate string
Tree	tcp-validate
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number tcp-validate string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log

Synopsis	Enter the log context
Context	configure application-assurance group number partition number tcp-validate string log
Tree	log
Description	Commands in this context enable event logging of traffic dropped by TCP validation.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all *boolean*

Synopsis Enable logging of all dropped TCP packets

Context **configure** [application-assurance group number partition number tcp-validate string log](#)
[all boolean](#)

Tree [all](#)

Description When configured to **true**, all dropped TCP packets are logged, including the following:

- packets received after an RST and discarded
- packets received before TCP session establishment (before SYN) and discarded

An event log must also be configured to enable logging of all dropped packets.

When configured to **false**, discards related to the described cases are not captured in any event log.

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis Event log name

Context **configure** [application-assurance group number partition number tcp-validate string log](#)
[event-log reference](#)

Tree [event-log](#)

Reference **configure** [application-assurance group number partition number event-log string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

strict *boolean*

Synopsis Enable strict checking of TCP traffic

Context **configure** [application-assurance group number partition number tcp-validate string strict](#)
[boolean](#)

Tree [strict](#)

Description When configured to **true**, the command specifies whether enforcement of TCP sequence and acknowledgment numbers are applied. If a packet does not meet the

expected sequence or acknowledgment number, it is dropped. This command should only be enabled if the expected bit error rate or packet loss is low.

For example, if acknowledgments are lost before being detected by AA, the server timeouts are triggered and retransmissions occur. If strict is enabled, these retransmissions resemble a replay attack and are dropped by AA.

When configured to **false**, the command removes the TCP sequence and acknowledgment number enforcement.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tethering-detection

Synopsis	Enter the tethering-detection context
Context	configure application-assurance group number partition number tethering-detection
Tree	tethering-detection
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of tethering detection
Context	configure application-assurance group number partition number tethering-detection admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

single-device

Synopsis	Enter the single-device context
Context	configure application-assurance group number partition number tethering-detection single-device
Tree	single-device

Description	Commands in this context configure the single-device fields and expected TTL values for flow-level tethering detection.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expected-ttl *[ttl] number*

Synopsis	Add a list entry for expected-ttl
Context	configure application-assurance group number partition number tethering-detection single-device expected-ttl number
Tree	expected-ttl
Description	Commands in this context configure the TTL values for single-device tethering detection.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ttl] *number*

Synopsis	Expected TTL traffic value from host devices
Context	configure application-assurance group number partition number tethering-detection single-device expected-ttl number
Tree	expected-ttl
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

threshold-crossing-alert

Synopsis	Enter the threshold-crossing-alert context
Context	configure application-assurance group number partition number threshold-crossing-alert
Tree	threshold-crossing-alert
Description	Commands in this context configure the generation of threshold crossing alerts (TCAs).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

criteria [*criteria-id*] *keyword direction keyword*

Synopsis	Enter the criteria list instance
Context	configure application-assurance group number partition number threshold-crossing-alert criteria <i>keyword direction keyword</i>
Tree	criteria
Description	Commands in this context configure the TCA criteria for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[criteria-id] *keyword*

Synopsis	Statistics TCA criteria ID
Context	configure application-assurance group number partition number threshold-crossing-alert criteria <i>keyword direction keyword</i>
Tree	criteria
Options	error-drop, fragment-drop-out-of-order, fragment-drop-all, overload-drop, gtp-sanity-drop
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for the criteria statistics TCA
Context	configure application-assurance group number partition number threshold-crossing-alert criteria <i>keyword direction keyword</i>
Tree	criteria
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
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Context	configure application-assurance group number partition number threshold-crossing-alert criteria keyword direction keyword high-watermark number
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert criteria keyword direction keyword low-watermark number
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter [[gtp-filter-name](#)] *reference criteria keyword direction keyword*

Synopsis	Enter the gtp-filter list instance
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter reference criteria keyword direction keyword
Tree	gtp-filter
Description	Commands in this context configure TCA generation for a GTP filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[gtp-filter-name] *reference*

Synopsis	GTP filter name for TCA generation
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter reference criteria keyword direction keyword
Tree	gtp-filter
Reference	configure application-assurance group number partition number gtp gtp-filter string

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

criteria *keyword*

Synopsis	Criteria ID for GTP filter TCA
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter reference criteria keyword direction keyword
Tree	gtp-filter
Options	max-payload-length, message-type-default-action, header-sanity, message-type-gtpv2-default-action, imsi-apn-filter-default-action, validate-gtp-tunnels, validate-sequence-number, validate-src-ip-addr, missing-mandatory-ie, gtp-in-gtp, gtp-tunnel-database-full, gtp-tunnel-endpoint-limit
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for the GTP filter TCA
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter reference criteria keyword direction keyword
Tree	gtp-filter
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter reference criteria keyword direction keyword high-watermark number
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis Low watermark threshold
Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert](#) [gtp-filter](#) *reference* [criteria](#) *keyword* [direction](#) *keyword* **low-watermark** *number*
Tree [low-watermark](#)
Range 0 to 4294967294
Default 0
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter-entry [[gtp-filter-name](#)] *reference* [entry-id](#) *number* [direction](#) *keyword*

Synopsis Enter the **gtp-filter-entry** list instance
Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert](#) [gtp-filter-entry](#) *reference* [entry-id](#) *number* [direction](#) *keyword*
Tree [gtp-filter-entry](#)
Description Commands in this context configure the AA GTP filter entry TCA fields.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[gtp-filter-name](#)] *reference*

Synopsis AA GTP filter name for TCA configuration
Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert](#) [gtp-filter-entry](#) *reference* [entry-id](#) *number* [direction](#) *keyword*
Tree [gtp-filter-entry](#)
Reference **configure** [application-assurance group](#) *number* [partition](#) *number* [gtp](#) [gtp-filter](#) *string*
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry-id *number*

Synopsis	Entry ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert gtp-filter-entry <i>reference</i> entry-id <i>number</i> direction <i>keyword</i>
Tree	gtp-filter-entry
Description	This command configures the identifier for the statistics TCA GTP filter V1 message type entry, V2 message type entry, or imsi-apn filter entry.
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Traffic direction for GTP filter entry TCA
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert gtp-filter-entry <i>reference</i> entry-id <i>number</i> direction <i>keyword</i>
Tree	gtp-filter-entry
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert gtp-filter-entry <i>reference</i> entry-id <i>number</i> direction <i>keyword</i> high-watermark <i>number</i>
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter-entry reference entry-id number direction keyword low-watermark number
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer [[policer-name](#)] *string direction keyword*

Synopsis	Enter the policer list instance
Context	configure application-assurance group number partition number threshold-crossing-alert policer string direction keyword
Tree	policer
Description	Commands in this context configure a TCA for the counter capturing drops or admit events.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Policer name for TCA generation
Context	configure application-assurance group number partition number threshold-crossing-alert policer string direction keyword
Tree	policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for the policer TCA
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Context	configure application-assurance group number partition number threshold-crossing-alert policer string direction keyword
Tree	policer
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert policer string direction keyword high-watermark number
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert policer string direction keyword low-watermark number
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter [[sctp-filter-name](#)] *reference criteria keyword direction keyword*

Synopsis	Enter the sctp-filter list instance
Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword
Tree	sctp-filter

Description	Commands in this context configure TCA generation for an SCTP filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sctp-filter-name] *reference*

Synopsis	SCTP filter name for TCA generation
Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword
Tree	sctp-filter
Reference	configure application-assurance group number partition number sctp-filter string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

criteria *keyword*

Synopsis	Criteria ID for SCTP filter TCA
Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword
Tree	sctp-filter
Options	ppid-default-action, packet-sanity, ppid-range
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for SCTP filter TCA
Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword
Tree	sctp-filter
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis High watermark threshold

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert](#) [sctp-filter](#) *reference* [criteria](#) *keyword* [direction](#) *keyword* [high-watermark](#) *number*

Tree [high-watermark](#)

Range 1 to 4294967295

Default 4294967295

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis Low watermark threshold

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert](#) [sctp-filter](#) *reference* [criteria](#) *keyword* [direction](#) *keyword* [low-watermark](#) *number*

Tree [low-watermark](#)

Range 0 to 4294967294

Default 0

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter-entry [[sctp-filter-name](#)] *reference* [entry-id](#) *reference* [direction](#) *keyword*

Synopsis Enter the **sctp-filter-entry** list instance

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert](#) [sctp-filter-entry](#) *reference* [entry-id](#) *reference* [direction](#) *keyword*

Tree [sctp-filter-entry](#)

Description Commands in this context configure the AA SCTP filter PPID entry TCA fields.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sctp-filter-name] *reference*

Synopsis	AA SCTP filter name for TCA configuration
Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword
Tree	sctp-filter-entry
Reference	configure application-assurance group number partition number sctp-filter string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry-id *reference*

Synopsis	ID for SCTP filter entry TCA
Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword
Tree	sctp-filter-entry
Reference	configure application-assurance group number partition number sctp-filter string ppid entry number
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword
Tree	sctp-filter-entry
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
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Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword high-watermark number
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword low-watermark number
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter [[session-filter-name](#)] *reference criteria keyword direction keyword*

Synopsis	Enter the session-filter list instance
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword
Tree	session-filter
Description	Commands in this context configure TCA generation for a session filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[session-filter-name] *reference*

Synopsis	AA session filter name for TCA configuration
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword
Tree	session-filter

Reference	configure application-assurance group number partition number session-filter string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

criteria *keyword*

Synopsis	ID for session filter entry TCA
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword
Tree	session-filter
Options	default-action
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword
Tree	session-filter
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword high-watermark number
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis Low watermark threshold
Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert session-filter](#) *reference* [criteria](#) *keyword* [direction](#) *keyword* **low-watermark** *number*
Tree [low-watermark](#)
Range 0 to 4294967294
Default 0
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter-entry [[session-filter-name](#)] *reference* [entry-id](#) *reference* [direction](#) *keyword*

Synopsis Enter the **session-filter-entry** list instance
Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert session-filter-entry](#) *reference* [entry-id](#) *reference* [direction](#) *keyword*
Tree [session-filter-entry](#)
Description Commands in this context configure the AA session filter entry TCA fields for the partition.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[session-filter-name] *reference*

Synopsis AA session filter name for TCA configuration
Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert session-filter-entry](#) *reference* [entry-id](#) *reference* [direction](#) *keyword*
Tree [session-filter-entry](#)
Reference **configure** [application-assurance group](#) *number* [partition](#) *number* [session-filter](#) *string*
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry-id *reference*

Synopsis	ID for session filter entry TCA
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword
Tree	session-filter-entry
Reference	configure application-assurance group number partition number session-filter string entry number
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword
Tree	session-filter-entry
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword high-watermark number
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert session-filter-entry <i>reference</i> entry-id <i>reference</i> direction <i>keyword</i> low-watermark <i>number</i>
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate [[tcp-validate-name](#)] *reference* [direction](#) *keyword*

Synopsis	Enter the tcp-validate list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert tcp-validate <i>reference</i> direction <i>keyword</i>
Tree	tcp-validate
Description	Commands in this context configure TCP validation policy TCA fields for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tcp-validate-name] *reference*

Synopsis	AA TCP validate name for configuration
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert tcp-validate <i>reference</i> direction <i>keyword</i>
Tree	tcp-validate
Reference	configure application-assurance group <i>number</i> partition <i>number</i> tcp-validate <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for TCA configuration
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Context	configure application-assurance group number partition number threshold-crossing-alert tcp-validate reference direction keyword
Tree	tcp-validate
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert tcp-validate reference direction keyword high-watermark number
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert tcp-validate reference direction keyword low-watermark number
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-ip-policy [[ip-policy-id](#)] *number*

Synopsis	Enter the transit-ip-policy list instance
Context	configure application-assurance group number partition number transit-ip-policy number
Tree	transit-ip-policy

Description	Commands in this context define a transit AA subscriber IP policy. Transit AA subscribers are managed by the system through the use of this policy assigned to services, which determines how transit subs are created and removed for that service.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-policy-id] number

Synopsis	IP transit policy ID
Context	configure application-assurance group number partition number transit-ip-policy number
Tree	transit-ip-policy
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-app-profile reference

Synopsis	Default AA application profile
Context	configure application-assurance group number partition number transit-ip-policy number default-app-profile reference
Tree	default-app-profile
Reference	configure application-assurance group number partition number policy app-profile string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure application-assurance group number partition number transit-ip-policy number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

detect-seen-ip *boolean*

Synopsis	Detect transit subscribers based on IP address
Context	configure application-assurance group number partition number transit-ip-policy number detect-seen-ip <i>boolean</i>
Tree	detect-seen-ip
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp

Synopsis	Enter the dhcp context
Context	configure application-assurance group number partition number transit-ip-policy number dhcp
Tree	dhcp
Description	Commands in this context enable dynamic DHCP-based management of transit aa-subs for the transit IP policy. Dynamic DHCP-based management and other types of management of transit subs for a transit IP policy are mutually exclusive.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state for learning DHCP dynamic transits
Context	configure application-assurance group number partition number transit-ip-policy number dhcp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

diameter

Synopsis	Enter the diameter context
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Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i> diameter
Tree	diameter
Description	Commands in this context configure dynamic Diameter-based management of transit AA subs for the transit IP policy. This is mutually exclusive to other types of management of transit subs for a given transit IP policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state for Diameter dynamic transits
Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i> diameter admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application-policy *reference*

Synopsis	Diameter application policy name for IP transit policy
Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i> diameter application-policy <i>reference</i>
Tree	application-policy
Reference	configure subscriber-mgmt diameter-gx-policy <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address-prefix-length *number*

Synopsis	Length of the AA transit IP policy IPv6 address prefix
Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i> ipv6-address-prefix-length <i>number</i>
Tree	ipv6-address-prefix-length
Range	32 to 64

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the radius context
Context	configure application-assurance group number partition number transit-ip-policy number radius
Tree	radius
Description	Commands in this context enable dynamic RADIUS-based management of transit aa-subs for the transit IP policy. This is mutually exclusive to other types of management of transit subs for a given transit IP policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of learning RADIUS dynamic transit
Context	configure application-assurance group number partition number transit-ip-policy number radius admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *reference*

Synopsis	RADIUS authentication policy
Context	configure application-assurance group number partition number transit-ip-policy number radius authentication-policy <i>reference</i>
Tree	authentication-policy
Reference	configure subscriber-mgmt radius-authentication-policy <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

seen-ip-radius-acct-policy *reference*

Synopsis	RADIUS accounting policy to enable seen-IP notification
Context	configure application-assurance group number partition number transit-ip-policy number radius seen-ip-radius-acct-policy reference
Tree	seen-ip-radius-acct-policy
Reference	configure application-assurance radius-accounting-policy string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-aa-sub [[transit-aa-sub-name](#)] *string*

Synopsis	Enter the static-aa-sub list instance
Context	configure application-assurance group number partition number transit-ip-policy number static-aa-sub <i>string</i>
Tree	static-aa-sub
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[transit-aa-sub-name](#)] *string*

Synopsis	Static transit subscriber name
Context	configure application-assurance group number partition number transit-ip-policy number static-aa-sub <i>string</i>
Tree	static-aa-sub
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure application-assurance group number partition number transit-ip-policy number static-aa-sub string app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group number partition number policy app-profile <i>string</i>

Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip [address] (*ipv4-unicast-address* | *ipv6-prefix*)

Synopsis	Add a list entry for ip
Context	configure application-assurance group number partition number transit-ip-policy number static-aa-sub string ip (<i>ipv4-unicast-address</i> <i>ipv6-prefix</i>)
Tree	ip
Description	Commands in this context configure the IP address for a static transit aa-sub.
Max. Instances	32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[address] (*ipv4-unicast-address* | *ipv6-prefix*)

Synopsis	IP address for an AA static transit subscriber
Context	configure application-assurance group number partition number transit-ip-policy number static-aa-sub string ip (<i>ipv4-unicast-address</i> <i>ipv6-prefix</i>)
Tree	ip
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis	Subscriber identification policy
Context	configure application-assurance group number partition number transit-ip-policy number sub-ident-policy reference
Tree	sub-ident-policy
Description	This command defines the subscriber identification policy for the transit IP policy that will be associated with a SAP. The subscriber identification policy must be defined prior to associating the profile with a SAP in the configure subscriber-mgmt sub-ident-policy context. Subscribers are managed by the system through the use of subscriber identification strings. A subscriber identification string uniquely identifies a subscriber.

For static hosts, the subscriber identification string is explicitly defined with each static subscriber host.

For dynamic hosts, the subscriber identification string must be derived from the DHCP ACK message sent to the subscriber host. The default value for the string is the content of Option 82 CIRCUIT-ID and REMOTE-ID fields interpreted as an octet string. As an option, the DHCP ACK message may be processed by a subscriber identification policy which has the capability to parse the message into an alternative ASCII or octet string value.

When multiple hosts on the same port are associated with the same subscriber identification string, they are considered to be host members of the same subscriber. A subscriber identification policy can also be used for identifying dynamic transit subscriber names.

Reference	configure subscriber-mgmt sub-ident-policy string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-auto-create

Synopsis	Enter the transit-auto-create context
Context	configure application-assurance group number partition number transit-ip-policy number transit-auto-create
Tree	transit-auto-create
Description	Commands in this context enable the seen-IP auto creation of transit subscribers using the transit IP policy name and subscriber IP address as the aa-sub name. The default app-profile configured against the transit IP policy is applied to these subscribers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the automatic dynamic transits
Context	configure application-assurance group number partition number transit-ip-policy number transit-auto-create admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inactivity-monitor *boolean*

Synopsis	Monitor inactivity on auto-created transit subscribers
Context	configure application-assurance group number partition number transit-ip-policy number transit-auto-create inactivity-monitor boolean
Tree	inactivity-monitor
Description	<p>When configured to true, this command enables the auto-removal of inactive transit subscribers. Periodically, AA removes any inactive auto-created subscribers. An inactive subscriber is defined as having no active flows in the last period.</p> <p>When configured to false, this command disables the auto-removal of inactive transit subscribers.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-prefix-policy [[prefix-policy-id](#)] *number*

Synopsis	Enter the transit-prefix-policy list instance
Context	configure application-assurance group number partition number transit-prefix-policy number
Tree	transit-prefix-policy
Description	Commands in this context define a transit AA subscriber prefix policy. Transit AA subscribers are managed by the system through the use of this policy assigned to services, which determines how transit subscribers are created and removed for that service.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[prefix-policy-id] *number*

Synopsis	Transit prefix policy ID
Context	configure application-assurance group number partition number transit-prefix-policy number
Tree	transit-prefix-policy
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [application-assurance group number](#) [partition number](#) [transit-prefix-policy number](#) **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance
Context **configure** [application-assurance group number](#) [partition number](#) [transit-prefix-policy number](#) **entry** *number*
Tree [entry](#)
Description Commands in this context configure the index to a specific entry of a transit prefix policy.
Max. Instances 4095
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis ID for a transit prefix policy entry
Context **configure** [application-assurance group number](#) [partition number](#) [transit-prefix-policy number](#) **entry** *number*
Tree [entry](#)
Range 1 to 4294967295
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub reference

Synopsis	Name of the transit prefix AA subscriber
Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> entry <i>number</i> aa-sub <i>reference</i>
Tree	aa-sub
Reference	configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> static-aa-sub <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the match context
Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> entry <i>number</i> match
Tree	match
Description	Commands in this context configure transit prefix policy entry match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-ip (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	AA subscriber IP address prefix
Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> entry <i>number</i> match aa-sub-ip (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	aa-sub-ip
Description	This command configures a transit prefix subscriber IP address prefix. It is used when the site is on the local side, the same side of the system as the parent SAP. The local aa-sub-ip addresses represent the source IP in the from-SAP direction and destination IP in the to-SAP direction.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Network IP address prefix
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Context	configure application-assurance group number partition number transit-prefix-policy number entry number match network-ip (ipv4-prefix ipv6-prefix)
Tree	network-ip
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-aa-sub [[transit-aa-sub-name](#)] *string*

Synopsis	Enter the static-aa-sub list instance
Context	configure application-assurance group number partition number transit-prefix-policy number static-aa-sub <i>string</i>
Tree	static-aa-sub
Max. Instances	4095
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[transit-aa-sub-name] *string*

Synopsis	Static transit subscriber name
Context	configure application-assurance group number partition number transit-prefix-policy number static-aa-sub <i>string</i>
Tree	static-aa-sub
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure application-assurance group number partition number transit-prefix-policy number static-aa-sub <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group number partition number policy app-profile <i>string</i>
Notes	This element is mandatory.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

is-remote *boolean*



WARNING:

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

Synopsis Set transit subscriber as remote
Context **configure** [application-assurance group number partition number transit-prefix-policy number static-aa-sub string is-remote boolean](#)
Tree [is-remote](#)
Notes This element is mandatory.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wap1x

Synopsis Enter the **wap1x** context
Context **configure** [application-assurance group number partition number wap1x](#)
Tree [wap1x](#)
Description Commands in this context configure the Wireless Application Protocol (WAP) 1.X.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of WAP1x detection
Context **configure** [application-assurance group number partition number wap1x admin-state keyword](#)
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer

Synopsis	Enter the policer context
Context	configure application-assurance group number policer
Tree	policer
Description	<p>Commands in this context create application assurance policer profiles of a specified type. Policers can be bandwidth or flow-limiting and can have a granularity of system scope (limits traffic entering AA ISA for all or a subset of AA subscribers) or a subscriber scope (limits apply to each AA subscriber traffic).</p> <p>The policer type and granularity can only be configured during creation. They cannot be modified. The policer profile must be removed from all AQPs to be removed. Changes to policer profile parameters take effect immediately for policers instantiated as a result of AQP actions using this profile.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

anl-bandwidth-policer [[policer-name](#)] *string*

Synopsis	Enter the anl-bandwidth-policer list instance
Context	configure application-assurance group number policer anl-bandwidth-policer <i>string</i>
Tree	anl-bandwidth-policer
Description	Commands in this context configure the AA ANL policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Policer name
Context	configure application-assurance group number policer anl-bandwidth-policer <i>string</i>
Tree	anl-bandwidth-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action keyword

Synopsis	Action for packets violating configured policer rate
Context	configure application-assurance group <i>number</i> policer anl-bandwidth-policer <i>string</i> action <i>keyword</i>
Tree	action
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic. Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic. When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.
Default	permit-deny
Options	permit-deny, priority-mark
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure application-assurance group <i>number</i> policer anl-bandwidth-policer <i>string</i> adaptation-rule
Tree	adaptation-rule
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir keyword

Synopsis	Peak information rate value for the adaptation rule
Context	configure application-assurance group <i>number</i> policer anl-bandwidth-policer <i>string</i> adaptation-rule pir <i>keyword</i>
Tree	pir

Description	This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.
Default	closest
Options	max, min, closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> policer anl-bandwidth-policer <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	ANL bandwidth policer maximum burst size
Context	configure application-assurance group <i>number</i> policer anl-bandwidth-policer <i>string</i> mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-percentage *number*

Synopsis	Rate used by Access-Network-Location policers
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Context	configure application-assurance group <i>number</i> policer anl-bandwidth-policer <i>string</i> rate-percentage <i>number</i>
Tree	rate-percentage
Description	This command configures the stage 1 congestion percentage used by Access-Network-Location (ANL) policers. Because ANL total bandwidth is dynamically measured and estimated by AA, this command allows the operator to configure the ratio of that measured bandwidth to be used by the ANL policer as the policer rate. No limiting is performed if not specified.
Range	0 to 200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-percentage-stage-2 *number*

Synopsis	Rate used by Access-Network-Location policers
Context	configure application-assurance group <i>number</i> policer anl-bandwidth-policer <i>string</i> rate-percentage-stage-2 <i>number</i>
Tree	rate-percentage-stage-2
Description	This command configures the stage 2 congestion percentage rate used by Access-Network-Location (ANL) policers. Because ANL stage2 total bandwidth is dynamically measured and estimated by AA, this command allows the operator to configure the ratio of that measured bandwidth to be used by the ANL stage2 policer as the policer rate. When unconfigured, limiting is not performed.
Range	0 to 200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-bucket-bandwidth-policer [[policer-name](#)] *string*

Synopsis	Enter the dual-bucket-bandwidth-policer list instance
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer <i>string</i>
Tree	dual-bucket-bandwidth-policer
Description	Commands in this context configure the dual-bucket bandwidth policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[policer-name] string

Synopsis	Policer name
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string
Tree	dual-bucket-bandwidth-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string adaptation-rule
Tree	adaptation-rule
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir keyword

Synopsis	Committed information rate value for adaptation rule
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string adaptation-rule cir keyword
Tree	cir
Description	This command configures the CIR for the dual-bucket-bandwidth-policer adaptation rule policer. Nokia recommends configuring CIR larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Default	closest
Options	max, min, closest
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir keyword

Synopsis Peak information rate value for the adaptation rule

Context **configure** application-assurance group number policer dual-bucket-bandwidth-policer string adaptation-rule pir keyword

Tree pir

Description This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.

Default closest

Options max, min, closest

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs number

Synopsis Committed burst size when in congested state

Context **configure** application-assurance group number policer dual-bucket-bandwidth-policer string cbs number

Tree cbs

Description This command configures the committed burst size (CBS) for a policer. Nokia recommends that CBS is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.

Range 0 to 131071

Default 0

Units kilobytes

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir (number | keyword)

Synopsis Committed information rate value for the policer

Context **configure** application-assurance group number policer dual-bucket-bandwidth-policer string cir (number | keyword)

Tree	cir
Description	This command configures the CIR for the dual-bucket-bandwidth-policer policer. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Default	0
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override

Synopsis	Enter the congestion-override context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override
Tree	congestion-override
Description	Commands in this context configure the congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs *number*

Synopsis	Committed burst size in a congested stage 2 state
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override cbs number
Tree	cbs
Description	This command configures the committed burst size for a policer. The configured CBS should be larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	Committed information rate value for the policer override
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer string congestion-override cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	This command configures the CIR for the dual-bucket bandwidth policer congestion override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Default	0
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer string congestion-override mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
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Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override pir (<i>number keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override-stage-2

Synopsis	Enter the congestion-override-stage-2 context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override-stage-2
Tree	congestion-override-stage-2
Description	This command enables the context to configure per-subscriber stage 2 congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs *number*

Synopsis	Committed burst size in a congested stage 2 state
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override-stage-2 cbs <i>number</i>
Tree	cbs
Description	This command configures the committed burst size for a policer. The configured CBS should be larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	Committed information rate value for the policer override
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer string congestion-override-stage-2 cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	This command configures the CIR for the dual-bucket bandwidth policer congestion override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Default	0
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer string congestion-override-stage-2 mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
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Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override-stage-2 pir (<i>number keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs number

Synopsis	Bandwidth policer maximum burst size
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string mbs number
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the bandwidth policer
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer <i>string</i> pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [[tod-override-id](#)] *number*

Synopsis	Enter the time-of-day-override list instance
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer <i>string</i> time-of-day-override <i>number</i>
Tree	time-of-day-override
Description	Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tod-override-id] *number*

Synopsis	ID for time of day override
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer <i>string</i> time-of-day-override <i>number</i>
Tree	time-of-day-override
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this time of day policer
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs *number*

Synopsis	Committed burst size for time of day override policer
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number cbs number
Tree	cbs
Description	This command configures the committed burst size (CBS) for a policer. Nokia recommends configuring CBS larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	Committed information rate for time of day override
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number cir (number keyword)
Tree	cir
Description	This command configures the committed information rate (CIR) for the dual-bucket-bandwidth-policer policer time of day override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.

Range	0 to 100000000
Default	0
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size for the policer time of day override
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number mbs number
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends that MBS is configured larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the time of day override
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Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number pir (<i>number keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis	Enter the time-range context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range
Tree	time-range
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis	Enable the daily context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily
Tree	daily
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-days

Synopsis	Enable policer override on every day
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily all-days
Tree	all-days
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end string

Synopsis	Daily end time
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily end string
Tree	end
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on keyword

Synopsis	Policer override on selected days
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily on keyword
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start string

Synopsis	Daily start time
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily start string
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the weekly context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly
Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end

Synopsis	Enable the end context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly end
Tree	end
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis	Weekly end day
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer string time-of-day-override <i>number</i> time-range weekly end day <i>keyword</i>
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis	Weekly end time
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer string time-of-day-override <i>number</i> time-range weekly end time <i>string</i>
Tree	time
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start

Synopsis	Enable the start context
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer string time-of-day-override <i>number</i> time-range weekly start
Tree	start
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis	Weekly start day
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly start day keyword
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis	Weekly start time
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly start time string
Tree	time
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-count-limit-policer [[policer-name](#)] string

Synopsis	Enter the flow-count-limit-policer list instance
Context	configure application-assurance group number policer flow-count-limit-policer string
Tree	flow-count-limit-policer
Description	Commands in this context configure the AA flow count limit policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**policer-name**] *string*

Synopsis	Policer name
Context	configure application-assurance group number policer flow-count-limit-policer <i>string</i>
Tree	flow-count-limit-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action for packets violating configured policer rate
Context	configure application-assurance group number policer flow-count-limit-policer <i>string</i> action <i>keyword</i>
Tree	action
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic. Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic. When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.
Default	permit-deny
Options	permit-deny, priority-mark
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number policer flow-count-limit-policer <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword*



WARNING:

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

Synopsis Policer granularity
Context **configure** [application-assurance group number policer flow-count-limit-policer string granularity keyword](#)
Tree [granularity](#)
Options system, subscriber
Notes This element is mandatory.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

limit-gtp-flows *boolean*



WARNING:

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

Synopsis Limit concurrent GTP flows
Context **configure** [application-assurance group number policer flow-count-limit-policer string limit-gtp-flows boolean](#)
Tree [limit-gtp-flows](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-count (*number | keyword*)

Synopsis Peak flow count limit
Context **configure** [application-assurance group number policer flow-count-limit-policer string peak-flow-count \(number | keyword\)](#)
Tree [peak-flow-count](#)
Range 0 to 100000000

Default	max
Units	flows
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [[tod-override-id](#)] *number*

Synopsis	Enter the time-of-day-override list instance
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number
Tree	time-of-day-override
Description	Commands in this context configure the time of day override policy for a specific policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override ID overrides the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tod-override-id] *number*

Synopsis	ID for time of day override
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number
Tree	time-of-day-override
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this time of day policer
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number admin-state keyword
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-count (*number* | *keyword*)

Synopsis	Peak flow count limit
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> peak-flow-count (<i>number</i> <i>keyword</i>)
Tree	peak-flow-count
Range	0 to 100000000
Default	max
Units	flows
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis	Enter the time-range context
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range
Tree	time-range
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable

along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis Enable the **daily** context
Context **configure** [application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range daily](#)
Tree [daily](#)
Description Commands in this context configure the daily start and end times for policer override.
Notes The following elements are part of a choice: **daily** or **weekly**.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-days

Synopsis Enable policer override on every day
Context **configure** [application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range daily all-days](#)
Tree [all-days](#)
Notes The following elements are part of a choice: **all-days** or **on**.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end string

Synopsis Daily end time
Context **configure** [application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range daily end string](#)
Tree [end](#)
Description This command configures the daily end time of the policer override.
The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length 3 to 5

Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on keyword

Synopsis	Policer override on selected days
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range daily on keyword
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start string

Synopsis	Daily start time
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range daily start string
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the weekly context
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly

Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end

Synopsis	Enable the end context
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly end
Tree	end
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis	Weekly end day
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly end day keyword
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis	Weekly end time
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly end time string
Tree	time
Description	This command configures the weekly end time of the policer override.

The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start

Synopsis	Enable the start context
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly start
Tree	start
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis	Weekly start day
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly start day keyword
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis	Weekly start time
Context	configure application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range weekly start time string
Tree	time
Description	This command configures the weekly start time of the policer override.

The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-policer [*policer-name*] *string*

Synopsis	Enter the flow-setup-rate-policer list instance
Context	configure application-assurance group number policer flow-setup-rate-policer string
Tree	flow-setup-rate-policer
Description	Commands in this context configure the flow setup rate policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[policer-name] *string*

Synopsis	Policer name
Context	configure application-assurance group number policer flow-setup-rate-policer string
Tree	flow-setup-rate-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action for packets violating configured policer rate
Context	configure application-assurance group number policer flow-setup-rate-policer string action keyword
Tree	action
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic. Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.

When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.

Default	permit-deny
Options	permit-deny, priority-mark
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure application-assurance group number policer flow-setup-rate-policer string adaptation-rule
Tree	adaptation-rule
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-setup-rate *keyword*

Synopsis	Peak flow setup rate adaptation rule
Context	configure application-assurance group number policer flow-setup-rate-policer string adaptation-rule peak-flow-setup-rate keyword
Tree	peak-flow-setup-rate
Default	closest
Options	max, min, closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
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Context	configure application-assurance group number policer flow-setup-rate-policer string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-burst-size *number*

Synopsis	Maximum flow setup rate burst size
Context	configure application-assurance group number policer flow-setup-rate-policer string flow-setup-rate-burst-size number
Tree	flow-setup-rate-burst-size
Range	0 to 131071
Default	0
Units	flows
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword*



WARNING:

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

Synopsis	Policer granularity
Context	configure application-assurance group number policer flow-setup-rate-policer string granularity keyword
Tree	granularity
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-setup-rate (*number* | *keyword*)

Synopsis	Peak flow setup rate
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Context	configure application-assurance group number policer flow-setup-rate-policer string peak-flow-setup-rate (<i>number</i> <i>keyword</i>)
Tree	peak-flow-setup-rate
Range	1 to 100000000
Default	max
Units	flows per second
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [[tod-override-id](#)] *number*

Synopsis	Enter the time-of-day-override list instance
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number
Tree	time-of-day-override
Description	Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tod-override-id] *number*

Synopsis	ID for time of day override
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number
Tree	time-of-day-override
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this time of day policer
Context	configure application-assurance group <i>number</i> policer flow-setup-rate-policer <i>string</i> time-of-day-override <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> policer flow-setup-rate-policer <i>string</i> time-of-day-override <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-burst-size *number*

Synopsis	Maximum flow setup rate burst size
Context	configure application-assurance group <i>number</i> policer flow-setup-rate-policer <i>string</i> time-of-day-override <i>number</i> flow-setup-rate-burst-size <i>number</i>
Tree	flow-setup-rate-burst-size
Range	0 to 131071
Default	0
Units	flows
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-setup-rate (*number* | *keyword*)

Synopsis	Peak flow setup rate
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Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number peak-flow-setup-rate (number keyword)
Tree	peak-flow-setup-rate
Range	1 to 100000000
Default	max
Units	flows per second
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis	Enter the time-range context
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range
Tree	time-range
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis	Enable the daily context
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range daily
Tree	daily
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-days

Synopsis	Enable policer override on every day
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range daily all-days
Tree	all-days
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end string

Synopsis	Daily end time
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range daily end string
Tree	end
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on keyword

Synopsis	Policer override on selected days
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range daily on keyword
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start string

Synopsis	Daily start time
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range daily start string
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the weekly context
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly
Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end

Synopsis	Enable the end context
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly end
Tree	end
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis	Weekly end day
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly end day keyword
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis	Weekly end time
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly end time string
Tree	time
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start

Synopsis	Enable the start context
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly start
Tree	start
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day *keyword*

Synopsis	Weekly start day
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly start day keyword
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *string*

Synopsis	Weekly start time
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly start time string
Tree	time
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

single-bucket-bandwidth-policer [[policer-name](#)] *string*

Synopsis	Enter the single-bucket-bandwidth-policer list instance
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string
Tree	single-bucket-bandwidth-policer
Description	Commands in this context configure the single-bucket bandwidth policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**policer-name**] *string*

Synopsis	Policer name
Context	configure application-assurance group number policer single-bucket-bandwidth-policer <i>string</i>
Tree	single-bucket-bandwidth-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action for packets violating configured policer rate
Context	configure application-assurance group number policer single-bucket-bandwidth-policer <i>string action keyword</i>
Tree	action
Description	<p>This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.</p> <p>Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.</p> <p>When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.</p>
Default	permit-deny
Options	permit-deny, priority-mark
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure application-assurance group number policer single-bucket-bandwidth-policer <i>string adaptation-rule</i>
Tree	adaptation-rule
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir keyword

Synopsis Peak information rate value for the adaptation rule

Context **configure** [application-assurance group](#) *number* [policer single-bucket-bandwidth-policer string](#) [adaptation-rule](#) **pir** *keyword*

Tree [pir](#)

Description This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.

Default closest

Options max, min, closest

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override

Synopsis Enter the **congestion-override** context

Context **configure** [application-assurance group](#) *number* [policer single-bucket-bandwidth-policer string](#) **congestion-override**

Tree [congestion-override](#)

Description Commands in this context configure the congestion bandwidth policer override rates.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs number

Synopsis Maximum burst size when in a congested state

Context **configure** [application-assurance group](#) *number* [policer single-bucket-bandwidth-policer string](#) [congestion-override](#) **mbs** *number*

Tree [mbs](#)

Description This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.

Range 0 to 131071

Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> congestion-override pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override-stage-2

Synopsis	Enter the congestion-override-stage-2 context
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> congestion-override-stage-2
Tree	congestion-override-stage-2
Description	Commands in this context configure per-subscriber stage 2 congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> congestion-override-stage-2 mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the

policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.

Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer string congestion-override-stage-2 pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword*



WARNING:

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

Synopsis	Policer granularity
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string granularity keyword
Tree	granularity
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs number

Synopsis	Bandwidth policer maximum burst size
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string mbs number
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (number | keyword)

Synopsis	Peak information rate value for the bandwidth policer
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string pir (number keyword)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [*tod-override-id*] *number*

Synopsis Enter the **time-of-day-override** list instance

Context **configure** *application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number*

Tree [time-of-day-override](#)

Description Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.

Max. Instances 8

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tod-override-id] *number*

Synopsis ID for time of day override

Context **configure** *application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number*

Tree [time-of-day-override](#)

Range 1 to 255

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of this time of day policer

Context **configure** *application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number admin-state keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs number

Synopsis	Bandwidth policer maximum burst size for time of day override
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number mbs number
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (number | keyword)

Synopsis	Peak information rate value for time of day override
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number pir (number keyword)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis Enter the **time-range** context

Context **configure** [application-assurance group number policer single-bucket-bandwidth-policer string](#) [time-of-day-override number time-range](#)

Tree [time-range](#)

Description Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis Enable the **daily** context

Context **configure** [application-assurance group number policer single-bucket-bandwidth-policer string](#) [time-of-day-override number time-range](#) [daily](#)

Tree [daily](#)

Description Commands in this context configure the daily start and end times for policer override.

Notes The following elements are part of a choice: **daily** or **weekly**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-days

Synopsis Enable policer override on every day

Context **configure** [application-assurance group number policer single-bucket-bandwidth-policer string](#) [time-of-day-override number time-range](#) [daily](#) [all-days](#)

Tree [all-days](#)

Notes The following elements are part of a choice: **all-days** or **on**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end string

Synopsis	Daily end time
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer string time-of-day-override <i>number</i> time-range daily end <i>string</i>
Tree	end
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on keyword

Synopsis	Policer override on selected days
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer string time-of-day-override <i>number</i> time-range daily on <i>keyword</i>
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start string

Synopsis	Daily start time
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer string time-of-day-override <i>number</i> time-range daily start <i>string</i>
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the weekly context
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly
Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end

Synopsis	Enable the end context
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly end
Tree	end
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis	Weekly end day
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly end day keyword
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis	Weekly end time
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly end time string
Tree	time
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start

Synopsis	Enable the start context
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly start
Tree	start
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis	Weekly start day
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly start day keyword
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis Weekly start time

Context **configure** [application-assurance group number](#) [policer single-bucket-bandwidth-policer string](#) [time-of-day-override number](#) [time-range](#) [weekly start time string](#)

Tree [time](#)

Description This command configures the weekly start time of the policer override.

The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length 3 to 5

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-optimizer [\[tcp-optimizer-name\]](#) *string*

Synopsis Enter the **tcp-optimizer** list instance

Context **configure** [application-assurance group number](#) [tcp-optimizer string](#)

Tree [tcp-optimizer](#)

Description Commands in this context configure the TCP optimizer policy. When a TCP optimizer policy is removed or deleted, the existing flows using this policy are abandoned, and optimization is stopped.

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tcp-optimizer-name] *string*

Synopsis TCP optimizer name

Context **configure** [application-assurance group number](#) [tcp-optimizer string](#)

Tree [tcp-optimizer](#)

Description This command configures the name of the TCP optimizer policy.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dack-timeout *number*

Synopsis Delayed acknowledgment timeout for client and server

Context **configure** [application-assurance group number tcp-optimizer string dack-timeout number](#)

Tree [dack-timeout](#)

Description This command configures a delay ACK (DACK) timeout for the TCP optimizer. By entering this command a default of 200 ms timeout is enabled for delayed acknowledgment. This value is not configurable.

Range 200

Units milliseconds

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** [application-assurance group number tcp-optimizer string description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial-cwnd *number*

Synopsis Initial congestion window of the TCP optimizer

Context **configure** [application-assurance group number tcp-optimizer string initial-cwnd number](#)

Tree [initial-cwnd](#)

Description This command configures the initial TCP congestion window (cwnd) used during the TCP Slow Start (SS) period.

Range 1 to 256

Default 8

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial-ss-threshold (*number* | *keyword*)

Synopsis	Initial TCP Slow Start threshold for client and server
Context	configure application-assurance group <i>number</i> tcp-optimizer string initial-ss-threshold (<i>number</i> <i>keyword</i>)
Tree	initial-ss-threshold
Description	This command configures the initial Slow Start (SS) threshold for a specific TCP optimizer policy. Nokia recommends setting the threshold close to the access network Bandwidth Delay Product (BDP).
Range	0 to 1000000
Default	1000000
Units	kilobytes
Options	auto
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

network-rtt-threshold *number*

Synopsis	Network round trip time threshold
Context	configure application-assurance group <i>number</i> tcp-optimizer string network-rtt-threshold <i>number</i>
Tree	network-rtt-threshold
Description	This command configures the threshold of the Round Trip Time (RTT) delay of the network side (between AA and the content provider) above which TCP Optimization (TCPO) is performed. This enables the operator to disable optimization for content that is served from a location close to the TCP optimizer.
Range	1 to 100
Units	milliseconds
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-stack *keyword*

Synopsis	TCP stack congestion control algorithm
Context	configure application-assurance group <i>number</i> tcp-optimizer string tcp-stack <i>keyword</i>
Tree	tcp-stack
Description	This command configures the TCP stack used toward the subscriber.

Note: The TCP stack used toward the core network is new-reno, and it is not configurable. TCP BBR, TCP Illinois, and TCP Westwood implement a sender-side modification of the TCP congestion window algorithm that improves the performance of TCP Reno in wireless networks with lossy links.

Default	westwood
Options	westwood, illinois, new-reno, bbr
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-filter [[url-filter-name](#)] *string*

Synopsis	Enter the url-filter list instance
Context	configure application-assurance group number url-filter string
Tree	url-filter
Description	Commands in this context configure a URL filter action for flows of a specific type matching this entry. If no URL filters are specified, then no URL filters are evaluated.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[url-filter-name] *string*

Synopsis	URL filter name
Context	configure application-assurance group number url-filter string
Tree	url-filter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA URL filter
Context	configure application-assurance group number url-filter string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

apply-function-specific-behaviour *boolean*

Synopsis	Use function-specific behavior for action or redirect
Context	configure application-assurance group number url-filter string apply-function-specific-behaviour <i>boolean</i>
Tree	apply-function-specific-behaviour
Description	When configured to true , the function-specific configurations for URL list, ICAP, and web service (url-list , icap , and web-service) are used for default action (default-action) and HTTP redirect (http-redirect). When configured to false , the configuration at the URL filter level (url-filter) is used for default action and HTTP redirect.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the default-action context
Context	configure application-assurance group number url-filter string default-action
Tree	default-action
Description	Commands in this context configure the default action to take effect when the URL filter cannot be used. This may occur in the following cases: <ul style="list-style-type: none"> • for the local URL list when the URL list is shut down or the file is not loaded due to an error. • in the case of ICAP or web filtering when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis	Allow all requests as the default URL filter action
Context	configure application-assurance group number url-filter string default-action allow
Tree	allow

Description	When configured, this command allows all requests as the default URL filter action when the URL filter cannot be used.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis	Block all requests as the default URL filter action
Context	configure application-assurance group number url-filter string default-action block-all
Tree	block-all
Description	When configured, this command blocks all requests as the default URL filter action when the URL filter cannot be used.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis	HTTP URL name for block and redirect request action
Context	configure application-assurance group number url-filter string default-action block-http-redirect reference
Tree	block-http-redirect
Description	This command blocks traffic and redirects the user to an information page that can be different from the page the user is redirected to when the site that the user tried to access is found in the URL filter. This page is configured using the configure AA group url-filter http-redirect command
Reference	configure application-assurance group number http-redirect string
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number url-filter string description string

Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	HTTP redirect for a blocked HTTP request
Context	configure application-assurance group number url-filter string http-redirect reference
Tree	http-redirect
Reference	configure application-assurance group number http-redirect string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-request-filtering *keyword*

Synopsis	HTTP filtering for all HTTP requests
Context	configure application-assurance group number url-filter string http-request-filtering keyword
Tree	http-request-filtering
Description	This command selects between HTTP filtering for all HTTP requests in a flow or only the first HTTP request.
Default	all
Options	all, first
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icap

Synopsis	Enter the icap context
Context	configure application-assurance group number url-filter string icap
Tree	icap
Description	Commands in this context configure the URL filter ICAP policy fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

custom-x-header *string*

Synopsis	Custom x-header field name to include in ICAP requests
Context	configure application-assurance group number url-filter string icap custom-x-header string
Tree	custom-x-header
Description	This command configures the URL filter ICAP policy to include a new x-header field; the content of the x-header is populated based on the AQP URL filter action which can optionally specify the ASO characteristic value to include in the x-header.
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the default-action context
Context	configure application-assurance group number url-filter string icap default-action
Tree	default-action
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis	Allow all requests as the default action
Context	configure application-assurance group number url-filter string icap default-action allow
Tree	allow
Description	When configured, this command allows all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis	Block all requests as the default action
Context	configure application-assurance group number url-filter string icap default-action block-all
Tree	block-all
Description	When configured, this command blocks all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis	HTTP URL for redirection when URL filter cannot be used
Context	configure application-assurance group number url-filter string icap default-action block-http-redirect reference
Tree	block-http-redirect
Description	This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access was found in the URL filter; this page is configured using the configure application-assurance group url-filter http-redirect command.
Reference	configure application-assurance group number http-redirect string
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	HTTP redirect object used when ICAP blocks HTTP request
Context	configure application-assurance group number url-filter string icap http-redirect reference
Tree	http-redirect
Reference	configure application-assurance group number http-redirect string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the server list instance
Context	configure application-assurance group number url-filter string icap server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number
Tree	server
Description	Commands in this context configure the IP address and server port of the ICAP server. In the current release, the system supports IPv4 addresses only for the ICAP server.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	ICAP server IP address
Context	configure application-assurance group number url-filter string icap server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number
Tree	server
Description	This command configures the ICAP server address. In the current release, the system supports IPv4 addresses only for the ICAP server.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port number

Synopsis	ICAP server port
Context	configure application-assurance group number url-filter string icap server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number
Tree	server
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this URL filter ICAP server
Context	configure application-assurance group number url-filter string icap server (ipv4-address-no-zone ipv6-address-no-zone) port number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number url-filter string icap server (ipv4-address-no-zone ipv6-address-no-zone) port number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number*



WARNING:

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

Synopsis	VLAN ID of the ICAP server service port
Context	configure application-assurance group number url-filter string icap vlan-id number
Tree	vlan-id
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-filtering

Synopsis	Enter the local-filtering context
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Context	configure application-assurance group <i>number</i> url-filter <i>string</i> local-filtering
Tree	local-filtering
Description	Commands in this context configure a URL filter policy for local filtering to filter traffic based on a list of URLs located on a file stored in the router compact flash.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow-list *reference*



WARNING:

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

Synopsis	Local filtering URL list for allowed URLs
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> local-filtering allow-list <i>reference</i>
Tree	allow-list
Reference	configure application-assurance group <i>number</i> url-list <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the deny-list list instance
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> local-filtering deny-list <i>reference</i>
Tree	deny-list
Description	Commands in this context configure a list of denied URLs to be added to the local URL filter policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[url-list-name] *reference*

Synopsis	URL list name
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> local-filtering deny-list <i>reference</i>

Tree	deny-list
Description	This command adds a deny-list URL list to the local URL filter policy.
Reference	configure application-assurance group number url-list string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the default-action context
Context	configure application-assurance group number url-filter string local-filtering deny-list reference default-action
Tree	default-action
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen in the case of a local URL list when the URL list is disabled or the file is not loaded due to an error.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis	Allow all requests as the default action
Context	configure application-assurance group number url-filter string local-filtering deny-list reference default-action allow
Tree	allow
Description	This command allows all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis	Block all requests as the default action
Context	configure application-assurance group number url-filter string local-filtering deny-list reference default-action block-all
Tree	block-all

Description	This command blocks all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis	HTTP URL for redirection when URL filter cannot be used
Context	configure application-assurance group number url-filter string local-filtering deny-list reference default-action block-http-redirect reference
Tree	block-http-redirect
Description	This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access was found in the URL filter; this page is configured using the configure application-assurance group url-filter http-redirect command.
Reference	configure application-assurance group number http-redirect string
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	HTTP redirect object applied to blocked HTTP requests
Context	configure application-assurance group number url-filter string local-filtering deny-list reference http-redirect reference
Tree	http-redirect
Reference	configure application-assurance group number http-redirect string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

web-service

Synopsis	Enter the web-service context
Context	configure application-assurance group number url-filter string web-service
Tree	web-service

Description	Commands in this context configure the URL filter policy using web-service filtering. The operator must configure the web service, hostname, DNS server to use, the AA interface VLAN ID, and provision the category profiles.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category-set *number*



WARNING:

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

Synopsis	Web service category ID
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service category-set <i>number</i>
Tree	category-set
Range	1 to 65535
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

classification-overrides

Synopsis	Enter the classification-overrides context
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service classification-overrides
Tree	classification-overrides
Description	Commands in this context create a classification override and allow the operator to manually set the category of a hostname.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service classification-overrides entry <i>number</i>
Tree	entry

Description	Commands in this context configure a classification override, manually setting the category of a hostname.
Max. Instances	200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	Classification override entry ID
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service classification-overrides entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category-name *string*

Synopsis	Web service category name
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service classification-overrides entry <i>number</i> category-name <i>string</i>
Tree	category-name
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expression *string*

Synopsis	Hostname of the configured override category
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service classification-overrides entry <i>number</i> expression <i>string</i>
Tree	expression
String Length	1 to 255
Notes	This element is mandatory.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

classifier *keyword*



WARNING:

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

Synopsis	Web service classifier
Context	configure application-assurance group number url-filter string web-service classifier keyword
Tree	classifier
Options	web-service-1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the default-action context
Context	configure application-assurance group number url-filter string web-service default-action action
Tree	default-action
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis	Allow all requests as the default action
Context	configure application-assurance group number url-filter string web-service default-action allow
Tree	allow
Description	This command allows all traffic when the web service is unavailable.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis	Block all requests as the default action
Context	configure application-assurance group number url-filter string web-service default-action block-all
Tree	block-all
Description	This command blocks all traffic when the web service is unavailable.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis	HTTP URL for redirection when the web service is unavailable
Context	configure application-assurance group number url-filter string web-service default-action block-http-redirect reference
Tree	block-http-redirect
Description	This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access was found in the URL filter; this page is configured using the configure application-assurance group url-filter http-redirect command.
Reference	configure application-assurance group number http-redirect string
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-profile *reference*



WARNING:

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

Synopsis	Web service default profile
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Context	configure application-assurance group number url-filter string web-service default-profile reference
Tree	default-profile
Reference	configure application-assurance group number url-filter string web-service profile string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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



WARNING:

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

Synopsis	Web service DNS server
Context	configure application-assurance group number url-filter string web-service dns-server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dns-server
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn *string*



WARNING:

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

Synopsis	Web service fully qualified domain name
Context	configure application-assurance group number url-filter string web-service fqdn string
Tree	fqdn
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	Web service HTTP redirect
Context	configure application-assurance group number url-filter string web-service http-redirect reference

Tree	http-redirect
Reference	configure application-assurance group number http-redirect string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the profile list instance
Context	configure application-assurance group number url-filter string web-service profile string
Tree	profile
Description	Commands in this context configure the category profiles of the web service.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[profile-name] *string*

Synopsis	Web service profile name
Context	configure application-assurance group number url-filter string web-service profile string
Tree	profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block

Synopsis	Enter the block context
Context	configure application-assurance group number url-filter string web-service profile string block
Tree	block
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category [*category-name*] *string*

Synopsis	Add a list entry for category
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service profile <i>string</i> block category <i>string</i>
Tree	category
Description	Commands in this context configure the category that is blocked in the category profile.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[category-name] *string*

Synopsis	Web service profile category name to be blocked
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service profile <i>string</i> block category <i>string</i>
Tree	category
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service profile <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number*



WARNING:

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

Synopsis	Web-service VLAN ID
Context	configure application-assurance group number url-filter string web-service vlan-id number
Tree	vlan-id
Description	This command configures the VLAN ID on which the AA ISA emits the traffic mapping to a preconfigured AA interface.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the url-list list instance
Context	configure application-assurance group number url-list string
Tree	url-list
Description	Commands in this context configure a URL list object. The URL list points to a file containing a list of URLs located on the system Compact Flash and is then referenced in a URL filter object to filter and redirect subscribers when a URL from this file is accessed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[url-list-name] *string*

Synopsis	URL list name
Context	configure application-assurance group number url-list string
Tree	url-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the URL list
Context	configure application-assurance group number url-list string admin-state keyword

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number url-list string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

file *string*

Synopsis	File name of the URL list on compact flash
Context	configure application-assurance group number url-list string file string
Tree	file
String Length	1 to 180
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

host-expressions *boolean*



WARNING:

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

Synopsis	Allow URL list to contain hostnames with wildcards
Context	configure application-assurance group number url-list string host-expressions boolean
Tree	host-expressions
Description	When configured to true , this command adds hostnames with wildcards to the URL list. When configured to false , the URL list containing hostnames with wildcards is removed from the configuration.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key string

Synopsis	URL list decryption key
Context	configure application-assurance group number url-list string key string
Tree	key
Description	This command configures the secret key for decrypting the URL list.
String Length	1 to 115
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

size keyword



WARNING:

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

Synopsis	Size limit of the URL list
Context	configure application-assurance group number url-list string size keyword
Tree	size
Default	standard
Options	standard, extended
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich

Synopsis	Enter the http-enrich context
Context	configure application-assurance http-enrich
Tree	http-enrich
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Enter the **field** list instance
Context **configure** [application-assurance](#) [http-enrich field](#) *string*
Tree [field](#)
Description Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the **application-assurance group** context.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis HTTP enrich field name (void, do not use)
Context **configure** [application-assurance](#) [http-enrich field](#) *string*
Tree [field](#)
Description This command should not be used by the operators. Configuring it has no effect. Operators should use the commands in the **application-assurance group** context.
String Length 1 to 32
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis User information comment
Context **configure** [application-assurance](#) [http-enrich field](#) *string* **comment** *string*
Tree [comment](#)
String Length 1 to 32
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-error-redirect

Synopsis	Enter the http-error-redirect context
Context	configure application-assurance http-error-redirect
Tree	http-error-redirect
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

error-code [[error-code-number](#)] *number*

Synopsis	Enter the error-code list instance
Context	configure application-assurance http-error-redirect error-code <i>number</i>
Tree	error-code
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[error-code-number\]](#) *number*

Synopsis	Error code for HTTP error redirection
Context	configure application-assurance http-error-redirect error-code <i>number</i>
Tree	error-code
Range	400 to 999
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance http-error-redirect error-code <i>number</i> comment <i>string</i>
Tree	comment

String Length 1 to 32
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template [[template-id](#)] *number*

Synopsis Enter the **template** list instance
Context **configure** [application-assurance](#) [http-error-redirect](#) [template](#) *number*
Tree [template](#)
Description Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the **application-assurance group** context.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[template-id] *number*

Synopsis HTTP error redirect template ID
Context **configure** [application-assurance](#) [http-error-redirect](#) [template](#) *number*
Tree [template](#)
Max. Range 0 to 4294967295
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis User information comment
Context **configure** [application-assurance](#) [http-error-redirect](#) [template](#) *number* [comment](#) *string*
Tree [comment](#)
String Length 1 to 32
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-notification

Synopsis	Enter the http-notification context
Context	configure application-assurance http-notification
Tree	http-notification
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template [[template-id](#)] *number*

Synopsis	Enter the template list instance
Context	configure application-assurance http-notification template <i>number</i>
Tree	template
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[template-id](#)] *number*

Synopsis	HTTP notification template ID
Context	configure application-assurance http-notification template <i>number</i>
Tree	template
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance http-notification template <i>number</i> comment <i>string</i>
Tree	comment

String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enter the http-redirect context
Context	configure application-assurance http-redirect
Tree	http-redirect
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template [[template-id](#)] *number*

Synopsis	Enter the template list instance
Context	configure application-assurance http-redirect template <i>number</i>
Tree	template
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[template-id\]](#) *number*

Synopsis	HTTP redirect template ID
Context	configure application-assurance http-redirect template <i>number</i>
Tree	template
Description	This command specifies the HTTP policy redirect template ID. The available options are: 1 - JavaScript based redirect embedded in HTTP 200 OK response with a predefined number of arguments automatically appended to the redirect URL 2 - HTTP 302 redirect with a predefined number of arguments automatically appended to the redirect URL

	3 - HTTP 302 redirect with no parameters appended to the URL (empty)
	4 - Empty redirect format using JavaScript
	5 - Redirect supporting macro substitution using HTTP 302
	6 - Redirect supporting macro substitution using JavaScript
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance http-redirect template <i>number</i> comment <i>string</i>
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the protocol list instance
Context	configure application-assurance protocol <i>string</i>
Tree	protocol
Description	Commands in this context configure the administrative state of system-wide protocols. Some protocols are always enabled and cannot be disabled. These are "base protocols" that were present in R1 of the release. Some protocols are disabled by default and can be enabled. There are protocols that were introduced post R1, which are all enabled by default but may be disabled if not desired.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[protocol-name] *string*

Synopsis	AA protocol name
Context	configure application-assurance protocol <i>string</i>
Tree	protocol

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the protocol
Context	configure application-assurance protocol <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy [[rad-acct-plcy-name](#)] *string*

Synopsis	Enter the radius-accounting-policy list instance
Context	configure application-assurance radius-accounting-policy <i>string</i>
Tree	radius-accounting-policy
Description	Commands in this context configure an existing subscriber RADIUS-based accounting policy to use for AA. RADIUS accounting policies are configured in the configure application-assurance radius-accounting-policy context.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[rad-acct-plcy-name](#)] *string*

Synopsis	AA RADIUS accounting policy name
Context	configure application-assurance radius-accounting-policy <i>string</i>
Tree	radius-accounting-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interim-update-interval *number*

Synopsis AA RADIUS accounting policy interim update interval
Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [interim-update-interval](#) *number*
Tree [interim-update-interval](#)
Range 5 to 1080
Units minutes
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-server

Synopsis Enter the **radius-accounting-server** context
Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [radius-accounting-server](#)
Tree [radius-accounting-server](#)
Description Commands in this context configure an existing subscriber RADIUS-based accounting policy to use for AA. RADIUS accounting policies are configured in the **configure** **application-assurance radius-accounting-policy** context.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-algorithm *keyword*

Synopsis	Access algorithm for the list of RADIUS servers
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server access-algorithm <i>keyword</i>
Tree	access-algorithm
Default	direct
Options	direct, round-robin
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

retry *number*

Synopsis	Number of retries for contacting the RADIUS server
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server retry <i>number</i>
Tree	retry
Range	1 to 10
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router or VPRN service name
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server router-instance <i>string</i>
Tree	router-instance
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [[server-index](#)] *number*

Synopsis	Enter the server list instance
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server server <i>number</i>
Tree	server

Description	Commands in this context configure the RADIUS server and the RADIUS server IP address, index, and key values. RADIUS servers are accessed in order from lowest to highest index for authentication requests until a response from a server is received. A higher indexed server is only queried if no response is received from a lower indexed server (which implies that the server is not available). If a response from a server is received, no other RADIUS servers are queried.
Max. Instances	5
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[server-index] *number*

Synopsis	RADIUS accounting server index
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server server <i>number</i>
Tree	server
Description	This command configures the index for the RADIUS server. The index determines the sequence in which the servers are queried for authentication requests. Servers are queried in order from lowest to highest index.
Range	1 to 5
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	RADIUS server IP address
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server server <i>number</i> address <i>string</i>
Tree	address
Description	This command configures the IP address of the RADIUS server. Two RADIUS servers cannot have the same IP address. An error message is generated if the server address is a duplicate.
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port number

Synopsis	RADIUS server UDP port used for authentication
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server server <i>number</i> port <i>number</i>
Tree	port
Range	1 to 65535
Default	1813
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secret string

Synopsis	RADIUS server secret key
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server server <i>number</i> secret <i>string</i>
Tree	secret
Description	This command configures the secret key to access the RADIUS server. This secret key must match the password on the RADIUS server.
String Length	1 to 54
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-address string

Synopsis	Source IP address of RADIUS packets
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server source-address <i>string</i>
Tree	source-address
Description	<p>This command configures the source IP address of the RADIUS packet.</p> <p>The system IP address must be configured for the RADIUS client to work. The system IP address must only be configured if the source address is not specified. When this command reverts to its default, the source address is determined at the moment the request is sent.</p> <p>This address is also used in the nas-ip-address command in the configure aaa radius isa-policy accounting include-attributes and configure aaa radius isa-policy</p>

authentication include-attributes contexts as it is set to the system IP address if no source address was given.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis RADIUS accounting server response timeout
Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [radius-accounting-server](#) *timeout* *number*
Tree [timeout](#)
Range 1 to 90
Default 5
Units seconds
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

significant-change *number*

Synopsis Change delta for RADIUS accounting record updates
Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [significant-change](#) *number*
Tree [significant-change](#)
Description This command configures the number of changes required to generate the record.
Range 1
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

usage-alert-thresholds

Synopsis Enter the **usage-alert-thresholds** context
Context **configure** [application-assurance](#) [usage-alert-thresholds](#)
Tree [usage-alert-thresholds](#)
Description Commands in this context configure the AA performance monitoring alerts.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit-rate-high-wmark (*number* | *keyword*)

Synopsis	High watermark for bit rate alarms
Context	configure application-assurance usage-alert-thresholds bit-rate-high-wmark (<i>number</i> <i>keyword</i>)
Tree	bit-rate-high-wmark
Description	This command configures the high watermark for bit rate alarms. The value must be larger than or equal to the low watermark value.
Range	1 to 100000
Default	max
Units	megabps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit-rate-low-wmark *number*

Synopsis	Low watermark for bit rate alarms
Context	configure application-assurance usage-alert-thresholds bit-rate-low-wmark <i>number</i>
Tree	bit-rate-low-wmark
Description	This command configures the utilization of the flow records on the ISA-AA group when the full alarm is cleared by the agent.
Range	0 to 99999
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

datapath-cpu-high-wmark (*number* | *keyword*)

Synopsis	High watermark for datapath CPU alarms
Context	configure application-assurance usage-alert-thresholds datapath-cpu-high-wmark (<i>number</i> <i>keyword</i>)
Tree	datapath-cpu-high-wmark
Description	This command configures the system-wide high watermark threshold as a percentage of the per-ISA datapath core CPU utilization, where an alarm is raised by the agent. CPU usage is the average usage across all datapath cores.

Range	0 to 100
Default	95
Units	percent
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

datapath-cpu-low-wmark *number*

Synopsis	Low watermark for datapath CPU alarms
Context	configure application-assurance usage-alert-thresholds datapath-cpu-low-wmark <i>number</i>
Tree	datapath-cpu-low-wmark
Description	This command configures the system-wide low watermark threshold as a percentage of the per-ISA datapath core CPU utilization, where an alarm is raised by the agent. CPU usage is the average usage across all datapath cores.
Range	0 to 100
Default	90
Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-high-wmark (*number* | *keyword*)

Synopsis	High watermark for flow setup rate
Context	configure application-assurance usage-alert-thresholds flow-setup-rate-high-wmark (<i>number</i> <i>keyword</i>)
Tree	flow-setup-rate-high-wmark
Description	This command configures the system-wide high watermark threshold for per-ISA throughput in packets/second when an alarm is raised by the agent. The value must be larger than or equal to the packet-rate-low-wmark value.
Range	1 to 2000000
Default	max
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-low-wmark *number*

Synopsis	Low watermark for flow setup rate
Context	configure application-assurance usage-alert-thresholds flow-setup-rate-low-wmark <i>number</i>
Tree	flow-setup-rate-low-wmark
Description	This command configures the flow setup rate on the ISA-AA when a flow setup alarm is raised by the agent.
Range	0 to 1999999
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-table-high-wmark *number*

Synopsis	Flow table high watermark
Context	configure application-assurance usage-alert-thresholds flow-table-high-wmark <i>number</i>
Tree	flow-table-high-wmark
Description	This command configures the system-wide high watermark threshold as a percentage of the flow table size for the per-ISA utilization of the flow records when a full alarm is raised by the agent.
Range	0 to 100
Default	95
Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-table-low-wmark *number*

Synopsis	Flow table low watermark
Context	configure application-assurance usage-alert-thresholds flow-table-low-wmark <i>number</i>
Tree	flow-table-low-wmark
Description	This command configures the system-wide low watermark threshold as a percentage of the flow table size for per-ISA.
Range	0 to 100
Default	90

Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-rate-high-wmark (*number* | *keyword*)

Synopsis	Packet rate high watermark
Context	configure application-assurance usage-alert-thresholds packet-rate-high-wmark (<i>number</i> <i>keyword</i>)
Tree	packet-rate-high-wmark
Description	This command configures the packet rate on the ISA-AA when a packet rate alarm is raised by the agent.
Range	1 to 148809524
Default	max
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-rate-low-wmark *number*

Synopsis	Packet rate low watermark
Context	configure application-assurance usage-alert-thresholds packet-rate-low-wmark <i>number</i>
Tree	packet-rate-low-wmark
Description	This command configures the packet rate on the ISA-AA when a packet rate alarm is cleared by the agent.
Range	0 to 148809523
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.3 aps commands

```
configure
- aps number
- advertise-interval number
- annexb
- wait-to-restore-time number
- working-circuit reference
- apply-groups reference
- apply-groups-exclude reference
- hold-time number
- neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
- protect-circuit reference
- revert
- time number
- switching-mode keyword
- working-circuit reference
```

3.3.1 aps command descriptions

aps [group-id] *number*

Synopsis	Enter the aps list instance
Context	configure aps <i>number</i>
Tree	aps
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[group-id] *number*

Synopsis	APS group ID
Context	configure aps <i>number</i>
Tree	aps
Range	1 to 128
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

advertise-interval *number*

Synopsis	Time between subsequent advertisement messages
Context	configure aps <i>number</i> advertise-interval <i>number</i>
Tree	advertise-interval
Range	10 to 650
Default	10
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

annexb

Synopsis	Enable the annexb context
Context	configure aps <i>number</i> annexb

Tree	annexb
Notes	The following elements are part of a choice: annexb or (neighbor , protect-circuit , revert , and working-circuit).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

wait-to-restore-time *number*

Synopsis	Annex B mode operation wait to restore time
Context	configure aps <i>number</i> annexb wait-to-restore-time <i>number</i>
Tree	wait-to-restore-time
Description	This command specifies the delay after which the newly active section becomes the primary section after a switchover from the primary section to the secondary section occurs and the switch request clears normally.
Range	0 to 3600
Default	300
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

working-circuit *reference*

Synopsis	Working circuit port for the APS group
Context	configure aps <i>number</i> annexb working-circuit <i>reference</i>
Tree	working-circuit
Reference	configure port <i>string</i>
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

hold-time *number*

Synopsis	Time to wait for an advertisement packet
Context	configure aps <i>number</i> hold-time <i>number</i>

Tree	hold-time
Range	10 to 650
Default	30
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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

Synopsis	Neighbor IP address for multi-chassis APS
Context	configure aps <i>number</i> neighbor (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	neighbor
Notes	The following elements are part of a choice: annexb or (neighbor , protect-circuit , revert , and working-circuit).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

protect-circuit *reference*

Synopsis	Protection circuit port for the APS group
Context	configure aps <i>number</i> protect-circuit <i>reference</i>
Tree	protect-circuit
Reference	configure port <i>string</i>
Notes	The following elements are part of a choice: annexb or (neighbor , protect-circuit , revert , and working-circuit).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

revert

Synopsis	Enable the revert context
Context	configure aps <i>number</i> revert
Tree	revert
Notes	The following elements are part of a choice: annexb or (neighbor , protect-circuit , revert , and working-circuit).

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

time *number*

Synopsis Wait time before switching back to the working circuit
Context **configure** *aps number revert time number*
Tree *time*
Range 0 | 60 to 3600
Default 300
Units seconds
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

switching-mode *keyword*

Synopsis Switching mode for the APS port
Context **configure** *aps number switching-mode keyword*
Tree *switching-mode*
Default bi-directional
Options uni-directional, bi-directional
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

working-circuit *reference*

Synopsis Working circuit port for the APS group
Context **configure** *aps number working-circuit reference*
Tree *working-circuit*
Reference **configure** *port string*
Notes The following elements are part of a choice: **annexb** or (**neighbor**, **protect-circuit**, **revert**, and **working-circuit**).
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

3.4 bfd commands

```
configure
- bfd
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-template string
    - apply-groups reference
    - apply-groups-exclude reference
    - echo-receive number
    - multiplier number
    - receive-interval number
    - transmit-interval number
    - type keyword
  - seamless-bfd
    - reflector string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - discriminator number
      - local-state keyword
```


3.4.1 bfd command descriptions

bfd

Synopsis	Enter the bfd context
Context	configure bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

bfd-template [[name](#)] *string*

Synopsis	Enter the bfd-template list instance
Context	configure bfd bfd-template <i>string</i>
Tree	bfd-template
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	BFD template name
Context	configure bfd bfd-template <i>string</i>
Tree	bfd-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Echo receive interval
Context	configure bfd bfd-template <i>string</i> echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Default	100

Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Detection multiplier
Context	configure bfd bfd-template <i>string multiplier number</i>
Tree	multiplier
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive-interval *number*

Synopsis	Receive interval
Context	configure bfd bfd-template <i>string receive-interval number</i>
Tree	receive-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit interval
Context	configure bfd bfd-template <i>string transmit-interval number</i>
Tree	transmit-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Local termination point for the BFD session
Context	configure bfd bfd-template <i>string</i> type <i>keyword</i>
Tree	type
Options	cpm-np, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

seamless-bfd

Synopsis	Enter the seamless-bfd context
Context	configure bfd seamless-bfd
Tree	seamless-bfd
Introduced	19.7.R1
Platforms	All

reflector [*name*] *string*

Synopsis	Enter the reflector list instance
Context	configure bfd seamless-bfd reflector <i>string</i>
Tree	reflector
Max. Instances	1
Introduced	19.7.R1
Platforms	All

[name] *string*

Synopsis	S-BFD reflector name
Context	configure bfd seamless-bfd reflector <i>string</i>
Tree	reflector
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the seamless BFD reflector
Context **configure** [bfd seamless-bfd reflector](#) *string* **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 19.7.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [bfd seamless-bfd reflector](#) *string* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 19.7.R1
Platforms All

discriminator *number*



WARNING:

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

Synopsis Discriminator of the seamless BFD reflector
Context **configure** [bfd seamless-bfd reflector](#) *string* **discriminator** *number*
Tree [discriminator](#)
Range 524288 to 526335
Introduced 19.7.R1
Platforms All

local-state *keyword*

Synopsis	Local state of the seamless BFD reflector
Context	configure bfd seamless-bfd reflector <i>string</i> local-state <i>keyword</i>
Tree	local-state
Default	up
Options	admin-down, up
Introduced	19.7.R1
Platforms	All

3.5 bmp commands

```

configure
-  bmp
  -  admin-state keyword
  -  apply-groups reference
  -  apply-groups-exclude reference
  -  collector
    -  admin-state keyword
    -  apply-groups reference
    -  apply-groups-exclude reference
    -  connection
      -  ipv4
        -  address string
        -  port number
      -  ipv6
        -  address string
        -  port number
  -  station string
    -  admin-state keyword
    -  apply-groups reference
    -  apply-groups-exclude reference
    -  connection
      -  connect-retry number
      -  local-address (ipv4-address-no-zone | ipv6-address-no-zone)
      -  router-instance string
      -  station-address
        -  ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        -  port number
      -  tcp-keepalive
        -  admin-state keyword
        -  keep-count number
        -  keep-idle number
        -  keep-interval number
    -  description string
  -  family
    -  evpn boolean
    -  ipv4 boolean
    -  ipv6 boolean
    -  l2-vpn boolean
    -  label-ipv4 boolean
    -  label-ipv6 boolean
    -  mcast-ipv4 boolean
    -  mcast-ipv6 boolean
    -  mcast-vpn-ipv4 boolean
    -  mcast-vpn-ipv6 boolean
    -  sr-policy-ipv4 boolean
    -  sr-policy-ipv6 boolean
    -  vpn-ipv4 boolean
    -  vpn-ipv6 boolean
  -  initiation-message string
  -  report-local-routes boolean
  -  stats-report-interval number

```

3.5.1 bmp command descriptions

bmp

Synopsis	Enter the bmp context
Context	configure bmp
Tree	bmp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BMP operation
Context	configure bmp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

collector

Synopsis	Enter the collector context
Context	configure bmp collector
Tree	collector
Introduced	19.10.R1
Platforms	VSR-NRC

admin-state *keyword*

Synopsis	Administrative state of the BMP collector
Context	configure bmp collector admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 19.10.R1
Platforms VSR-NRC

connection



WARNING:

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

Synopsis Enter the **connection** context
Context **configure** bmp collector connection
Tree [connection](#)
Introduced 19.10.R1
Platforms VSR-NRC

ipv4



WARNING:

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

Synopsis Enter the **ipv4** context
Context **configure** bmp collector connection ipv4
Tree [ipv4](#)
Introduced 19.10.R1
Platforms VSR-NRC

address string



WARNING:

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

Synopsis IPv4 address
Context **configure** bmp collector connection ipv4 address *string*
Tree [address](#)
Introduced 19.10.R1

Platforms VSR-NRC

port number



WARNING:

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

Synopsis IPv4 TCP destination port number
Context **configure** [bmp collector connection ipv4 port number](#)
Tree [port](#)
Range 1 to 65535
Default 4210
Introduced 19.10.R1
Platforms VSR-NRC

ipv6



WARNING:

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

Synopsis Enter the **ipv6** context
Context **configure** [bmp collector connection ipv6](#)
Tree [ipv6](#)
Introduced 19.10.R1
Platforms VSR-NRC

address string



WARNING:

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

Synopsis IPv6 address
Context **configure** [bmp collector connection ipv6 address string](#)
Tree [address](#)
Introduced 19.10.R1

Platforms VSR-NRC

port *number*



WARNING:

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

Synopsis IPv6 TCP destination port
Context **configure** [bmp collector connection ipv6 port](#) *number*
Tree [port](#)
Range 1 to 65535
Default 4210
Introduced 19.10.R1
Platforms VSR-NRC

station [[name](#)] *string*

Synopsis Enter the **station** list instance
Context **configure** [bmp station](#) *string*
Tree [station](#)
Max. Instances 8
Introduced 16.0.R1
Platforms All

[name] *string*

Synopsis BMP monitoring station name
Context **configure** [bmp station](#) *string*
Tree [station](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis	Administrative state of the BMP monitoring station
Context	configure bmp station <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

connection

Synopsis	Enter the connection context
Context	configure bmp station <i>string</i> connection
Tree	connection
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	Maximum time between connection attempts
Context	configure bmp station <i>string</i> connection connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	All

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

Synopsis	Local IP address to communicate with monitoring station
Context	configure bmp station <i>string</i> connection local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-address

Introduced 16.0.R1
Platforms All

router-instance *string*

Synopsis Router instance used to reach the BMP station
Context **configure** [bmp station string connection router-instance string](#)
Tree [router-instance](#)
Default Base
Introduced 16.0.R4
Platforms All

station-address

Synopsis Enter the **station-address** context
Context **configure** [bmp station string connection station-address](#)
Tree [station-address](#)
Introduced 16.0.R1
Platforms All

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

Synopsis IP address of the remote BMP monitoring station
Context **configure** [bmp station string connection station-address ip-address \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)
Tree [ip-address](#)
Introduced 16.0.R1
Platforms All

port *number*

Synopsis BMP monitoring station port
Context **configure** [bmp station string connection station-address port number](#)
Tree [port](#)
Range 1 to 65535
Introduced 16.0.R1

Platforms All

tcp-keepalive

Synopsis Enter the **tcp-keepalive** context
Context **configure** [bmp station string connection tcp-keepalive](#)
Tree [tcp-keepalive](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the TCP keepalive
Context **configure** [bmp station string connection tcp-keepalive admin-state keyword](#)
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

keep-count *number*

Synopsis Keepalive threshold before connection is declared down
Context **configure** [bmp station string connection tcp-keepalive keep-count number](#)
Tree [keep-count](#)
Range 3 to 100
Default 4
Introduced 16.0.R1
Platforms All

keep-idle *number*

Synopsis Time until the first TCP keepalive probe is sent
Context **configure** [bmp station string connection tcp-keepalive keep-idle number](#)
Tree [keep-idle](#)

Range	1 to 100000
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	All

keep-interval *number*

Synopsis	Time between two TCP keepalive probes
Context	configure bmp station <i>string</i> connection tcp-keepalive keep-interval <i>number</i>
Tree	keep-interval
Range	1 to 100000
Default	15
Units	seconds
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure bmp station <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enter the family context
Context	configure bmp station <i>string</i> family
Tree	family
Description	Commands in this context specify the address families that are reported to a BMP monitoring station.
Introduced	16.0.R1
Platforms	All

evpn boolean

Synopsis	Support EVPN address family
Context	configure bmp station string family evpn boolean
Tree	evpn
Default	false
Introduced	16.0.R4
Platforms	All

ipv4 boolean

Synopsis	Support IPv4 address family
Context	configure bmp station string family ipv4 boolean
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 boolean

Synopsis	Support IPv6 address family
Context	configure bmp station string family ipv6 boolean
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn boolean

Synopsis	Support L2 VPN address family
Context	configure bmp station string family l2-vpn boolean
Tree	l2-vpn
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support labeled IPv4 address family
Context	configure bmp station <i>string</i> family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Support labeled IPv6 address family
Context	configure bmp station <i>string</i> family label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Support IPv4 multicast address family
Context	configure bmp station <i>string</i> family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Support IPv6 multicast address family
Context	configure bmp station <i>string</i> family mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Support IPv4 VPN multicast address family
Context	configure bmp station <i>string</i> family mcast-vpn-ipv4 <i>boolean</i>
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Support IPv6 VPN multicast address family
Context	configure bmp station <i>string</i> family mcast-vpn-ipv6 <i>boolean</i>
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

sr-policy-ipv4 *boolean*

Synopsis	Support SR policy IPv4 address family
Context	configure bmp station <i>string</i> family sr-policy-ipv4 <i>boolean</i>
Tree	sr-policy-ipv4
Default	false
Introduced	22.5.R1
Platforms	All

sr-policy-ipv6 *boolean*

Synopsis	Support SR policy IPv6 address family
Context	configure bmp station <i>string</i> family sr-policy-ipv6 <i>boolean</i>
Tree	sr-policy-ipv6
Default	false
Introduced	22.5.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support VPN IPv4 address family
Context	configure bmp station <i>string</i> family vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support VPN IPv6 address family
Context	configure bmp station <i>string</i> family vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

initiation-message *string*

Synopsis	Free form initiation message sent to monitoring station
Context	configure bmp station <i>string</i> initiation-message <i>string</i>
Tree	initiation-message
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

report-local-routes *boolean*

Synopsis	Allow local route reporting to BMP monitoring station
Context	configure bmp station <i>string</i> report-local-routes <i>boolean</i>
Tree	report-local-routes
Default	false
Introduced	16.0.R1
Platforms	All

stats-report-interval *number*

Synopsis	Frequency of reports sent to the BMP monitoring station
Context	configure bmp station <i>string</i> stats-report-interval <i>number</i>
Tree	stats-report-interval
Range	15 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

3.6 bof commands

```

bof
- auto-boot
- dhcp
  - client-id (keyword | hex-string | string)
  - inband
    - disabled boolean
    - null-encapsulation boolean
    - vlan number
    - vlan-discovery boolean
  - include-user-class boolean
  - ipv4 boolean
  - ipv6 boolean
  - management-port boolean
- ospf
  - mtu number
  - neid string
  - neip-ipv4 string
  - neip-ipv6 string
  - vendor-id number
- port-mtu number
- timeout number
- auto-configure
- ipv4
  - dhcp
    - client-id (hex-string | string)
    - include-user-class boolean
    - timeout number
- ipv6
  - dhcp
    - client-id (hex-string | string)
    - client-type keyword
    - include-user-class boolean
    - timeout number
- configuration
  - encrypt boolean
  - encryption-key string
  - password string
  - primary-location string
  - secondary-location string
  - tertiary-location string
- console
  - speed number
  - wait-time number
- dns
  - domain string
  - primary-server (ipv4-address-no-zone | ipv6-address-no-zone)
  - secondary-server (ipv4-address-no-zone | ipv6-address-no-zone)
  - tertiary-server (ipv4-address-no-zone | ipv6-address-no-zone)
- image
  - primary-location string
  - secondary-location string
  - tertiary-location string
- li
  - local-save boolean
  - separate boolean
- license
  - primary-location string
- port string
  - autonegotiate keyword

```

bof port duplex

- **duplex** *keyword*
- **speed** *number*
- **router** *string*
- **interface** *string*
 - **cpm** *keyword*
 - **ipv4**
 - **ip-address** *string*
 - **prefix-length** *number*
 - **ipv6**
 - **ipv6-address** *string*
 - **prefix-length** *number*
 - **ip-mtu** *number*
- **static-routes**
 - **route** (*ipv4-prefix | ipv6-prefix*)
 - **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **system**
 - **base-mac-address** *string*
 - **fips-140-2** *boolean*
 - **persistent-indices** *boolean*
 - **profile** *keyword*

3.6.1 bof command descriptions

bof

Synopsis	Configure system boot options
Context	bof
Tree	bof
Description	<p>This command creates or edits the boot option file (BOF) for the specified local storage device.</p> <p>A BOF file specifies where the system searches for runtime images, configuration files, and other operational parameters during system initialization.</p> <p>BOF parameters can be modified. Changes can be saved to a specified compact flash. The BOF must be located in the root directory of either an internal or external compact flash local to the system and have the mandatory filename of bof.cfg.</p> <p>When modifications are made to in-memory parameters that are currently in use or operating, the changes are effective immediately. For example, if the IP address of the management port is changed, the change takes place immediately.</p> <p>Only one entry of the BOF configuration command statement can be saved once the statement has been found to be syntactically correct.</p> <p>When opening an existing BOF that is not the BOF used in the most recent boot, a message is issued notifying the user that the parameters will not affect the operation of the node.</p> <p>No default boot option file exists. The router boots with the factory default boot sequence and options.</p>
Introduced	20.10.R1
Platforms	All

auto-boot



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the auto-boot context
Context	bof auto-boot
Tree	auto-boot
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

dhcp



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the dhcp context
Context	bof auto-boot dhcp
Tree	dhcp
Notes	The following elements are part of a choice: dhcp or ospf .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

client-id (*keyword | hex-string | string*)



Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	bof auto-boot dhcp client-id (<i>keyword hex-string string</i>)
Tree	client-id
String Length	3 to 118
Options	use-chassis-mac-address
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

inband



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the inband context
Context	bof auto-boot dhcp inband
Tree	inband
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

disabled *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Do not use in-band ports
Context	bof auto-boot dhcp inband disabled <i>boolean</i>
Tree	disabled
Default	true
Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

null-encapsulation *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Use null encapsulation
Context	bof auto-boot dhcp inband null-encapsulation <i>boolean</i>
Tree	null-encapsulation
Default	true
Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

vlan *number*



Note:

The new value of this element takes effect when the router boots.

Synopsis	In-band VLAN ID
Context	bof auto-boot dhcp inband vlan <i>number</i>
Tree	vlan
Range	1 to 4094

Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

vlan-discovery *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Use VLAN discovery
Context	bof auto-boot dhcp inband vlan-discovery <i>boolean</i>
Tree	vlan-discovery
Default	true
Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

include-user-class *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Include user class in auto boot provisioning
Context	bof auto-boot dhcp include-user-class <i>boolean</i>
Tree	include-user-class
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

ipv4 *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv4
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Context	bof auto-boot dhcp ipv4 <i>boolean</i>
Tree	ipv4
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

ipv6 *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv6
Context	bof auto-boot dhcp ipv6 <i>boolean</i>
Tree	ipv6
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

management-port *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot on the management port
Context	bof auto-boot dhcp management-port <i>boolean</i>
Tree	management-port
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

ospf



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the ospf context
Context	bof auto-boot ospf

Tree	ospf
Notes	The following elements are part of a choice: dhcp or ospf .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

mtu number



Note:

The new value of this element takes effect when the router boots.

Synopsis	OSPF MTU
Context	bof auto-boot ospf mtu number
Tree	mtu
Range	512 to 9786
Default	1500
Units	bytes
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

neid string



Note:

The new value of this element takes effect when the router boots.

Synopsis	Network element ID
Context	bof auto-boot ospf neid string
Tree	neid
String Length	3
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

neip-ipv4 string



Note:

The new value of this element takes effect when the router boots.

Synopsis	Network element IPv4 address
Context	<code>bof auto-boot ospf neip-ipv4 string</code>
Tree	<code>neip-ipv4</code>
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

neip-ipv6 *string*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Network element IPv6 address
Context	<code>bof auto-boot ospf neip-ipv6 string</code>
Tree	<code>neip-ipv6</code>
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

vendor-id *number*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Vendor ID
Context	<code>bof auto-boot ospf vendor-id number</code>
Tree	<code>vendor-id</code>
Range	1 to 254
Default	140
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

port-mtu *number*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Port MTU setting
Context	<code>bof auto-boot port-mtu number</code>

Tree	port-mtu
Range	512 to 9800
Units	bytes
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

timeout *number*



Note:

The new value of this element takes effect when the router boots.

Synopsis	ZTP timeout
Context	bof auto-boot timeout <i>number</i>
Tree	timeout
Description	This command configures the Zero Touch Provisioning timeout, which is the total time allowed for the ZTP process to execute successfully. If the ZTP process is unsuccessful (in the case of auto-boot using OSPF, if no OSPF adjacency is found), the node is first rebooted, then the ZTP process is retried.
Range	30 to 1440
Units	minutes
Introduced	22.7.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

auto-configure

Synopsis	Enter the auto-configure context
Context	bof auto-configure
Tree	auto-configure
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

ipv4

Synopsis	Enter the ipv4 context
Context	bof auto-configure ipv4
Tree	ipv4

Introduced 20.10.R1
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

dhcp



Note:

The new value of this element takes effect when the router boots.

Synopsis Enable the **dhcp** context
Context [bof auto-configure ipv4 dhcp](#)
Tree [dhcp](#)
Introduced 20.10.R1
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

client-id (*hex-string* | *string*)



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis DHCP client ID
Context [bof auto-configure ipv4 dhcp client-id](#) (*hex-string* | *string*)
Tree [client-id](#)
String Length 3 to 256
Introduced 20.10.R1
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

include-user-class *boolean*



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	bof auto-configure ipv4 dhcp include-user-class <i>boolean</i>
Tree	include-user-class
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

timeout *number*



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	bof auto-configure ipv4 dhcp timeout <i>number</i>
Tree	timeout
Range	1 to 65535
Default	30
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

ipv6

Synopsis	Enter the ipv6 context
Context	bof auto-configure ipv6
Tree	ipv6
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

dhcp



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the dhcp context
Context	bof auto-configure ipv6 dhcp
Tree	dhcp
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

client-id (*hex-string* | *string*)



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	bof auto-configure ipv6 dhcp client-id (<i>hex-string</i> <i>string</i>)
Tree	client-id
String Length	3 to 250
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

client-type *keyword*



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP client type
Context	bof auto-configure ipv6 dhcp client-type <i>keyword</i>
Tree	client-type

Options	duid-enterprise, duid-link-local
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

include-user-class *boolean*



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	bof auto-configure ipv6 dhcp include-user-class <i>boolean</i>
Tree	include-user-class
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

timeout *number*



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	bof auto-configure ipv6 dhcp timeout <i>number</i>
Tree	timeout
Range	1 to 65535
Default	30
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

configuration

Synopsis	Enter the configuration context
Context	bof configuration
Tree	configuration
Introduced	20.10.R1
Platforms	All

encrypt *boolean*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enable encryption of BOF configuration files
Context	bof configuration encrypt <i>boolean</i>
Tree	encrypt
Description	<p>When configured to true, this command enables encryption of the BOF using AES256 and SHA256.</p> <p>When the BOF is encrypted on the compact flash, it is still reachable using the BOF interactive menu during node startup, and fields can be modified using the BOF interactive menu.</p>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encryption-key *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Secret key for encryption of configuration files
Context	bof configuration encryption-key <i>string</i>
Tree	encryption-key
Description	<p>This command creates a key to be used by AES256 and SHA256 for configuration file encryption and hashing. This key is used for all configuration files (primary, secondary, and tertiary).</p> <p>After creating or deleting a key, save the configuration file with the current encryption key state.</p>

String Length 1 to 71
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis Password for boot-time modification of boot options
Context [bof configuration password string](#)
Tree [password](#)
String Length 1 to 71
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary-location *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis Primary configuration location
Context [bof configuration primary-location string](#)
Tree [primary-location](#)
String Length 1 to 180
Introduced 20.10.R1
Platforms All

secondary-location *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis Secondary configuration location
Context [bof configuration secondary-location string](#)
Tree [secondary-location](#)
String Length 1 to 180

Introduced 20.10.R1
Platforms All

tertiary-location *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis Tertiary configuration location
Context [bof configuration tertiary-location](#) *string*
Tree [tertiary-location](#)
String Length 1 to 180
Introduced 20.10.R1
Platforms All

console

Synopsis Enter the **console** context
Context [bof console](#)
Tree [console](#)
Introduced 20.10.R1
Platforms All

speed *number*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis Console port speed
Context [bof console speed](#) *number*
Tree [speed](#)
Range 9600 | 19200 | 38400 | 57600 | 115200
Default 19200
Units bps
Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

wait-time *number*



Note:

The new value of this element takes effect when the router boots.

Synopsis Wait time for interrupt to change boot parameters
Context [bof console wait-time number](#)
Tree [wait-time](#)
Range 1 to 10
Default 3
Units seconds
Introduced 20.10.R1
Platforms All

dns

Synopsis Enter the **dns** context
Context [bof dns](#)
Tree [dns](#)
Introduced 20.10.R1
Platforms All

domain *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis System DNS domain name for DNS address resolution
Context [bof dns domain string](#)
Tree [domain](#)
String Length 1 to 178
Introduced 20.10.R1
Platforms All

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



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Primary DNS server
Context	bof dns primary-server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	primary-server
Introduced	20.10.R1
Platforms	All

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



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Secondary DNS server
Context	bof dns secondary-server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	secondary-server
Introduced	20.10.R1
Platforms	All

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



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Tertiary DNS server
Context	bof dns tertiary-server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	tertiary-server
Introduced	20.10.R1
Platforms	All

image

Synopsis	Enter the image context
Context	bof image

Tree	image
Introduced	20.10.R1
Platforms	All

primary-location *string*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Primary image location
Context	bof image primary-location <i>string</i>
Tree	primary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

secondary-location *string*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Secondary image location
Context	bof image secondary-location <i>string</i>
Tree	secondary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

tertiary-location *string*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Tertiary image location
Context	bof image tertiary-location <i>string</i>
Tree	tertiary-location
String Length	1 to 180

Introduced 20.10.R1
Platforms All

li

Synopsis Enter the **li** context
Context [bof li](#)
Tree [li](#)
Introduced 20.10.R1
Platforms All

local-save *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis Save the LI configuration locally
Context [bof li local-save *boolean*](#)
Tree [local-save](#)
Introduced 20.10.R1
Platforms All

separate *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis Separate access to the LI information
Context [bof li separate *boolean*](#)
Tree [separate](#)
Introduced 20.10.R1
Platforms All

license

Synopsis Enter the **license** context

Context	bof license
Tree	license
Introduced	20.10.R1
Platforms	All

primary-location *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Primary license file location
Context	bof license primary-location <i>string</i>
Tree	primary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

port [[router-name](#)] *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the port list instance
Context	bof port <i>string</i>
Tree	port
Max. Instances	1
Introduced	20.10.R1
Platforms	All

[router-name] *string*

Synopsis	Administrative router name
Context	bof port <i>string</i>
Tree	port
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

autonegotiate *keyword*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Auto-negotiate speed and duplex type on Ethernet port
Context	bof port string autonegotiate keyword
Tree	autonegotiate
Default	true
Options	false, true
Introduced	20.10.R1
Platforms	All

duplex *keyword*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Duplex type for the Ethernet port
Context	bof port string duplex keyword
Tree	duplex
Default	full
Options	full, half
Introduced	20.10.R1
Platforms	All

speed *number*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Speed of the Ethernet port
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Context	<code>bof port string speed number</code>
Tree	<code>speed</code>
Range	10 100 1000
Default	100
Units	megabps
Introduced	20.10.R1
Platforms	All

router [`router-name`] *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the router list instance
Context	<code>bof router string</code>
Tree	<code>router</code>
Max. Instances	1
Introduced	20.10.R1
Platforms	All

[router-name] *string*

Synopsis	Administrative router name
Context	<code>bof router string</code>
Tree	<code>router</code>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

interface [`interface-name`] *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the interface list instance
Context	<i>bof router string interface string</i>
Tree	<i>interface</i>
Max. Instances	1
Introduced	20.10.R1
Platforms	All

[interface-name] *string*

Synopsis	Router interface name
Context	<i>bof router string interface string</i>
Tree	<i>interface</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

cpm [*cpm-type*] *keyword*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the cpm list instance
Context	<i>bof router string interface string cpm keyword</i>
Tree	<i>cpm</i>
Introduced	20.10.R1
Platforms	All

[cpm-type] *keyword*

Synopsis	CPM type
Context	<i>bof router string interface string cpm keyword</i>
Tree	<i>cpm</i>
Options	active, standby, a, b, c, d
Notes	This element is part of a list key.

Introduced 20.10.R1
Platforms All

ipv4



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis Enable the **ipv4** context
Context [bof router string interface string cpm keyword ipv4](#)
Tree [ipv4](#)
Introduced 20.10.R1
Platforms All

ip-address *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis IPv4 address assigned to the interface
Context [bof router string interface string cpm keyword ipv4 ip-address string](#)
Tree [ip-address](#)
Description This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses must be on the same subnet.
Notes This element is mandatory.
Introduced 20.10.R1
Platforms All

prefix-length *number*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis IPv4 address prefix length
Context [bof router string interface string cpm keyword ipv4 prefix-length number](#)
Tree [prefix-length](#)
Range 0 to 32

Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

ipv6



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enable the ipv6 context
Context	bof router <i>string</i> interface <i>string</i> cpm <i>keyword</i> ipv6
Tree	ipv6
Introduced	20.10.R1
Platforms	All

ipv6-address *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv6 address assigned to the interface
Context	bof router <i>string</i> interface <i>string</i> cpm <i>keyword</i> ipv6 ipv6-address <i>string</i>
Tree	ipv6-address
Description	This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses must be on the same subnet.
Introduced	20.10.R1
Platforms	All

prefix-length *number*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv6 address prefix length
Context	bof router <i>string</i> interface <i>string</i> cpm <i>keyword</i> ipv6 prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 128

Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

ip-mtu *number*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Interface IP MTU
Context	bof router <i>string</i> interface <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	<p>This command configures the MTU for IP packets transmitted out the interface of the management router instance associated to the management port.</p> <p>The operational MTU for the port is set to the lesser of the values configured with this command and the management port MTU.</p> <p>If the interface supports IPv6 packets, the command value must be set to 1280 or higher.</p>
Range	512 to 9786
Units	bytes
Introduced	20.10.R1
Platforms	All

static-routes

Synopsis	Enter the static-routes context
Context	bof router <i>string</i> static-routes
Tree	static-routes
Introduced	20.10.R1
Platforms	All

route [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the route list instance
----------	--------------------------------------

Context	<code>bof router string static-routes route (ipv4-prefix ipv6-prefix)</code>
Tree	<code>route</code>
Introduced	20.10.R1
Platforms	All

[ip-prefix] (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP prefix for the static route
Context	<code>bof router string static-routes route (ipv4-prefix ipv6-prefix)</code>
Tree	<code>route</code>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

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



WARNING:

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



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Next-hop IP address
Context	<code>bof router string static-routes route (ipv4-prefix ipv6-prefix) next-hop (ipv4-address-no-zone ipv6-address-no-zone)</code>
Tree	<code>next-hop</code>
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

system

Synopsis	Enter the system context
Context	<code>bof system</code>
Tree	<code>system</code>

Introduced 20.10.R1
Platforms All

base-mac-address *string*



Note:

The new value of this element takes effect when the router boots.

Synopsis Base system MAC address
Context [bof system base-mac-address](#) *string*
Tree [base-mac-address](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS-20, 7950 XRS-20e, VSR

fips-140-2 *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis Operate in FIPS 140-2 mode
Context [bof system fips-140-2](#) *boolean*
Tree [fips-140-2](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS

persistent-indices *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis Classic and mixed management mode persistent indices
Context [bof system persistent-indices](#) *boolean*
Tree [persistent-indices](#)
Introduced 20.10.R1
Platforms All

profile *keyword*



Note:

The new value of this element takes effect when the router boots.

Synopsis	System capabilities profile
Context	bof system profile <i>keyword</i>
Tree	profile
Options	profile-a, profile-b
Introduced	20.10.R1
Platforms	All

3.7 call-trace commands

```
configure
- call-trace
  - apply-groups reference
  - apply-groups-exclude reference
  - buffering boolean
  - location keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - size-limit (number | keyword)
  - max-files-number number
  - primary-cf keyword
  - trace-profile string
    - applications
      - connectivity-management boolean
      - gx boolean
      - gy boolean
      - ladb boolean
      - msap boolean
      - nasreq boolean
      - ppp-event boolean
      - python boolean
      - radius-acct boolean
      - radius-auth boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - events keyword
    - output
      - debug
      - live
        - fqdn string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - port number
        - router-instance string
      - local-storage
    - size-limit number
    - time-limit number
```

3.7.1 call-trace command descriptions

call-trace

Synopsis	Enter the call-trace context
Context	configure call-trace
Tree	call-trace
Description	Commands in this context configure the attributes of the call trace debugging functionality.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

buffering *boolean*

Synopsis	Buffer messages until the trace key is known
Context	configure call-trace buffering boolean
Tree	buffering
Description	<p>When configured to true, the router buffers initial messages for sessions where the trace key is not yet known, for example, a username for a PPP session.</p> <p>When the trace key, for example, a username, indicates a match for a traced session, the router sends the buffered messages immediately. If the key does not match a trace, the router discards the buffered messages.</p> <p>When configured to false, the router does not buffer any messages and therefore initial messages may not be traced.</p>
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

location [[location-type](#)] *keyword*

Synopsis	Enter the location list instance
Context	configure call-trace location keyword
Tree	location
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[location-type] keyword

Synopsis	Compact flash card to be used
Context	configure call-trace location <i>keyword</i>
Tree	location
Options	cf1, cf2
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of compact flash for log storage
Context	configure call-trace location <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

size-limit (number | keyword)

Synopsis	Maximum cumulative size of call trace files on the card
Context	configure call-trace location <i>keyword</i> size-limit (<i>number</i> <i>keyword</i>)
Tree	size-limit
Range	1 to 65536
Default	1000
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-files-number number

Synopsis	Maximum number of files call trace can create
Context	configure call-trace max-files-number <i>number</i>

Tree	max-files-number
Range	1 to 1024
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary-cf *keyword*

Synopsis	Primary CF card as local storage location
Context	configure call-trace primary-cf <i>keyword</i>
Tree	primary-cf
Default	cf1
Options	cf1, cf2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace-profile [[name](#)] *string*

Synopsis	Enter the trace-profile list instance
Context	configure call-trace trace-profile <i>string</i>
Tree	trace-profile
Description	Commands in this context configure the attributes of the call-trace profile list.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Call trace profile name
Context	configure call-trace trace-profile <i>string</i>
Tree	trace-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

applications

Synopsis	Enter the applications context
Context	configure call-trace trace-profile <i>string applications</i>
Tree	applications
Description	Commands in this context configure call trace attributes for the specified application.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

connectivity-management *boolean*

Synopsis	Trace messages used for connectivity protocols
Context	configure call-trace trace-profile <i>string applications connectivity-management boolean</i>
Tree	connectivity-management
Description	When configured to true , this command enables call trace for connectivity protocols, such as DHCP, ARP, and DHCPv6, and events related to connectivity management; for example, migrant or data-triggered host creation, idling, or session timeout. When configured to false , connectivity protocols are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gx *boolean*

Synopsis	Trace Diameter messages used for the Gx application
Context	configure call-trace trace-profile <i>string applications gx boolean</i>
Tree	gx
Description	When configured to true , this command enables call trace for Diameter messages used for the Gx application. When configured to false , Diameter Gx messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gy *boolean*

Synopsis	Trace Diameter messages used for the Gy application
----------	---

Context	configure call-trace trace-profile <i>string applications gy boolean</i>
Tree	gy
Description	When configured to true , this command enables call trace for Diameter messages used for the Gy application. When configured to false , Diameter Gy messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ludb boolean

Synopsis	Trace local user database lookups
Context	configure call-trace trace-profile <i>string applications ludb boolean</i>
Tree	ludb
Description	When configured to true , this command enables call trace for Local User Data Base (LUDB) lookups. When configured to false , LUDB lookups are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap boolean

Synopsis	Trace MSAP creation events
Context	configure call-trace trace-profile <i>string applications msap boolean</i>
Tree	msap
Description	When configured to true , this command enables tracing of Managed Service Access Point (MSAP) creation events. When configured to false , MSAP create events are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq boolean

Synopsis	Trace Diameter messages used for NASREQ application
Context	configure call-trace trace-profile <i>string applications nasreq boolean</i>

Tree	nasreq
Description	When configured to true , this command enables call trace for Diameter messages used for the Diameter Network Access Server Requirements (NASREQ) application. When configured to false , Diameter NASREQ messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-event *boolean*

Synopsis	Allow tracing for PPP state machine related events
Context	configure call-trace trace-profile <i>string</i> applications ppp-event <i>boolean</i>
Tree	ppp-event
Description	When configured to true , events related to the PPP state machine are traced. This configuration may result in a large amount of event messages. When configured to false , tracing is not activated for PPP state machine events.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python *boolean*

Synopsis	Trace Python script execution
Context	configure call-trace trace-profile <i>string</i> applications python <i>boolean</i>
Tree	python
Description	When configured to true , this command enables tracing of Python script execution. When configured to false , Python script execution is not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-acct *boolean*

Synopsis	Trace messages and events for RADIUS-based accounting
Context	configure call-trace trace-profile <i>string</i> applications radius-acct <i>boolean</i>
Tree	radius-acct

Description	When configured to true , this command enables tracing of messages and events related to RADIUS-based accounting. When configured to false , RADIUS-based accounting messages and events are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth *boolean*

Synopsis	Trace RADIUS authentication messages and events
Context	configure call-trace trace-profile <i>string</i> applications radius-auth <i>boolean</i>
Tree	radius-auth
Description	When configured to true , this command enables tracing of messages and events related to RADIUS authentication, including CoA and Disconnect. When configured to false , messages and events related to RADIUS authentication are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure call-trace trace-profile <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

events *keyword*

Synopsis	Events to include in the captured trace
Context	configure call-trace trace-profile <i>string</i> events <i>keyword</i>
Tree	events
Options	public-only, all

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

output

Synopsis Enter the **output** context
Context **configure** [call-trace](#) [trace-profile](#) *string* **output**
Tree [output](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debug

Synopsis Enable output to the debug log
Context **configure** [call-trace](#) [trace-profile](#) *string* **output** **debug**
Tree [debug](#)
Notes The following elements are part of a choice: **debug**, **live**, or **local-storage**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

live

Synopsis Enable the **live** context
Context **configure** [call-trace](#) [trace-profile](#) *string* **output** **live**
Tree [live](#)
Notes The following elements are part of a choice: **debug**, **live**, or **local-storage**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fqdn *string*

Synopsis Fully qualified domain name of live output destination
Context **configure** [call-trace](#) [trace-profile](#) *string* **output** **live** **fqdn** *string*
Tree [fqdn](#)
String Length 1 to 255

Notes	The following elements are part of a mandatory choice: fqdn or ip-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address of the live output destination server
Context	configure call-trace trace-profile <i>string</i> output live ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a mandatory choice: fqdn or ip-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port number

Synopsis	TCP IP port
Context	configure call-trace trace-profile <i>string</i> output live port <i>number</i>
Tree	port
Range	1 to 65536
Default	29770
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance or VPRN service name
Context	configure call-trace trace-profile <i>string</i> output live router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-storage

Synopsis	Destination for output
Context	configure call-trace trace-profile <i>string</i> output local-storage
Tree	local-storage
Notes	The following elements are part of a choice: debug , live , or local-storage .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

size-limit *number*

Synopsis	Maximum data output for a single call trace operation
Context	configure call-trace trace-profile <i>string</i> size-limit <i>number</i>
Tree	size-limit
Range	1 to 1000
Default	10
Units	megabytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time-limit *number*

Synopsis	Maximum time for a single call trace job
Context	configure call-trace trace-profile <i>string</i> time-limit <i>number</i>
Tree	time-limit
Range	1 to 604800
Default	86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

3.8 card commands

```

configure
- card number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- card-type keyword
- fail-on-error boolean
- filter-profile keyword
- fp number
- apply-groups reference
- apply-groups-exclude reference
- egress
- hs-fixed-high-thresh-delta number
- hs-pool-policy reference
- wred-queue-control
- admin-state keyword
- buffer-allocation decimal-number
- reserved-cbs decimal-number
- slope-policy reference
- fp-resource-policy reference
- hi-bw-mcast-src
- alarm boolean
- default-paths-only boolean
- group number
- ingress
- access
- queue-group reference instance-id number
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- collect-stats boolean
- description string
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-threshold-separation (number | keyword)
- priority number
- apply-groups reference
- apply-groups-exclude reference
- mbs-contribution (number | keyword)
- policy-name reference
- policer-overrides
- policer reference
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- rate
- cir (number | keyword)
- pir (number | keyword)
- stat-mode keyword
- dist-cpu-protection
- dynamic-enforcement-policer-pool number
- mcast-path-management
- admin-state keyword

```

configure card fp ingress mcast-path-management bandwidth-policy

- **bandwidth-policy** *reference*
- **network**
- **pool** *string*
 - **amber-alarm-threshold** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **red-alarm-threshold** *number*
 - **resv-cbs**
 - **amber-alarm-action**
 - **max** *number*
 - **step** *number*
 - **cbs** *number*
 - **slope-policy** *reference*
- **queue-group** *reference* **instance-id** *number*
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **description** *string*
 - **policer-control-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **max-rate** (*number* | *keyword*)
 - **priority-mbs-thresholds**
 - **min-threshold-separation** (*number* | *keyword*)
 - **priority** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mbs-contribution** (*number* | *keyword*)
 - **policy-name** *reference*
 - **policer-overrides**
 - **policer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **packet-byte-offset** *number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **stat-mode** *keyword*
 - **queue-policy** *reference*
- **policy-accounting**
 - **classes** *number*
 - **policers** *number*
- **ingress-buffer-allocation** *decimal-number*
- **init-extract-prio-mode** *keyword*
- **stable-pool-sizing** *boolean*
- **level** *keyword*
- **mda** *number*
 - **access**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ingress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **clock-mode**

configure card mda clock-mode mode

- **mode** *keyword*
- **timestamp-freq** *number*
- **egress-xpl**
 - **threshold** *number*
 - **window** *number*
- **event** *keyword*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **fail-on-error** *boolean*
- **ingress-xpl**
 - **threshold** *number*
 - **window** *number*
- **level** *keyword*
- **mda-type** *keyword*
- **network**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ingress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **power-priority-level** *number*
- **reset-on-recoverable-error** *boolean*
- **sync-e** *keyword*
- **upgrade** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **path** *keyword*
- **xconnect**
 - **mac** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **loopback** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **description** *string*
- **power-save** *boolean*
- **reset-on-recoverable-error** *boolean*
- **upgrade** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **path** *keyword*
- **virtual-scheduler-adjustment**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **internal-scheduler-weight-mode** *keyword*
 - **interval**
 - **rate-calculation-minimum**
 - **fast-queue** *decimal-number*
 - **slow-queue** *decimal-number*
 - **scheduler-run-minimum** *decimal-number*
 - **task-scheduling** *decimal-number*
 - **slow-queue-threshold-rate** *number*
- **xiom** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fail-on-error** *boolean*
 - **level** *keyword*

configure card xiom mda

- **mda** *number*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mda-type** *keyword*
- **power-priority-level** *number*
- **sync-e** *keyword*
- **xconnect**
 - **mac** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **loopback** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **description** *string*
- **reset-on-recoverable-error** *boolean*
- **upgrade** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **path** *keyword*
- **xiom-type** *keyword*

3.8.1 card command descriptions

card [*slot-number*] *number*

Synopsis	Enter the card list instance
Context	configure card <i>number</i>
Tree	card
Description	Commands in this context cover attributes for specific chassis slots for physical cards. Cards include IOM, IMM, and XCM. In SR OS, cards cover IOM, IMM, and XCM.
Introduced	16.0.R1
Platforms	All

[slot-number] *number*

Synopsis	Slot number within the chassis
Context	configure card <i>number</i>
Tree	card
Description	This command configures a unique value that identifies the card slot within a chassis in the system.
Range	1 to 20
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

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

card-type keyword



WARNING:

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

Synopsis	Card type
Context	configure card <i>number</i> card-type <i>keyword</i>
Tree	card-type
Description	<p>This command adds an IOM, IMM, XCM to the device configuration for the slot.</p> <p>The card type can be pre-provisioned, meaning that the card does not need to be installed in the chassis.</p> <p>A card must be provisioned before any contained object can be configured: MDA, XIOM, XMA, MDA-s, connector, or port. A card can only be provisioned in a slot if the card type is allowed in the slot. An error message is generated if an attempt is made to provision a card type that is not allowed.</p> <p>If a card is inserted that does not match the configured card type for the slot, a log event and facility alarm is raised. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event and facility alarm are raised if an administratively enabled card is removed from the chassis. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event is issued when a card is removed that is administratively disabled.</p> <p>Because IMM's do not have the capability to install separate MDAs, the configuration of the MDAs is automatic. This configuration only includes the default options such as default buffer policies. Commands to manage the MDA remain in the MDA configuration context.</p> <p>Some card hardware can support two different firmware loads. One load includes the base Ethernet functionality, including 10G WAN mode, but does not include 1588 port-based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two card types that are the same, except for a "-ptp" suffix to indicate the second loadset. A hard reset of the card occurs when switching between the two provisioned types.</p> <p>An appropriate alarm is raised if a partial or complete card failure is detected. The alarm is cleared when the error condition ceases.</p>
Options	<p>xcm-x20, imm40-10gb-sfp, imm4-100gb-cxp, iom4-e, iom-a, imm-1pac-fp3, imm-2pac-fp3, iom4-e-hs, imm4-100gb-cfp4, iom-e, iom-v, iom4-e-b, iom-sar-hm, xcm2-x20, iom-1, xcm-14s, imm40-10gb-sfp-tp, iom-ixr-r6, imm36-100g-qsfp28, imm48-sfp+2-qsfp28, iom5-e, xcm-7s, imm48-sfp++6-qsfp28, xcm-1s, xcm-2s, imm24-sfp++8-sfp28+2-qsfp28, iom-sar-hmc, imm14-10g-sfp++4-1g-tx, iom-ixr-r4, imm6-qsfpdd+48-sfp56, imm32-qsfp28+4-qsfpdd, i48-800g-qsfpdd-1x, imm36-qsfpdd, imm4-1g-tx+20-1g-sfp+6-10g-sfp+, iom-ixr-r6d, xcm2-7s, i24-800g-qsfpdd-1, imm36-800g-qsfpdd, xcm2-14s, i48-400g-qsfpdd-1, i80-200g-sfpdd+12-400g-qsfpdd-1, i40-200g-sfpdd+6-800g-qsfpdd-1, i80-200g-sfpdd+12-800g-qsfpdd-1x, xcm-2se, xcm-14s-b, xcm-7s-b</p>

Introduced	16.0.R1
Platforms	All

fail-on-error *boolean*

Synopsis Set operational state of the card to Failed upon error

Context **configure** *card number* **fail-on-error** *boolean*

Tree **fail-on-error**

Description When configured to **true**, this command controls the behavior of the card when any one of a specific set of card level errors is encountered in the system.

When the this command is set to **true**, and any one (or more) of the specific errors is detected, the operational state of the card is set to failed. This failed state persists until the **clear card** command is issued (reset) or the card is removed and reinserted (reseated). If the condition persists after reseating the card, contact Nokia support to investigate more.

Nokia only recommends configuring this command to **true** when the network is designed to be able to route traffic around a failed card (redundant cards, nodes, or other paths exist).

The list of specific errors includes the following:

CHASSIS event ID# 2063 - tmnxEqCardPChipMemoryEvent

CHASSIS event ID# 2076 - tmnxEqCardPChipCamEvent

CHASSIS event ID# 2059 - tmnxEqCardPChipError (for ingress Ethernet only)

CHASSIS event ID# 2098 - tmnxEqCardQChipBufMemoryEvent

CHASSIS event ID# 2099 - tmnxEqCardQChipStatsMemoryEvent

CHASSIS event ID# 2101 - tmnxEqCardQChipIntMemoryEvent

CHASSIS event ID# 2103 - tmnxEqCardChipIfCellEvent

On platforms with integrated CPM and IOM, IMM, or XCM, the node is rebooted if this command is set to **true** and one of the card level errors is encountered. The tmnxEqCardPChipError is only considered as a trigger for this command for ingress FCS errors (not egress FCS errors).

Note: On the detection of the event or error in the system, the reporting of the event (logs) and the fail-on-error behavior of the card are independent. Log event control configuration determines whether the events are reported in logs (or SNMP traps, and so on) and the fail-on-error configuration determines the behavior of the card. This implies that the card can be configured to fail-on-error even if the events are suppressed (some may be suppressed in the system by default). To facilitate post-failure analysis, Nokia recommends reporting the specific events or errors and that **configure log log-events** be enabled when this command is set to **true**.

Default	false
Introduced	16.0.R1

Platforms All

filter-profile *keyword*



WARNING:

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

Synopsis	Filter profile for the card
Context	configure <i>card number filter-profile keyword</i>
Tree	<i>filter-profile</i>
Description	This command controls the resources allocated to ingress and egress IPv4 and IPv6 filters on a per-line card basis on the SR-a platform.
Default	none
Options	none, profile-a
Introduced	19.10.R1
Platforms	7750 SR-a

fp [*fp-number*] *number*

Synopsis	Enter the fp list instance
Context	configure <i>card number fp number</i>
Tree	<i>fp</i>
Description	Commands in this context configure forwarding plane (FP) specific options on the card.
Introduced	16.0.R1
Platforms	All

[fp-number] *number*

Synopsis	Forwarding plane within the card
Context	configure <i>card number fp number</i>
Tree	<i>fp</i>
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure <i>card number fp number egress</i>
Tree	<i>egress</i>
Introduced	16.0.R1
Platforms	All

hs-fixed-high-thresh-delta *number*

Synopsis	High threshold delta on the forwarding plane
Context	configure <i>card number fp number egress hs-fixed-high-thresh-delta number</i>
Tree	<i>hs-fixed-high-thresh-delta</i>
Description	<p>This command specifies the egress aggregate shaper high burst limit threshold delta for this HSQ IOM FP.</p> <p>An aggregate rate can be applied to each egress HSQ queue group, HS secondary shaper, and (for subscribers configured with HS SLA expanded mode) primary shaper that manages the maximum burst limit over a specified shaping rate. Each aggregate shaper supports two thresholds that are used in conjunction with the low burst class setting. The system uses the lowest value attainable for each low threshold aggregate burst limit without causing shaper under run conditions.</p> <p>The high burst limit threshold is determined by adding the configured value of this command to the aggregate low burst limit threshold value. An operator must set this configured value to at least two times the maximum frame size to prevent lower threshold class forwarding from also affecting the higher threshold classes when forwarding larger packet sizes. An insufficiently high threshold delta defeats the intended purpose of mapping classes to the higher threshold.</p>
Range	0 to 65536
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-pool-policy *reference*

Synopsis	HS pool policy
Context	configure <i>card number fp number egress hs-pool-policy reference</i>
Tree	<i>hs-pool-policy</i>
Description	This command specifies the HS pool policy for the FP.

An HS pool policy contains the required parameters to create and size root and mid-tier buffer pools on an HSQ IOM, and applies a slope policy to each. A single HS pool policy is supported per port FP.

This command is only applicable to the HSQ IOM (iom4-e-hs) and fails if configured on other card types.

Reference	configure qos hs-pool-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

wred-queue-control

Synopsis	Enter the wred-queue-control context
Context	configure card number fp number egress wred-queue-control
Tree	wred-queue-control
Description	Commands in this context configure the aggregate Weighted Random Early Detection (WRED) queue options for all WRED queues on an egress forwarding plane.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the WRED queue control function
Context	configure card number fp number egress wred-queue-control admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

buffer-allocation *decimal-number*

Synopsis	Buffer allocation for WRED queue buffer pools
Context	configure card number fp number egress wred-queue-control buffer-allocation <i>decimal-number</i>
Tree	buffer-allocation
Description	This command defines the percentage of buffers to set aside for WRED queue buffer pools.

Range	0.01 to 99.99
Default	25.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reserved-cbs *decimal-number*

Synopsis	Buffers for queues operating within CBS thresholds
Context	configure card <i>number</i> fp <i>number</i> egress wred-queue-control reserved-cbs <i>decimal-number</i>
Tree	reserved-cbs
Description	<p>This command specifies the percentage of buffers within the WRED mega-pool to set aside for WRED queues operating within the configured CBS thresholds. The forwarding plane protects against WRED queue buffer starvation by setting aside a portion of the buffers within the WRED mega-pool.</p> <p>This threshold defines when a WRED queue requests buffers from the reserved portion of the WRED mega-pool and when it starts requesting buffers from the shared portion of the mega-pool. With proper oversubscription provisioning, a seldom active queue is not denied a buffer from the mega-pool when the shared portion of the mega-pool is congested.</p>
Range	0.01 to 99.99
Default	25.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

slope-policy *reference*

Synopsis	Slope policy for the forwarding plane
Context	configure card <i>number</i> fp <i>number</i> egress wred-queue-control slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fp-resource-policy *reference*



WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Resource policy to manage resources on the FP
Context	configure <i>card number fp number fp-resource-policy reference</i>
Tree	fp-resource-policy
Description	<p>This command configures an FP resource policy used to manage resources on a forwarding plane that is FP4-based and later.</p> <p>The system creates a default policy that applies to all FP4 and later FPs. If an FP resource policy is removed from an FP, the system automatically applies the default policy to that FP. The system prevents the modification or deletion of the default policy, and the deletion of any user-created policy that is applied to an FP.</p>
Reference	configure qos fp-resource-policy string
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

hi-bw-mcast-src

Synopsis	Enable the hi-bw-mcast-src context
Context	configure <i>card number fp number hi-bw-mcast-src</i>
Tree	hi-bw-mcast-src
Description	<p>Commands in this context configure the attributes to designate the FP as a high-bandwidth IP multicast source, expecting the ingress traffic to include high-bandwidth IP multicast traffic.</p> <p>When configured, the system attempts to allocate a dedicated multicast switch fabric plane (MSFP) to the forwarding plane. When a group is specified, all FPs in the group share the same MSFP.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

alarm *boolean*

Synopsis	Raise an alarm when multiple traffic taps share a plane
Context	configure <i>card number fp number hi-bw-mcast-src alarm boolean</i>

Tree	alarm
Description	<p>When configured to true, the router generates an event if the MDA must share an MSFP with another MDA in a different group. MDAs within the same group that share an MSFP do not generate an event. Additionally, if a failure occurs during normal operation or resources are removed, the system generates an event if it cannot maintain separation of MSFPs for the MDAs.</p> <p>When configured to false, the router does not generate events.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

default-paths-only *boolean*

Synopsis	Allocate the default paths to dedicated MSFPs
Context	configure card number fp number hi-bw-mcast-src default-paths-only <i>boolean</i>
Tree	default-paths-only
Description	<p>When configured to true, the system only attempts to allocate the two default paths (one high priority and one low priority) to dedicated MSFPs.</p> <p>When configured to false, the default path allocation is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

group *number*

Synopsis	Logical MSFP group for the MDA
Context	configure card number fp number hi-bw-mcast-src group <i>number</i>
Tree	group
Description	<p>This command specifies the logical MSFP group for the MDA.</p> <p>If a group is specified, all FPs in the group share the same MSFP.</p>
Range	0 to 32
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

ingress

Synopsis	Enter the ingress context
Context	configure card number fp number ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the access context
Context	configure card number fp number ingress access
Tree	access
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-group [[queue-group-name](#)] *reference* [instance-id](#) *number*

Synopsis	Enter the queue-group list instance
Context	configure card number fp number ingress access queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Description	Commands in this context create a named queue group template on the ingress forwarding plane of an IOM or IMM.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[[queue-group-name](#)] *reference*

Synopsis	Queue group name
Context	configure card number fp number ingress access queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

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

instance-id *number*

Synopsis Instance ID

Context **configure** *card number fp number ingress access queue-group reference instance-id number*

Tree [queue-group](#)

Range 1 to 65535

Notes This element is part of a list key.

Introduced 16.0.R1

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

accounting-policy *reference*

Synopsis Accounting policy for the FP ingress queue group

Context **configure** *card number fp number ingress access queue-group reference instance-id number accounting-policy reference*

Tree [accounting-policy](#)

Description This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.

Reference **configure** [log accounting-policy number](#)

Introduced 16.0.R1

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

collect-stats *boolean*

Synopsis Collect statistics on FP ingress queue group

Context **configure** *card number fp number ingress access queue-group reference instance-id number collect-stats boolean*

Tree [collect-stats](#)

Description When configured to **true**, the system collects accounting and statistical data for the queue group on the FP.

When configured to **false**, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file.

If this command is set to **true** (after it had previously been set to **false**), the counters written to the billing file include the traffic collected when the command was set to **false**.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure <i>card number fp number ingress access queue-group reference instance-id number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy</i>
Tree	<i>policer-control-policy</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides</i>
Tree	<i>overrides</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number | keyword*)

Synopsis	Maximum rate override
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Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides max-rate (number keyword)</i>
Tree	max-rate
Description	<p>This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer.</p> <p>For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state.</p> <p>Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.</p> <p>If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds</i>
Tree	priority-mbs-thresholds
Description	<p>Commands in this context configure the derivative for the shared portion and fair portion for each priority level.</p> <p>The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.</p>
Introduced	16.0.R1

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

min-threshold-separation (*number* | *keyword*)

Synopsis Minimum separation between any two active thresholds

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds min-threshold-separation (number | keyword)*

Tree [min-threshold-separation](#)

Description This command configures the minimum separation between any two active thresholds in the parent policer.

Range 0 to 16777216

Units bytes

Options auto

Introduced 16.0.R1

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

priority [*level*] *number*

Synopsis Enter the **priority** list instance

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number*

Tree [priority](#)

Introduced 16.0.R1

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

[level] *number*

Synopsis Priority level, higher number is stricter

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number*

Tree [priority](#)

Range 1 to 8

Notes This element is part of a list key.

Introduced 16.0.R1

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

mbs-contribution (*number* | *keyword*)

Synopsis	MBS contribution size override
Context	configure <i>card</i> <i>number</i> <i>fp</i> <i>number</i> <i>ingress</i> <i>access</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>policer-control-policy</i> <i>overrides</i> <i>priority-mbs-thresholds</i> <i>priority</i> <i>number</i> <i>mbs-contribution</i> (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure <i>card</i> <i>number</i> <i>fp</i> <i>number</i> <i>ingress</i> <i>access</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>policer-control-policy</i> <i>policy-name</i> <i>reference</i>
Tree	policy-name
Reference	configure qos <i>policer-control-policy</i> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-overrides

Synopsis	Enter the policer-overrides context
Context	configure <i>card</i> <i>number</i> <i>fp</i> <i>number</i> <i>ingress</i> <i>access</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>policer-overrides</i>
Tree	policer-overrides
Description	Commands in this context configure specific overrides to one or more policers created on the SAP through SAP ingress QoS policies.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer [**policer-id**] *reference*

Synopsis	Enter the policer list instance
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference</i>
Tree	policer
Description	<p>Commands in this context create, modify, or delete a policer. Policers are created and used in a similar manner to queues. Unlike queues that have dedicated counters, policers allow various stat-mode settings that define the counters to be associated with the policer. Packet byte offset provides a policer with the ability to modify the size of each packet based on a defined number of bytes. All policers must be created within the QoS policies.</p> <p>After a policer is created, it cannot be deleted from the QoS policy unless all forwarding classes mapped to the policer are first moved to other policers or queues.</p> <p>The system allows a policer to be created on a SAP QoS policy regardless of the ability to support policers on objects where the policy is currently applied. The system only scans the current objects for policer support and sufficient resources to create the policer when a forwarding class is first mapped to the policer ID. If the policer cannot be created because one or more instances of the policy do not support policing or have insufficient resources to create the policer, the forwarding class mapping fails.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] *reference*

Synopsis	Policer ID
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference</i>
Tree	policer
Reference	configure <i>qos queue-group-templates ingress queue-group string policer number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis	CBS tolerance allowed by the policer
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference cbs (number keyword)</i>

Tree	cbs
Description	<p>This command configures the CIR leaky bucket exceed threshold of the policer.</p> <p>If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.</p>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	Maximum burst tolerance allowed by the policer
Context	configure card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Description	<p>This command configures the PIR leaky bucket violate threshold of the policer.</p> <p>Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold.</p> <p>If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate.</p> <p>The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.</p>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size adjustment
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Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference packet-byte-offset number</i>
Tree	packet-byte-offset
Description	<p>This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed.</p> <p>Use this command to add downstream frame encapsulation or remove portions of packet headers.</p> <p>When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.</p>
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate</i>
Tree	rate
Description	<p>Commands in this context configure the metering and optional profiling rates of the policer.</p> <p>The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	CIR for the policer
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate cir (number keyword)</i>
Tree	cir
Description	<p>This command overrides the default CIR rate of the policer.</p> <p>When the policer is first created, the profiling rate defaults to 0 kb/s.</p>

When **max** is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.

Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	PIR for the policer
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate pir</i> (<i>number</i> <i>keyword</i>)
Tree	pir
Description	This command configures the metering rate of the policer for the PIR leaky bucket. When the policer is first created, the metering rate defaults to max. When max is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference stat-mode keyword</i>
Tree	stat-mode
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.

Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

dist-cpu-protection

Synopsis	Enter the dist-cpu-protection context
Context	configure <i>card number</i> <i>fp number</i> <i>ingress</i> dist-cpu-protection
Tree	dist-cpu-protection
Description	Commands in this context configure the distributed CPU protection forwarding plane settings.
Introduced	21.2.R1
Platforms	All

dynamic-enforcement-policer-pool *number*

Synopsis	Number of policers reserved as enforcement policers use
Context	configure <i>card number</i> <i>fp number</i> <i>ingress</i> dist-cpu-protection dynamic-enforcement-policer-pool <i>number</i>
Tree	dynamic-enforcement-policer-pool
Description	<p>This command reserves a set of policers for use as dynamic enforcement policers for the Distributed CPU Protection (DCP) feature. Policers are allocated from this pool and instantiated as per-object per-protocol dynamic enforcement policers after a local monitor is triggered for an object, such as a SAP or network interface.</p> <p>A change to this configured value automatically clears the high water mark, timestamp, and failed allocation count.</p> <p>If the command is configured to a value below the currently used or allocated number, all dynamic policers are returned to the free pool (and traffic returns to the local monitors).</p>
Range	1000 to 32000
Introduced	21.2.R1
Platforms	All

mcast-path-management

Synopsis	Enter the mcast-path-management context
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Context	configure card number fp number ingress mcast-path-management
Tree	mcast-path-management
Description	Commands in this context configure the IOM ingress multicast path management forwarding plane settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of multicast path management
Context	configure card number fp number ingress mcast-path-management admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bandwidth-policy *reference*

Synopsis	Bandwidth policy for ingress multicast path management
Context	configure card number fp number ingress mcast-path-management bandwidth-policy <i>reference</i>
Tree	bandwidth-policy
Description	This command specifies the bandwidth policy associated with the forwarding plane. The bandwidth policy defines the dynamic rate table and the multicast paths bandwidth and queuing parameters. If a bandwidth policy is not explicitly associated with a forwarding plane, the default bandwidth policy is used with ingress multicast path management.
Reference	configure multicast-management bandwidth-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

network

Synopsis	Enter the network context
Context	configure card <i>number</i> fp <i>number</i> ingress network
Tree	network
Description	Commands in this context configure the IOM ingress network forwarding plane settings.
Introduced	16.0.R1
Platforms	All

pool [[name](#)] *string*

Synopsis	Enter the pool list instance
Context	configure card <i>number</i> fp <i>number</i> ingress network pool <i>string</i>
Tree	pool
Description	Commands in this context configure the list of forwarding plane ingress network pool settings.
Introduced	19.5.R1
Platforms	All

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

Synopsis	Network ingress pool name for the FP
Context	configure card <i>number</i> fp <i>number</i> ingress network pool <i>string</i>
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

amber-alarm-threshold *number*

Synopsis	Amber alarm threshold allowed on oversubscription
Context	configure card <i>number</i> fp <i>number</i> ingress network pool <i>string</i> amber-alarm-threshold <i>number</i>
Tree	amber-alarm-threshold
Description	This command configures the threshold for the amber alarm on oversubscription.

If both amber and red alarm thresholds are configured, the amber alarm threshold must be equal to or less than the red alarm threshold.

Range	1 to 1000
Units	percent
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

red-alarm-threshold *number*

Synopsis	Red alarm threshold allowed on oversubscription
Context	configure <i>card number fp number ingress network pool string red-alarm-threshold number</i>
Tree	red-alarm-threshold
Description	This command configures the threshold for the red alarm on oversubscription. If both amber and red alarm thresholds are configured, the red alarm threshold must be equal to or exceed the amber alarm threshold.
Range	1 to 1000
Units	percent
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the resv-cbs context
Context	configure <i>card number fp number ingress network pool string resv-cbs</i>
Tree	resv-cbs
Description	Commands in this context specify the pool buffer settings. The commands do not set aside buffers within the buffer pool for CBS reservation. The CBS value per queue only determines the point at which enqueueing packets are subject to a RED slope. CBS oversubscription can result in a queue operating within its CBS configuration and still being unable to enqueue a packet due to unavailable buffers.
Introduced	19.5.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the amber-alarm-action context
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Context	configure card number fp number ingress network pool string resv-cbs amber-alarm-action
Tree	amber-alarm-action
Description	<p>Commands in this context specify settings for the reserved Committed Burst Size (CBS) and step change when the amber alert threshold is exceeded.</p> <p>The reserved CBS defines the amount of buffer space within the pool that is not considered shared.</p>
Introduced	19.5.R1
Platforms	All

max number

Synopsis	Maximum reserved CBS size of the pool
Context	configure card number fp number ingress network pool string resv-cbs amber-alarm-action max number
Tree	max
Description	<p>This command configures the maximum reserved CBS size of the pool.</p> <p>To enable adaptive CBS sizing, this command and the step command must be configured.</p> <p>The value for this command must not be more than the configure card fp ingress network pool resv-cbs cbs command.</p> <p>When the configure card fp ingress network pool resv-cbs cbs command is set to a value of zero (0), adaptive CBS sizing is disabled.</p>
Range	1 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

step number

Synopsis	Step-size percentage for reserved CBS size of the pool
Context	configure card number fp number ingress network pool string resv-cbs amber-alarm-action step number
Tree	step
Description	<p>This command configures the step-size percentage for the reserved CBS size of the pool.</p> <p>To enable adaptive CBS sizing, this command and the max command must be configured.</p>

When the **configure card fp ingress network pool resv-cbs cbs** command is set to a value of zero (0), adaptive CBS sizing is disabled.

Range	1 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

cbs number

Synopsis	Pool size reserved for CBS
Context	configure card number fp number ingress network pool string resv-cbs cbs number
Tree	cbs
Description	This command configures the percentage of pool size reserved for CBS. For network, the default value is computed as the sum of the CBS request by the entities using the pool. For access, the default value is 30%.
Range	0 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

slope-policy reference

Synopsis	Slope policy
Context	configure card number fp number ingress network pool string slope-policy reference
Tree	slope-policy
Description	This command specifies the slope policy that defines the high and low priority RED slope parameters and the time average factor.
Reference	configure qos slope-policy string
Introduced	19.5.R1
Platforms	All

queue-group [queue-group-name] reference instance-id number

Synopsis	Enter the queue-group list instance
Context	configure card number fp number ingress network queue-group reference instance-id number

Tree	queue-group
Description	Commands in this context configure IOM ingress network forwarding plane queue-group settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[queue-group-name] reference

Synopsis	Queue group name
Context	configure card number fp number ingress network queue-group reference instance-id number
Tree	queue-group
Reference	configure qos queue-group-templates ingress queue-group string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

instance-id number

Synopsis	Instance ID
Context	configure card number fp number ingress network queue-group reference instance-id number
Tree	queue-group
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

accounting-policy reference

Synopsis	Accounting policy for the FP ingress queue group
Context	configure card number fp number ingress network queue-group reference instance-id number accounting-policy reference
Tree	accounting-policy

Description	This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

collect-stats *boolean*

Synopsis	Collect statistics on FP ingress queue group
Context	configure card <i>number</i> fp <i>number</i> ingress network queue-group <i>reference</i> instance-id <i>number</i> collect-stats <i>boolean</i>
Tree	collect-stats
Description	<p>When configured to true, the system collects accounting and statistical data for the queue group on the FP.</p> <p>When configured to false, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file.</p> <p>If this command is set to true (after it had previously been set to false), the counters written to the billing file include the traffic collected when the command was set to false.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure card <i>number</i> fp <i>number</i> ingress network queue-group <i>reference</i> instance-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-control-policy

Synopsis	Enter the policer-control-policy context
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Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy</i>
Tree	policer-control-policy
Description	Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides</i>
Tree	overrides
Description	Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy override settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum rate override
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides max-rate (number keyword)</i>
Tree	max-rate
Description	<p>This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer.</p> <p>For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state.</p> <p>Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.</p>

If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds
Tree	priority-mbs-thresholds
Description	Commands in this context configure settings to derive the shared portion and fair portion for each priority level. The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-threshold-separation (*number* | *keyword*)

Synopsis	Minimum separation between any two active thresholds
Context	configure card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds min-threshold-separation (<i>number</i> <i>keyword</i>)
Tree	min-threshold-separation
Description	This command configures the minimum separation between any two active thresholds in the parent policer.
Range	0 to 16777216
Units	bytes
Options	auto

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [*level*] *number*

Synopsis	Enter the priority list instance
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number</i>
Tree	priority
Description	Commands in this context configure the list of priority MBS threshold priority settings for IOM ingress network forwarding plane queue-group policer control policy overrides.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[level] *number*

Synopsis	Priority level, higher number is stricter
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	MBS contribution size override
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number mbs-contribution (number keyword)</i>
Tree	mbs-contribution
Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes

Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy policy-name reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-overrides

Synopsis	Enter the policer-overrides context
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides</i>
Tree	policer-overrides
Description	Commands in this context configure the policer overrides for the IOM ingress network forwarding plane queue-groups.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference</i>
Tree	policer
Description	Commands in this context configure the list of policer override parameters for IOM ingress network forwarding plane queue-groups.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer ID
Context	configure card number fp number ingress network queue-group <i>reference</i> instance-id number policer-overrides policer <i>reference</i>
Tree	policer
Reference	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis	CBS tolerance allowed by the policer
Context	configure card number fp number ingress network queue-group <i>reference</i> instance-id number policer-overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Description	This command configures the CIR leaky bucket exceed threshold of the policer. If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	Maximum burst tolerance allowed by the policer
Context	configure card number fp number ingress network queue-group <i>reference</i> instance-id number policer-overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Description	This command configures the PIR leaky bucket violate threshold of the policer. Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold.

If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate.

The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.

Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size adjustment
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference packet-byte-offset number</i>
Tree	packet-byte-offset
Description	<p>This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed.</p> <p>Use this command to add downstream frame encapsulation or remove portions of packet headers.</p> <p>When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.</p>
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference rate</i>
Tree	rate
Description	Commands in this context configure the metering and optional profiling rates of the policer.

The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	CIR for the policer
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference rate cir</i> (<i>number</i> <i>keyword</i>)
Tree	cir
Description	This command overrides the default CIR rate of the policer. When the policer is first created, the profiling rate defaults to 0 kb/s. When max is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	PIR for the policer
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference rate pir</i> (<i>number</i> <i>keyword</i>)
Tree	pir
Description	This command configures the metering rate of the policer for the PIR leaky bucket. When the policer is first created, the metering rate defaults to max. When max is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.
Range	1 to 2000000000

Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference stat-mode keyword</i>
Tree	stat-mode
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-policy *reference*

Synopsis	Network queue policy
Context	configure <i>card number fp number ingress network queue-policy reference</i>
Tree	queue-policy
Reference	configure <i>qos network-queue string</i>
Introduced	19.5.R1
Platforms	All

policy-accounting

Synopsis	Enter the policy-accounting context
Context	configure <i>card number fp number ingress policy-accounting</i>
Tree	policy-accounting
Description	Commands in this context configure policy accounting. Use policy accounting to collect statistics about the amount of traffic matching particular routes or to police traffic associated with certain routes as destinations of the traffic.

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

classes *number*

Synopsis	Number of accounting classes for the forwarding plane
Context	configure <i>card number fp number ingress policy-accounting classes number</i>
Tree	classes
Description	This command specifies the maximum number of source and destination classes that can be instantiated for accounting purposes on the interfaces of a specific card or FP. When unconfigured, resources are not reserved for source or destination classes.
Range	1000 to 128000
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

policers *number*

Synopsis	Number of policer resources for policy accounting
Context	configure <i>card number fp number ingress policy-accounting policers number</i>
Tree	policers
Range	1 to 64000
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-buffer-allocation *decimal-number*

Synopsis	Ingress buffer pool allocation for the forwarding plane
Context	configure <i>card number fp number ingress-buffer-allocation decimal-number</i>
Tree	ingress-buffer-allocation
Description	This command configures an ingress buffer allocation for the FP. Ingress buffer allocation applies to user-accessible buffers (total buffers less those reserved for system use). The ingress buffer allocation determines how much of the user-accessible buffers are available for ingress purposes. The remaining buffers are available for egress purposes.
Range	20.00 to 80.00
Default	50.00

Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

init-extract-prio-mode *keyword*

Synopsis	Initial drop priority mode of extracted traffic
Context	configure <i>card number fp number</i> init-extract-prio-mode <i>keyword</i>
Tree	init-extract-prio-mode
Description	<p>This command specifies the scheme to select the initial drop priority of extracted control plane traffic.</p> <p>The initial drop priority of extracted packets can be either low or high priority. The drop priority can be altered subsequently by mechanisms such as CPU protection.</p> <p>High priority traffic receives preferential treatment in control plane congestion situations over low priority traffic.</p>
Default	uniform
Options	uniform, l3-classify
Introduced	16.0.R1
Platforms	All

stable-pool-sizing *boolean*

Synopsis	Enable stable pool sizing for the forwarding plane
Context	configure <i>card number fp number</i> stable-pool-sizing <i>boolean</i>
Tree	stable-pool-sizing
Description	<p>When configured to true, the router provides a stable buffer pool allocation environment for all default port buffer pools on the forwarding plane. This stable environment is provided at the expense of optimal buffer allocation between the various port buffer pools.</p> <p>When configured to false, the router disables stable pool sizing on the forwarding plane. Existing buffer pools are resized according to normal pool sizing behavior.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level keyword**WARNING:**

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

Synopsis	License level of the card
Context	configure card number level keyword
Tree	level
Description	<p>This command configures the license level of the card.</p> <p>New generations of cards include variants controlled by hardware and software licensing. For these cards, the license level must be provisioned in addition to the card type. A card cannot become operational unless the provisioned license level matches the license level of the card installed into the slot. The set of license levels varies by card type.</p> <p>The provisioned level controls aspects related to connector provisioning and the consumption of hardware egress user queues and egress policers. Changes to the provisioned license level may be blocked if configuration exists that would not be permitted with the new target license level.</p> <p>If the license level is not specified, the level is set to the highest license level for that card.</p>
Options	unrestricted, he, er, cr, he1200g+, er1200g+, cr1200g+, he400g, er400g, cr400g, he400g+, er400g+, cr400g+, he800g+, er800g+, cr800g+, he4800g+, er4800g+, cr4800g+, he4800g, er4800g, cr4800g, he2400g+, er2400g+, cr2400g+, he2400g, er2400g, cr2400g, he9600g, er9600g, cr9600g, he14400g, er14400g, cr14400g, he14400g+, er14400g+, cr14400g+, he2800g+, er2800g+, cr2800g+, he6000g+, er6000g+, cr6000g+, he18000g+, er18000g+, cr18000g+, he19200g, er19200g, cr19200g
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

mda [mda-slot] number

Synopsis	Enter the mda list instance
Context	configure card number mda number
Tree	mda
Description	Commands in this context cover attributes for specific MDA and XMA.
Introduced	16.0.R1
Platforms	All

[mda-slot] *number*

Synopsis	MDA or XMA slot
Context	configure card <i>number</i> mda <i>number</i>
Tree	mda
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the access context
Context	configure card <i>number</i> mda <i>number</i> access
Tree	access
Description	Commands in this context configure egress and ingress pool policy parameters. Access egress and ingress pools are only allocated on channelized MDAs.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure card <i>number</i> mda <i>number</i> access egress
Tree	egress
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure card <i>number</i> mda <i>number</i> access ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MDA
Context	configure <i>card number mda number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

clock-mode

Synopsis	Enter the clock-mode context
Context	configure <i>card number mda number clock-mode</i>
Tree	clock-mode
Description	Commands in this context define the clock mode on the MDA. This context is supported only on CES MDAs.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword*

Synopsis	Clock mode
Context	configure <i>card number mda number clock-mode mode keyword</i>
Tree	mode
Options	adaptive, differential
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

timestamp-freq *number*

Synopsis	Differential timestamp frequency
Context	configure <i>card number mda number clock-mode timestamp-freq number</i>
Tree	timestamp-freq
Range	19440 77760 103680

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress-xpl

Synopsis	Enter the egress-xpl context
Context	configure <i>card number mda number</i> egress-xpl
Tree	egress-xpl
Description	Commands in this context specify settings for the fail-on-error feature.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold number

Synopsis	Threshold value for XPL errors
Context	configure <i>card number mda number</i> egress-xpl threshold number
Tree	threshold
Description	This command configures the threshold for XPL errors. If the number of XPL errors exceeds the threshold value defined by the window value command, the MDA is placed in the failed state.
Range	1 to 1000000
Default	1000
Units	xpl errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window number

Synopsis	Time interval to measure XPL error frequency
Context	configure <i>card number mda number</i> egress-xpl window number
Tree	window
Description	This command configures the time interval used to measure the frequency of XPL errors for the fail-on-error feature. If the number of XPL errors exceeds the threshold value in defined by this command, the MDA is placed in the Failed state.
Range	1 to 1440
Default	60

Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event [*type*] *keyword*

Synopsis	Enter the event list instance
Context	configure <i>card number</i> <i>mda number</i> event <i>keyword</i>
Tree	event
Description	Commands in this context allow the user to control the action taken when a specific hardware error event is raised against the target MDA. If no event action has been created for a specific event type, the management plane of the router ignores the hardware errors related to that event type.
Introduced	19.7.R1
Platforms	All

[type] *keyword*

Synopsis	MDA event type being monitored
Context	configure <i>card number</i> <i>mda number</i> event <i>keyword</i>
Tree	event
Description	This command configures the type of event to be acted upon. <ul style="list-style-type: none">• soft-error — Defines the action to take when soft errors are detected on the MDA.• internal-frame-loss — Provides system detected frame loss in the traffic transiting the MDA.• memory-error — Provides the user options to handle MDA memory error events on MDAs. This feature is supported on FP2- and FP3-based Ethernet MDAs and IMMs.• data-link-error — Provides the user options to handle datapath link errors on an MDA.
Options	soft-error , internal-frame-loss , memory-error , datapath-link-error
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

action *keyword*

Synopsis	Action when a specific hardware error event is raised
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Context	configure card number mda number event keyword action keyword
Tree	action
Description	<p>This command defines the action taken when a specific hardware error event is detected on the target MDA.</p> <p>When no event action is specified for an event type, the hardware errors related to the event type are ignored by the management plane of the router.</p> <p>Actions include the following:</p> <ul style="list-style-type: none">• log-only — Pass the log event to log management. No other action is taken.• reset-mda — Reset the MDA.• fail-mda — Set the operational state of the MDA to Failed. This Failed state persists until the clear mda command is issued (reset) or the MDA is removed and reinserted (re-seated).
Options	none, log-only, reset, fail
Introduced	19.7.R1
Platforms	All

fail-on-error *boolean*

Synopsis	Set operational state to Failed if an error is detected
Context	configure card number mda number fail-on-error boolean
Tree	fail-on-error
Description	<p>When configured to true, the fail-on-error feature is enabled on the MDA. When a defined rate of egress or ingress XPL errors occur on an MDA within a specified time interval, the MDA is placed in the Failed state. This can force an APS switchover or traffic to be rerouted.</p> <p>The purpose of this feature is to avoid situations where traffic is forced to use a physical link that suffers from errors but is still technically operational. The feature uses values configured in the configure card mda egress-xpl and configure card mda ingress-xpl contexts.</p> <p>See "Fail-on-error overview" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Troubleshooting Guide</i> for more information.</p>
Default	false
Introduced	16.0.R1
Platforms	All

ingress-xpl

Synopsis	Enter the ingress-xpl context
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Context	configure <i>card number mda number ingress-xpl</i>
Tree	<i>ingress-xpl</i>
Description	Commands in this context specify settings for ingress XPL error occurrences.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	Threshold value for XPL errors
Context	configure <i>card number mda number ingress-xpl threshold number</i>
Tree	<i>threshold</i>
Description	This command configures the threshold for XPL errors. If the number of XPL errors exceeds the threshold value defined by the window <i>value</i> command, the MDA is placed in the failed state.
Range	1 to 1000000
Default	1000
Units	xpl errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window *number*

Synopsis	Time interval to measure XPL error frequency
Context	configure <i>card number mda number ingress-xpl window number</i>
Tree	<i>window</i>
Description	This command configures the time interval used to measure the frequency of XPL errors for the fail-on-error feature. If the number of XPL errors exceeds the threshold value in defined by this command, the MDA is placed in the Failed state.
Range	1 to 1440
Default	60
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level keyword



WARNING:

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

Synopsis	MDA card level
Context	configure card number mda number level keyword
Tree	level
Options	unrestricted, he2400g, he1600g, he1200g, er2400g, er1600g, er1200g, cr2400g, cr1600g, cr1200g, he2400g+, er2400g+, cr2400g+, he3600g, er3600g, cr3600g, he3600gdd, er3600gdd, cr3600gdd, he4800g, er4800g, cr4800g, he4800g+, er4800g+, cr4800g+, he600g, er600g, cr600g, he1200g+, er1200g+, cr1200g+, he2400g+4t, er2400g+4t, cr2400g+4t, he9600g, er9600g, cr9600g, he9600g+, er9600g+, cr9600g+, he14400g, er14400g, cr14400g, he14400g+, er14400g+, cr14400g+, he12000g+, er12000g+, cr12000g+, he18000g+, er18000g+, cr18000g+
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mda-type keyword



WARNING:

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

Synopsis	MDA type for the slot
Context	configure card number mda number mda-type keyword
Tree	mda-type
Description	<p>This command provisions a specific MDA type to the device configuration for the slot. The MDA can be pre-provisioned and an MDA must be provisioned before connectors or ports can be configured.</p> <p>A maximum of two MDAs can be provisioned on an IOM or XCM. XMAs are provisioned using MDA commands.</p> <p>A medium severity alarm is generated if an MDA is inserted that does not match the MDA type configured for the slot. This alarm is cleared when the correct MDA is inserted or the configuration is modified. A high severity alarm is raised when an administratively enabled MDA is removed from the chassis. This alarm is cleared if either the correct MDA type is inserted or the configuration is modified. A low severity alarm is issued if an MDA is removed that is administratively disabled.</p> <p>An MDA can only be provisioned in a slot if the MDA type is allowed in the MDA slot. An error message is generated when an MDA is provisioned in a slot where it is not allowed</p> <p>Some MDA hardware can support two different firmware loads. One load includes the baseEthernet functionality, including 10G WAN mode, but does not include 1588 port-</p>

based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two MDA types that are the same, except for a “-ptp” suffix to indicate the second loadset. A hard reset of the MDA occurs when switching between the two provisioned types.

An alarm is raised if partial or complete MDA failure is detected. The alarm is cleared when the error condition ceases.

New generations of XMAs include variants controlled through hardware and software licensing. For these XMA, the license level must be provisioned in addition to the MDA type. An XMA cannot become operational unless the provisioned license level matches the license level of the XMA installed into the slot.

The set of license levels varies by MDA type. The provisioned level controls aspects related to connector provisioning and the consumption of hardware egress queues and egress policers. Changes to the provisioned license level may be blocked if configuration that would not be permitted with the new target license level exists. If the license level is not specified, the level is set to the highest license level for that XMA.

Options	x12-400g-qsfpdd, x6-200g-cfp2-dco, cx20-10g-sfp, cx2-100g-cfp, p10-10g-sfp, p1-100g-cfp, p3-40g-qsfp, p6-10g-sfp, x40-10g-sfp, m40-10g-sfp, x4-100g-cxp, cx6-40g-qsfp, m4-100g-cxp, p20-1gb-sfp, s36-100gb-qsfp28-3.6t, p-isa2-ms, p-isa2-ms-e, isa2-aa, isa2-tunnel, isa2-bb, x4-100g-cfp2, cx72-1g-csfp, maxp1-100gb-cfp, ma4-10gb-sfp+, maxp10-10gb-sfp+, me10-10gb-sfp+, ma2-10gb-sfp+12-1gb-sfp, maxp6-10gb-sfp+1-40gb-qsfp+, ma44-1gb-csfp, ma20-1gb-tx, m20-10g-sfp+, me1-100gb-cfp2, m4-100g-cfp4, p1-100g-tun-b, maxp1-100gb-cfp2, maxp1-100gb-cfp4, isa-ms-v, isa-aa-v, isa-tunnel-v, isa-bb-v, m20-v, me-isa2-ms, me-isa2-ms-e, me40-1gb-csfp, m4-1g-tx+20-1g-sfp+6-10g-sfp+, me2-100gb-cfp4, me6-10gb-sfp+, isa2-video, me2-100gb-qsfp28, i6-10/100eth-tx, x2-100g-tun, i2-sdi, i2-cellular, me12-10/1gb-sfp+, me16-25gb-sfp28+2-100gb-qsfp28, me6-100gb-qsfp28, x6-400g-cfp8, me2-100gb-ms-qsfp28, s18-100gb-qsfp28, x40-10g-sfp-ptp, m40-10g-sfp-ptp, m36-100g-qsfp28, m48-sfp+2-qsfp28, m10-10g-sfp+, m20-1g-csfp, m6-10g-sfp++1-100g-qsfp28, me3-200gb-cfp2-dco, x24-100g-qsfp28, me12-100gb-qsfp28, i1-wlan, s36-400gb-qsfpdd, m24-sfp++8-sfp28+2-qsfp28, s36-100gb-qsfp28, a32-chds1v2, m48-sfp++6-qsfp28, maxp10-10/1gb-msec-sfp+, m4-10g-sfp++1-100g-cfp2, i3-10/100eth-tx, me3-400gb-qsfpdd, m18-25g-sfp28, m14-10g-sfp++4-1g-tx, m6-10g-sfp++4-25g-sfp28, me6-400gb-qsfpdd, me8-10/25gb-sfp28, m10-1g-sfp+2-10g-sfp+, m6-qsfpdd+48-sfp56, m32-qsfp28+4-qsfpdd, m36-qsfpdd, m1-400g-qsfpdd+1-100g-qsfp28, m5-100g-qsfp28, m48-800g-qsfpdd-1x, m24-800g-qsfpdd-1, ms36-800g-qsfpdd, x2-s36-800g-qsfpdd-18.0t, m48-400g-qsfpdd-1, m80-200g-sfpdd+12-800g-qsfpdd-1x, m40-200g-sfpdd+6-800g-qsfpdd-1, m80-200g-sfpdd+12-400g-qsfpdd-1, m2-cfp2, x2-s36-800g-qsfpdd-12.0t, me16-25gb-sfp28+2-100gb-qsfp-b, m10-50g-sfp56
Introduced	16.0.R1
Platforms	All

network

Synopsis Enter the **network** context

Context	configure <i>card number mda number network</i>
Tree	network
Description	Commands in this context configure egress and ingress pool policy parameters for the network. Network egress pools are only allocated on channelized MDAs.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure <i>card number mda number network egress</i>
Tree	egress
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure <i>card number mda number network ingress</i>
Tree	ingress
Introduced	16.0.R1
Platforms	All

power-priority-level *number*

Synopsis	Power priority level for the MDA
Context	configure <i>card number mda number power-priority-level number</i>
Tree	power-priority-level
Range	1 to 200
Default	150
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

reset-on-recoverable-error *boolean*

Synopsis	Reset MDA for fatal memory parity error on a Q-chip
Context	configure <i>card number mda number</i> reset-on-recoverable-error <i>boolean</i>
Tree	reset-on-recoverable-error
Description	When configured to true , the MDA resets when a fatal memory parity error is detected on a Q-chip of the MDA, regardless of the setting of the fail-on-error configuration for the MDA. When configured to false , the recovery action is taken instead of resetting the MDA.
Default	false
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

sync-e *keyword*

Synopsis	Synchronous Ethernet capability
Context	configure <i>card number mda number</i> sync-e <i>keyword</i>
Tree	sync-e
Description	This command enables synchronous Ethernet on the MDA. When enabled, any port on the MDA can be used as a source port in the central frequency clock configuration, under the configure system central-frequency-clock context.
Options	true, false
Introduced	16.0.R1
Platforms	All

upgrade [**upgrade-index**] *number*

Synopsis	Enter the upgrade list instance
Context	configure <i>card number mda number</i> upgrade <i>number</i>
Tree	upgrade
Description	Commands in this context configure the license level upgrade for the MDA. You can apply multiple upgrades to an MDA. The first upgrade must use index 1, then index 2, and so on. When removing upgrades, remove the largest index first, followed by the next largest, and so on. Some upgrades require a hard reset of the MDA to take effect. In general, this is required when the full duplex bandwidth changes as a result of the upgrade.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

[upgrade-index] *number*

Synopsis	Order of the upgrade instance
Context	configure <i>card number mda number upgrade number</i>
Tree	<i>upgrade</i>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

path *keyword*



WARNING:

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

Synopsis	Upgrade path of the MDA for the slot
Context	configure <i>card number mda number upgrade number path keyword</i>
Tree	<i>path</i>
Description	This command configures the upgrade path for the MDA in the slot. The path indicates the starting level and the new level that is applied due to the upgrade.
Options	cr1200g-cr1600g, cr1600g-cr2400g, er1200g-er1600g, er1600g-er2400g, he1200g-he1600g, he1600g-he2400g, cr1200g-er1200g, er1200g-he1200g, cr1600g-er1600g, er1600g-he1600g, cr2400g-er2400g, er2400g-he2400g, any2400g-2400g+, cr3600g-cr4800g, er3600g-er4800g, he3600g-he4800g, cr3600g-er3600g, er3600g-he3600g, cr4800g-er4800g, er4800g-he4800g, any3600g-3600gdd, any4800g-4800g+, cr600g-cr1200g, er600g-er1200g, he600g-he1200g, cr600g-er600g, er600g-he600g, any1200g-1200g+, any2400g-2400g+4t, cr-er9600g, er-he9600g, any9600g-9600g+, cr-er14400g, er-he14400g, any14400g-14400g+, he9600g-he12000g+, er9600g-er12000g+, cr9600g-cr12000g+, he14400g-he18000g+, er14400g-er18000g+, cr14400g-cr18000g+, cr-er12000g+, er-he12000g+, cr-er18000g+, er-he18000g+
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

xconnect

Synopsis	Enter the xconnect context
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Context	configure card <i>number</i> mda <i>number</i> xconnect
Tree	xconnect
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

mac [[mac-id](#)] *number*

Synopsis	Enter the mac list instance
Context	configure card <i>number</i> mda <i>number</i> xconnect mac <i>number</i>
Tree	mac
Description	Commands in this context configure the attributes of the MDA loopback (cross-connect) in the MAC chip.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[mac-id] *number*

Synopsis	MAC ID for the MDA cross-connect
Context	configure card <i>number</i> mda <i>number</i> xconnect mac <i>number</i>
Tree	mac
Range	1 to 12
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure card <i>number</i> mda <i>number</i> xconnect mac <i>number</i> description <i>string</i>
Tree	description
String Length	0 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

loopback [**loopback-id**] *number*

Synopsis	Enter the loopback list instance
Context	configure card <i>number</i> mda <i>number</i> xconnect mac <i>number</i> loopback <i>number</i>
Tree	loopback
Description	Commands in this context configure the attributes of the loopback on a MAC chip. The system and services can start using the loopback only when a port is associated with it (for example, port 1/1/m1/1, where m1 represents the MAC ID).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[loopback-id] *number*

Synopsis	Loopback ID for the MDA cross-connect
Context	configure card <i>number</i> mda <i>number</i> xconnect mac <i>number</i> loopback <i>number</i>
Tree	loopback
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

bandwidth *number*



WARNING:

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

Synopsis	Maximum bandwidth for a Layer 2 rate for MAC loopback
Context	configure card <i>number</i> mda <i>number</i> xconnect mac <i>number</i> loopback <i>number</i> bandwidth <i>number</i>
Tree	bandwidth
Range	10 25 40 100 400
Default	100
Units	gigabps
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure <i>card number mda number xconnect mac number loopback number description string</i>
Tree	<i>description</i>
String Length	0 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

power-save *boolean*

Synopsis	Place card in power-save mode when not in use
Context	configure <i>card number power-save boolean</i>
Tree	<i>power-save</i>
Description	<p>When configured to true, this command enables the power-save mode on the card when it is not in use. The power-save mode allows the card to be installed and configured in a platform for future use, while having minimal impact on the overall power consumption.</p> <p>A card placed in the power-save mode is reset, forced into an idle state, and consumes minimal power. In power save mode, the download of a software image to the card is not allowed. The card must be administratively disabled before it is placed in the power-save mode.</p> <p>Cards in the power save mode do not count in the intelligent power management budget and they also do not pass traffic.</p> <p>When configured to false, this command removes the card from power-save mode.</p>
Default	false
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a8, 7750 SR-2e, 7750 SR-3e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

reset-on-recoverable-error *boolean*

Synopsis	Reset card for fatal memory parity error on a Q-chip
Context	configure <i>card number reset-on-recoverable-error boolean</i>
Tree	<i>reset-on-recoverable-error</i>
Description	When configured to true , the card is reset when a fatal memory parity error is detected on a Q-chip of the card, regardless of the setting of the fail-on-error configuration for the card.

When configured to **false**, the recovery action is taken instead of resetting the card.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

upgrade [**upgrade-index**] *number*

Synopsis	Enter the upgrade list instance
Context	configure <i>card number upgrade number</i>
Tree	upgrade
Description	<p>Commands in this context assign a license level upgrade to the card, XIOM, or XMA. There can be multiple upgrades applied to a card, XIOM, or XMA. The first upgrade must use index 1, and then next index 2, and so on. Also, when removing upgrades, the largest index must be removed first, and then the next largest removed, and so on.</p> <p>The path indicates the starting level and the new level that will apply due to the upgrade. For example, "cr1200g-cr1600g" can be applied to an XMA that is currently at the cr1200g level and after application of the upgrade, the operational level of the XMA will be cr1600g.</p> <p>There must be an upgrade license available for the path specified. Available upgrades can be checked using the show licensing entitlements command.</p> <p>Some upgrades require a hard reset of the card or MDA to take effect. In general, this is required when the Full Duplex bandwidth is being changed.</p>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

[upgrade-index] *number*

Synopsis	Order of the upgrade value
Context	configure <i>card number upgrade number</i>
Tree	upgrade
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

path keyword



WARNING:

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

Synopsis	Upgrade path of the I/O module for the slot
Context	configure <i>card number</i> <i>upgrade number</i> <i>path</i> <i>keyword</i>
Tree	<i>path</i>
Description	This command configures the upgrade path associated with the upgrade instance for the target module in the slot. The path indicates the starting level and the new level that applies during the upgrade.
Options	cr-er, er-he, cr400g-cr1200g+, er400g-er1200g+, he400g-he1200g+, cr-er1200g+, er-he1200g+, cr-er400g+, er-he400g+, cr-er800g+, er-he800g+, cr400g-cr800g+, er400g-er800g+, he400g-he800g+, cr800g-cr1200g+, er800g-er1200g+, he800g-he1200g+, cr-er2400g, er-he2400g, any2400g-2400g+, cr-er4800g, er-he4800g, any4800g-4800g+, cr-er9600g, er-he9600g, cr-er14400g, er-he14400g, he9600g-he14400g, er9600g-er14400g, cr9600g-cr14400g, any14400g-14400g+, any2400g-2800g+, any4800g-6000g+, any14400g-18000g+, he2400g-he2800g+, er2400g-er2800g+, cr2400g-cr2800g+, he4800g-he6000g+, er4800g-er6000g+, cr4800g-cr6000g+, he14400g-he19200g, er14400g-er19200g, cr14400g-cr19200g, cr-er2800g+, er-he2800g+, cr-er6000g+, er-he6000g+, cr-er19200g, er-he19200g
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

virtual-scheduler-adjustment

Synopsis	Enter the virtual-scheduler-adjustment context
Context	configure <i>card number</i> <i>virtual-scheduler-adjustment</i>
Tree	<i>virtual-scheduler-adjustment</i>
Description	Commands in this context configure virtual scheduler parameters. This is only applicable to queues and policers associated to a scheduler.
Introduced	16.0.R1
Platforms	All

internal-scheduler-weight-mode keyword

Synopsis	Internal scheduler weight mode
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Context	configure <i>card number</i> virtual-scheduler-adjustment internal-scheduler-weight-mode <i>keyword</i>
Tree	internal-scheduler-weight-mode
Description	This command specifies the internal scheduler (tier 0) weight mode for all ingress queues on a LAG on the card on which it is applied.
Default	auto
Options	auto, force-equal, offered-load, capped-offered-load
Introduced	16.0.R1
Platforms	All

interval

Synopsis	Enter the interval context
Context	configure <i>card number</i> virtual-scheduler-adjustment interval
Tree	interval
Introduced	16.0.R1
Platforms	All

rate-calculation-minimum

Synopsis	Enter the rate-calculation-minimum context
Context	configure <i>card number</i> virtual-scheduler-adjustment interval rate-calculation-minimum
Tree	rate-calculation-minimum
Description	<p>Commands in this context override the default minimum time that must elapse before a policer or queue's offered rate can be recalculated. A minimum time between offered rate calculations is enforced to both prevent inaccurate estimation of the offered rate and excessive input to the virtual scheduler process.</p> <p>To smooth out rapidly fluctuating offered rates, the system averages the measured offered rate with a window of previously measured offered traffic statistics and knowledge of the time between the samples.</p>
Introduced	16.0.R1
Platforms	All

fast-queue *decimal-number*

Synopsis	Minimum rate calculation time for fast queues
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Context	configure <i>card number</i> virtual-scheduler-adjustment interval rate-calculation-minimum fast-queue <i>decimal-number</i>
Tree	fast-queue
Range	0.01 to 1000.00
Default	100.00
Units	percent
Introduced	16.0.R1
Platforms	All

slow-queue *decimal-number*

Synopsis	Minimum rate calculation time for slow queues
Context	configure <i>card number</i> virtual-scheduler-adjustment interval rate-calculation-minimum slow-queue <i>decimal-number</i>
Tree	slow-queue
Range	0.01 to 1000.00
Default	100.00
Units	percent
Introduced	16.0.R1
Platforms	All

scheduler-run-minimum *decimal-number*

Synopsis	Minimum time of the scheduler run
Context	configure <i>card number</i> virtual-scheduler-adjustment interval scheduler-run-minimum <i>decimal-number</i>
Tree	scheduler-run-minimum
Description	<p>This command overrides the default minimum time that must elapse before a virtual scheduler can redistribute bandwidth based on changes to the offered rates of member policers or queues.</p> <p>A minimum run interval is enforced to manage the number of batched queue changes before reacting to the changed rates. Because the periodic function of determining policer or queue offered rates is performed sequentially, the interval allows the policer and queue rates to be determined before the bandwidth distribution to the policers and queues.</p>
Range	0.01 to 1000.00
Default	100.00
Units	percent

Introduced	16.0.R1
Platforms	All

task-scheduling *decimal-number*

Synopsis	Task scheduling interval
Context	configure <i>card number</i> virtual-scheduler-adjustment interval task-scheduling <i>decimal-number</i>
Tree	task-scheduling
Description	<p>This command overrides the system default time interval for scheduling the hierarchical virtual scheduler task.</p> <p>By default, the system wakes the virtual scheduler task every 50 ms which is equivalent to five 10 ms timer ticks.</p>
Range	0.01 to 1000.00
Default	100.00
Units	percent
Introduced	16.0.R1
Platforms	All

slow-queue-threshold-rate *number*

Synopsis	Slow queue threshold rate
Context	configure <i>card number</i> virtual-scheduler-adjustment slow-queue-threshold-rate <i>number</i>
Tree	slow-queue-threshold-rate
Description	<p>This command overrides the system default threshold rate used to place policers and queues in the slow queue category. Slow rate policers and queues use a different minimum rate calculation interval time than fast rate queues.</p> <p>The fast rate threshold is derived by multiplying the adjusted slow rate threshold by a factor of 1.5.</p> <p>Configuring a value of zero (0) forces all policers and queues to be treated as fast rate queues.</p>
Range	0 to 1000000
Default	1000
Units	kilobps
Introduced	16.0.R1
Platforms	All

xiom [*xiom-slot*] *string*

Synopsis	Enter the xiom list instance
Context	configure card number xiom string
Tree	xiom
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[xiom-slot] *string*

Synopsis	XIOM slot ID
Context	configure card number xiom string
Tree	xiom
String Length	2
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the XIOM
Context	configure card number xiom string admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fail-on-error *boolean*

Synopsis	Set operational state of the card to failed on error
Context	configure card number xiom string fail-on-error boolean
Tree	fail-on-error

Description	When configured to true , the operational state of the card is set to failed when at least one of a specific set of card-level errors is detected. The failed state persists until the operator reseats the card or resets it using the clear command.
Default	false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

level keyword



WARNING:

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

Synopsis	License level of the XIOM
Context	configure card number xiom string level keyword
Tree	level
Description	<p>This command provisions the license level of the XIOM, which controls aspects related to connector provisioning and consumption of hardware egress queues and policers.</p> <p>An XIOM only becomes operational if the provisioned license level matches the license level of the card installed into the slot.</p> <p>The set of license levels varies by XIOM type. Changes to the provisioned license level may be blocked if a configuration exists that is not permitted with the new target license level.</p> <p>If the license level is not specified, the level is set to the highest license level for the XIOM.</p>
Options	unrestricted, he800g+, er800g+, cr800g+, he1500g+, er1500g+, cr1500g+, he1600g+, er1600g+, cr1600g+, he2400g+, er2400g+, cr2400g+, he3000g+, er3000g+, cr3000g+
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mda [mda-slot] number

Synopsis	Enter the mda list instance
Context	configure card number xiom string mda number
Tree	mda
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[mda-slot] *number*

Synopsis	MDA slot number
Context	configure <i>card number xiom string mda number</i>
Tree	<i>mda</i>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the MDA
Context	configure <i>card number xiom string mda number admin-state keyword</i>
Tree	<i>admin-state</i>
Default	enable
Options	enable, disable
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mda-type *keyword*



WARNING:

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

Synopsis	MDA-s type provisioned for the XIOM slot
Context	configure <i>card number xiom string mda number mda-type keyword</i>
Tree	<i>mda-type</i>
Description	<p>This command provisions the MDA-s type for the XIOM slot.</p> <p>The MDA-s type can be preprovisioned, which means that the MDA-s does not have to be installed in the chassis.</p> <p>You can preprovision the MDA type before you install the MDA in the chassis. An MDA-s can only be provisioned in a slot that is vacant. No other MDA-s can be provisioned (configured) for that particular slot. An error message or log event is generated if the wrong MDA type is provisioned or inserted.</p>
Options	ms6-200gb-cfp2-dco, ms3-200gb-cfp2-dco, ms16-100gb-sfpdd+4-100gb-qsfp28, ms18-100gb-qsfp28, ms4-400gb-qsfpdd+4-100gb-qsfp28, ms24-10/100gb-sfpdd,

	ms2-400gb-qsfpdd+2-100gb-qsfp28, ms8-100gb-sfpdd+2-100gb-qsfp28, ms16-sdd+4-qsfp28-b, ms8-sdd+2-qsfp28-b
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

power-priority-level *number*

Synopsis	Power priority level for the XIOM MDA-s
Context	configure card <i>number</i> xiom <i>string</i> mda <i>number</i> power-priority-level <i>number</i>
Tree	power-priority-level
Description	This command configures the power-priority level for the XIOM MDA-s. Consider the following suggestions when configuring the power-priority level: <ul style="list-style-type: none"> • The lowest number has the highest priority. • Use the priority numbers from 1 to 100 for modules that are essential for system operation. • Use the priority numbers from 101 to 200 for non-essential modules.
Range	1 to 200
Default	150
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

sync-e *keyword*

Synopsis	Synchronous Ethernet capability
Context	configure card <i>number</i> xiom <i>string</i> mda <i>number</i> sync-e <i>keyword</i>
Tree	sync-e
Options	true, false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

xconnect

Synopsis	Enter the xconnect context
Context	configure card <i>number</i> xiom <i>string</i> mda <i>number</i> xconnect
Tree	xconnect
Introduced	21.5.R1

Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mac [*mac-id*] *number*

Synopsis Enter the **mac** list instance
Context **configure** *card number xiom string mda number xconnect mac number*
Tree **mac**
Introduced 21.5.R1
Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[mac-id] *number*

Synopsis MAC ID for the MDA cross-connect
Context **configure** *card number xiom string mda number xconnect mac number*
Tree **mac**
Range 1 to 12
Notes This element is part of a list key.
Introduced 21.5.R1
Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis Text description
Context **configure** *card number xiom string mda number xconnect mac number description string*
Tree **description**
String Length 0 to 255
Introduced 21.5.R1
Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

loopback [*loopback-id*] *number*

Synopsis Enter the **loopback** list instance
Context **configure** *card number xiom string mda number xconnect mac number loopback number*
Tree **loopback**

Description	Commands in this context configure a MAC loopback on a MAC chip. The system and services only start using the loopback when a port is associated with it. For example, port 1/1/m1/1, where m1 represents the MAC ID.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[loopback-id] *number*

Synopsis	Loopback ID for the MDA cross-connect
Context	configure card <i>number</i> xiom <i>string</i> mda <i>number</i> xconnect mac <i>number</i> loopback <i>number</i>
Tree	loopback
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

bandwidth *number*



WARNING:

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

Synopsis	Maximum bandwidth for a Layer 2 rate for MAC loopback
Context	configure card <i>number</i> xiom <i>string</i> mda <i>number</i> xconnect mac <i>number</i> loopback <i>number</i> bandwidth <i>number</i>
Tree	bandwidth
Range	10 25 40 100 400
Default	100
Units	gigabps
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
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Context	configure <i>card number xiom string mda number xconnect mac number loopback number description string</i>
Tree	<i>description</i>
String Length	0 to 255
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

reset-on-recoverable-error *boolean*

Synopsis	Reset XIOM for fatal memory parity error on a Q-chip
Context	configure <i>card number xiom string reset-on-recoverable-error boolean</i>
Tree	<i>reset-on-recoverable-error</i>
Description	When configured to true , the XIOM is reset when a fatal memory parity error is detected on a Q-chip of the XIOM, regardless of the setting of the fail-on-error configuration for the XIOM. When configured to false , the recovery action is taken instead of resetting the XIOM.
Default	false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

upgrade [*upgrade-index*] *number*

Synopsis	Enter the upgrade list instance
Context	configure <i>card number xiom string upgrade number</i>
Tree	<i>upgrade</i>
Description	Commands in this context assign a license level upgrade to the XIOM. Multiple upgrades can be applied to an XIOM. The first upgrade must use index 1, then index 2, and so on. When removing upgrades, the largest index must be removed first, followed by the next largest, and so on. Some upgrades require a hard reset of the XIOM to take effect. In general, this is required when the Full Duplex bandwidth is changed as a result of the upgrade.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[upgrade-index] *number*

Synopsis	Order of the upgrade value
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Context	configure card number xiom string upgrade number
Tree	upgrade
Range	1 to 6
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

path keyword



WARNING:

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

Synopsis	Upgrade name
Context	configure card number xiom string upgrade number path keyword
Tree	path
Description	This command specifies the upgrade name. An upgrade license must be available for the specified path. Available upgrades can be checked using the show licensing entitlements command.
Options	cr800g-cr1500g+, er800g-er1500g+, he800g-he1500g+, cr1600g-cr2400g+, er1600g-er2400g+, he1600g-he2400g+, cr2400g-cr3000g+, er2400g-er3000g+, he2400g-he3000g+, cr-er800g+, er-he800g+, cr-er1500g+, er-he1500g+, cr-er1600g+, er-he1600g+, cr-er2400g+, er-he2400g+, cr-er3000g+, er-he3000g+
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

xiom-type keyword



WARNING:

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

Synopsis	XIOM type
Context	configure card number xiom string xiom-type keyword
Tree	xiom-type
Description	This command associates the XIOM type with the slot.

The XIOM type can be preprovisioned, which means that the XIOM does not have to be installed in the chassis.

An XIOM must be provisioned before an MDA-s, a connector, or a port can be configured. An XIOM can only be provisioned in a slot that is vacant. After an XIOM is provisioned in the slot, no other XIOM can be provisioned (configured) for the slot.

An XIOM can only be provisioned in a slot if the XIOM type is allowed in the slot. An error message is generated if an attempt is made to provision an XIOM type that is not allowed.

If an XIOM is inserted that does not match the configured XIOM type for the slot, then a log event and a facility alarm are raised. The alarm is cleared when the correct XIOM type is installed or the configuration is modified.

A log event and a facility alarm are raised if an administratively enabled XIOM is removed from the chassis. The alarm is cleared when the correct XIOM type is installed or the configuration is modified. A log event is issued when an XIOM is removed that is administratively disabled.

XIOMs are controlled by hardware and software licensing. In addition to the XIOM type, the license level must be provisioned using the **level** command.

Options	iom-s-3.0t, iom-s-1.5t
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

3.9 cflowd commands

```

configure
- cflowd
- active-flow-timeout number
- admin-state keyword
- analyze-gre-payload boolean
- analyze-l2tp-traffic boolean
- analyze-v4overv6-traffic boolean
- apply-groups reference
- apply-groups-exclude reference
- cache-size number
- collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
- admin-state keyword
- aggregation
- as-matrix boolean
- destination-prefix boolean
- protocol-port boolean
- raw boolean
- source-destination-prefix boolean
- source-prefix boolean
- apply-groups reference
- apply-groups-exclude reference
- autonomous-system-type keyword
- description string
- export-filter
- family
- ipv4 boolean
- ipv6 boolean
- l2-ip boolean
- mcast-ipv4 boolean
- mcast-ipv6 boolean
- mpls boolean
- interface-list
- router reference interface-name reference
- service
- ies-group-interface service-name reference subscriber-interface-
name reference group-interface-name reference
- ies-interface service-name reference interface-name reference
- vprn-group-interface service-name reference subscriber-interface-
name reference group-interface-name reference
- vprn-interface service-name reference interface-name reference
- vprn-network-interface service-name reference network-interface-
name reference
- router string
- router-instance string
- template-set keyword
- version number
- enhanced-distribution boolean
- export-mode keyword
- inactive-flow-timeout number
- inband-collector-export-only boolean
- overflow number
- sample-profile number
- apply-groups reference
- apply-groups-exclude reference
- metering-process keyword
- sample-rate number
- template-retransmit number
- use-vrtr-if-index boolean

```

3.9.1 cflowd command descriptions

cflowd

Synopsis	Enable the cflowd context
Context	configure cflowd
Tree	cflowd
Introduced	16.0.R1
Platforms	All

active-flow-timeout *number*

Synopsis	Maximum time before an active flow is exported
Context	configure cflowd active-flow-timeout <i>number</i>
Tree	active-flow-timeout
Description	<p>This command configures the maximum time before an active flow is aged out of the active cache. If an individual flow is active for the configured time, the flow is exported and a new flow is created on the next packet sampled for the flow.</p> <p>This value is set for a flow when the flow is initially created in the active cache table and does not change dynamically.</p>
Range	30 to 36000
Default	1800
Units	seconds
Introduced	20.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of cflowd
Context	configure cflowd admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

analyze-gre-payload *boolean*

Synopsis	Perform cflowd analysis on the inner IP packet
Context	configure cflowd analyze-gre-payload <i>boolean</i>
Tree	analyze-gre-payload
Default	false
Introduced	16.0.R1
Platforms	All

analyze-l2tp-traffic *boolean*

Synopsis	Analyze the inner IP header of an L2TP packet
Context	configure cflowd analyze-l2tp-traffic <i>boolean</i>
Tree	analyze-l2tp-traffic
Description	<p>When configured to true, cflowd looks for and analyzes the inner IP header of an L2TPv2 frame.</p> <p>L2TPv2 traffic is identified by either the source or destination UDP port numbering that is set to 1701.</p> <p>When configured to false, the analysis is not performed.</p>
Default	false
Introduced	19.10.R1
Platforms	All

analyze-v4overv6-traffic *boolean*

Synopsis	Analyze the inner IPv4 packet within an IPv6 packet
Context	configure cflowd analyze-v4overv6-traffic <i>boolean</i>
Tree	analyze-v4overv6-traffic
Description	<p>When configured to true, cflowd looks for and analyzes the inner IPv4 header of IPv4overIPv6 frames that include MAP-E as well as DSLite and SAM traffic.</p> <p>When configured to false, the analysis is not performed.</p>
Default	false
Introduced	19.10.R1
Platforms	All

cache-size *number*

Synopsis	Maximum number of active flows in the flow cache table
Context	configure cflowd cache-size <i>number</i>
Tree	cache-size
Range	1000 to 2000000
Units	flows
Introduced	16.0.R1
Platforms	All

collector [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **port number**

Synopsis	Enter the collector list instance
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number
Tree	collector
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote cflowd collector host
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number
Tree	collector
Description	This command specifies the IP address of the remote cflowd collector host to receive the exported cflowd data.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

port number

Synopsis	UDP port number of the remote cflowd collector host
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number
Tree	collector

Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the cflowd collector
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

aggregation

Synopsis	Enter the aggregation context
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation
Tree	aggregation
Introduced	16.0.R1
Platforms	All

as-matrix *boolean*

Synopsis	Base aggregation data based on AS information
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation as-matrix <i>boolean</i>
Tree	as-matrix
Default	false
Introduced	16.0.R1
Platforms	All

destination-prefix *boolean*

Synopsis	Aggregate data based on destination prefix information
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation destination-prefix <i>boolean</i>
Tree	destination-prefix
Default	false
Introduced	16.0.R1
Platforms	All

protocol-port *boolean*

Synopsis	Aggregate flows based on the IP protocol and ports
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation protocol-port <i>boolean</i>
Tree	protocol-port
Default	false
Introduced	16.0.R1
Platforms	All

raw *boolean*

Synopsis	Export flow data without aggregation
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation raw <i>boolean</i>
Tree	raw
Default	false
Introduced	16.0.R1
Platforms	All

source-destination-prefix *boolean*

Synopsis	Aggregate data based on prefix information
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation source-destination-prefix <i>boolean</i>
Tree	source-destination-prefix
Default	false

Introduced 16.0.R1
Platforms All

source-prefix *boolean*

Synopsis Aggregate flows based on the source prefix information
Context **configure** **cflowd collector** (*ipv4-address-no-zone | ipv6-address-no-zone*) **port number**
aggregation source-prefix *boolean*
Tree **source-prefix**
Default false
Introduced 16.0.R1
Platforms All

autonomous-system-type *keyword*

Synopsis Basis of the AS information included in flow data
Context **configure** **cflowd collector** (*ipv4-address-no-zone | ipv6-address-no-zone*) **port number**
autonomous-system-type *keyword*
Tree **autonomous-system-type**
Default origin
Options origin, peer
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** **cflowd collector** (*ipv4-address-no-zone | ipv6-address-no-zone*) **port number**
description *string*
Tree **description**
String Length 1 to 80
Introduced 16.0.R1
Platforms All

export-filter

Synopsis	Enter the export-filter context
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter
Tree	export-filter
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enter the family context
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter family
Tree	family
Introduced	16.0.R1
Platforms	All

ipv4 boolean

Synopsis	Filter IPv4 flow data from being sent to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter family ipv4 boolean
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 boolean

Synopsis	Filter IPv6 flow data from being sent to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter family ipv6 boolean
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-ip *boolean*

Synopsis	Filter L2 IP flow data from being sent to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter family l2-ip boolean
Tree	l2-ip
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Filter multicast IPv4 data from going to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter family mcast-ipv4 boolean
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Filter multicast IPv6 data from going to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter family mcast-ipv6 boolean
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mpls *boolean*

Synopsis	Filter MPLS flow data from being sent to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter family mpls boolean
Tree	mpls

Default	false
Introduced	16.0.R1
Platforms	All

interface-list

Synopsis	Enter the interface-list context
Context	configure cflovd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list
Tree	interface-list
Introduced	16.0.R4
Platforms	All

router [**router-name**] *reference interface-name reference*

Synopsis	Add a list entry for router
Context	configure cflovd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list router <i>reference interface-name reference</i>
Tree	router
Introduced	16.0.R4
Platforms	All

[router-name] *reference*

Synopsis	Administrative router name
Context	configure cflovd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list router <i>reference interface-name reference</i>
Tree	router
Reference	configure router <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

interface-name *reference*

Synopsis	Name for the router to the service interface or SAP
----------	---

Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list router reference interface-name reference
Tree	router
Reference	configure router <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

service

Synopsis	Enter the service context
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service
Tree	service
Introduced	16.0.R4
Platforms	All

ies-group-interface [service-name](#) *reference* [subscriber-interface-name](#) *reference* [group-interface-name](#) *reference*

Synopsis	Add a list entry for ies-group-interface
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service ies-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	ies-group-interface
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name *reference*

Synopsis	Administrative service name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service ies-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	ies-group-interface
Reference	configure service ies <i>string</i>
Notes	This element is part of a list key.

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-interface-name *reference*

Synopsis	Subscriber interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service ies-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	ies-group-interface
Reference	configure service ies <i>string</i> subscriber-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service ies-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	ies-group-interface
Reference	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ies-interface **service-name** *reference* **interface-name** *reference*

Synopsis	Add a list entry for ies-interface
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service ies-interface service-name <i>reference</i> interface-name <i>reference</i>
Tree	ies-interface
Introduced	16.0.R4
Platforms	All

service-name *reference*

Synopsis	Administrative service name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service ies-interface service-name <i>reference</i> interface-name <i>reference</i>
Tree	ies-interface
Reference	configure service ies <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

interface-name *reference*

Synopsis	IP interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service ies-interface service-name <i>reference</i> interface-name <i>reference</i>
Tree	ies-interface
Reference	configure service ies <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

vprn-group-interface [service-name](#) *reference* [subscriber-interface-name](#) *reference* [group-interface-name](#) *reference*

Synopsis	Add a list entry for vprn-group-interface
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	vprn-group-interface
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name *reference*

Synopsis	Administrative service name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	vprn-group-interface
Reference	configure service vprn <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-interface-name *reference*

Synopsis	Subscriber interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	vprn-group-interface
Reference	configure service vprn <i>string</i> subscriber-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	vprn-group-interface
Reference	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vprn-interface [service-name reference](#) [interface-name reference](#)

Synopsis	Add a list entry for vprn-interface
Context	configure cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number export-filter interface-list service vprn-interface service-name reference interface-name reference
Tree	vprn-interface
Introduced	16.0.R4
Platforms	All

service-name reference

Synopsis	Administrative service name
Context	configure cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number export-filter interface-list service vprn-interface service-name reference interface-name reference
Tree	vprn-interface
Reference	configure service vprn <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

interface-name reference

Synopsis	IP interface name
Context	configure cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number export-filter interface-list service vprn-interface service-name reference interface-name reference
Tree	vprn-interface
Reference	configure service vprn <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

vprn-network-interface [service-name reference](#) [network-interface-name reference](#)

Synopsis	Add a list entry for vprn-network-interface
----------	--

Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-network-interface service-name reference network-interface-name reference
Tree	vprn-network-interface
Introduced	16.0.R4
Platforms	All

service-name reference

Synopsis	Administrative service name
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-network-interface service-name reference network-interface-name reference
Tree	vprn-network-interface
Reference	configure service vprn <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

network-interface-name reference

Synopsis	Network interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-network-interface service-name reference network-interface-name reference
Tree	vprn-network-interface
Description	This command specifies the network interface name. Interface names must be unique within the group of defined IP interfaces for the configure router interface and configure service ies interface commands. An interface name cannot be in the form of an IP address. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes and must start with a letter.
Reference	configure service vprn <i>string</i> network-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

router [**router-instance**] *string*

Synopsis	Add a list entry for router
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter router <i>string</i>
Tree	router
Introduced	16.0.R1
Platforms	All

[router-instance] *string*

Synopsis	Router instance name
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter router <i>string</i>
Tree	router
Description	This command specifies the router instance name. Only "Base" is supported.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

router-instance *string*

Synopsis	Router or service name
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number router-instance <i>string</i>
Tree	router-instance
Description	This command specifies the routing instance used to route traffic to the associated collector IP address. The "Base" routing instance is the fallback if no route is found. No fallback mechanism is supported for "Base" and "VPRN".
Default	management
Introduced	16.0.R1
Platforms	All

template-set *keyword*

Synopsis	Templates sent to the collector
----------	---------------------------------

Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number template-set keyword
Tree	template-set
Description	This command specifies the set of templates sent to the collector when using cflowd Version 9 or Version 10.
Options	not-applicable, basic, mpls-ip, l2-ip, mpls-transport, compact, fastpath
Introduced	16.0.R1
Platforms	All

version number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Flow data collector version
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number version number
Tree	version
Range	5 8 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

enhanced-distribution boolean

Synopsis	Include ingress port ID in hashing algorithm for cflowd
Context	configure cflowd enhanced-distribution boolean
Tree	enhanced-distribution
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7s, 7750 SR-14s, 7950 XRS

export-mode keyword

Synopsis	Export mode for flow data
Context	configure cflowd export-mode keyword

Tree	export-mode
Default	automatic
Options	automatic, manual
Introduced	16.0.R1
Platforms	All

inactive-flow-timeout *number*

Synopsis	Time without matching packet before flow is inactive
Context	configure cflowd inactive-flow-timeout <i>number</i>
Tree	inactive-flow-timeout
Description	This command configures the time interval that must elapse without a packet matching a flow before the flow is considered inactive. This value is set for a flow when the flow is initially created in the active cache table and does not change dynamically.
Range	10 to 600
Default	15
Units	seconds
Introduced	20.2.R1
Platforms	All

inband-collector-export-only *boolean*

Synopsis	Export the traffic to all collectors only via in-band interfaces
Context	configure cflowd inband-collector-export-only <i>boolean</i>
Tree	inband-collector-export-only
Default	false
Introduced	16.0.R1
Platforms	All

overflow *number*

Synopsis	Percentage of entries to remove from Cflowd cache when the maximum number of entries is exceeded
Context	configure cflowd overflow <i>number</i>
Tree	overflow

Range	1 to 50
Default	1
Units	percent
Introduced	16.0.R1
Platforms	All

sample-profile [\[profile-id\]](#) *number*

Synopsis	Enter the sample-profile list instance
Context	configure cflowd sample-profile <i>number</i>
Tree	sample-profile
Max. Instances	5
Introduced	19.5.R1
Platforms	All

[\[profile-id\]](#) *number*

Synopsis	The unique specifier of this sample-profile
Context	configure cflowd sample-profile <i>number</i>
Tree	sample-profile
Range	1 to 5
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

metering-process *keyword*

Synopsis	Metering process for samples taken
Context	configure cflowd sample-profile <i>number</i> metering-process <i>keyword</i>
Tree	metering-process
Description	This command specifies the type of metering process to use for the samples taken from the associated interfaces.
Default	standard
Options	standard, fp-accelerated

Introduced	21.10.R1
Platforms	7750 SR-7s, 7750 SR-14s, 7950 XRS-20e

sample-rate *number*

Synopsis	Cflowd sampling rate for sample profile ID
Context	configure cflowd sample-profile <i>number</i> sample-rate <i>number</i>
Tree	sample-rate
Description	This command defines the cflowd sampling rate for the sample profile ID. The sample rate indicates that the associated interface samples 1 in N packets for cflowd analysis. You can only associate one rate profile below 1:256 with a specific IOM, IMM, or XMA.
Range	1 to 60000
Default	1000
Introduced	19.5.R1
Platforms	All

template-retransmit *number*

Synopsis	Time to resend template information
Context	configure cflowd template-retransmit <i>number</i>
Tree	template-retransmit
Range	10 to 600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	All

use-vrtr-if-index *boolean*

Synopsis	Export flow data using virtual router interface indexes
Context	configure cflowd use-vrtr-if-index <i>boolean</i>
Tree	use-vrtr-if-index
Default	false
Introduced	16.0.R1

Platforms All

3.10 chassis commands

```
configure
- chassis keyword chassis-number number
- apply-groups reference
- apply-groups-exclude reference
- monitor-filter-door boolean
- peq number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - input-power-mode number
  - peq-type keyword
- power-connection-module number
  - apply-groups reference
  - apply-groups-exclude reference
  - pcm-type keyword
- power-shelf number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - power-module number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - power-module-type keyword
  - power-shelf-type keyword
- power-supply number
  - apply-groups reference
  - apply-groups-exclude reference
  - power-supply-type keyword
```

3.10.1 chassis command descriptions

chassis [**chassis-class**] *keyword chassis-number number*

Synopsis	Enter the chassis list instance
Context	configure chassis <i>keyword chassis-number number</i>
Tree	chassis
Introduced	16.0.R1
Platforms	All

[chassis-class] *keyword*

Synopsis	Functional use of the physical chassis
Context	configure chassis <i>keyword chassis-number number</i>
Tree	chassis
Options	router
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

chassis-number *number*

Synopsis	Unique index to identify this physical chassis
Context	configure chassis <i>keyword chassis-number number</i>
Tree	chassis
Range	1 to 100
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

monitor-filter-door *boolean*

Synopsis	Allow filter door monitoring
Context	configure chassis <i>keyword chassis-number number monitor-filter-door boolean</i>

Tree	monitor-filter-door
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7s, 7750 SR-14s

peq [[peq-slot](#)] *number*

Synopsis	Enter the peq list instance
Context	configure chassis <i>keyword chassis-number number</i> peq number
Tree	peq
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

[peq-slot] *number*

Synopsis	Unique identifier index for a power supply tray in the chassis
Context	configure chassis <i>keyword chassis-number number</i> peq number
Tree	peq
Range	1 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PEQ
Context	configure chassis <i>keyword chassis-number number</i> peq number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

input-power-mode *number*

Synopsis	Input power mode of the PEQ
Context	configure <i>chassis</i> <i>keyword</i> <i>chassis-number</i> <i>number</i> <i>peq</i> <i>number</i> input-power-mode <i>number</i>
Tree	input-power-mode
Range	60 80
Units	amperes
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

peq-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	APEQ type
Context	configure <i>chassis</i> <i>keyword</i> <i>chassis-number</i> <i>number</i> <i>peq</i> <i>number</i> peq-type <i>keyword</i>
Tree	peq-type
Options	apeq-dc-2000, apeq-dc-2200-2800, apeq-ac-3000, apeq-hvdc-3000, apeq-dc-4275, ixr-ac-hvdc-3000, ixr-dc-3000, apeq-ac-4400
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

power-connection-module [*pcm-slot*] *number*

Synopsis	Enter the power-connection-module list instance
Context	configure <i>chassis</i> <i>keyword</i> <i>chassis-number</i> <i>number</i> power-connection-module <i>number</i>
Tree	power-connection-module
Introduced	16.0.R1
Platforms	7950 XRS-20e

[pcm-slot] *number*

Synopsis	Unique identifier index for a power control module in the chassis
Context	configure <i>chassis</i> <i>keyword</i> <i>chassis-number</i> <i>number</i> power-connection-module <i>number</i>

Tree	power-connection-module
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7950 XRS-20e

pcm-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PCM type
Context	configure chassis <i>keyword</i> chassis-number <i>number</i> power-connection-module <i>number</i> pcm-type <i>keyword</i>
Tree	pcm-type
Options	dual, quad
Introduced	16.0.R1
Platforms	7950 XRS-20e

power-shelf [[power-shelf-id](#)] *number*

Synopsis	Enter the power-shelf list instance
Context	configure chassis <i>keyword</i> chassis-number <i>number</i> power-shelf <i>number</i>
Tree	power-shelf
Introduced	16.0.R1
Platforms	7750 SR-s

[power-shelf-id] *number*

Synopsis	Unique identifier index for a power shelf in chassis
Context	configure chassis <i>keyword</i> chassis-number <i>number</i> power-shelf <i>number</i>
Tree	power-shelf
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7750 SR-s

admin-state *keyword*

Synopsis Administrative state of the power shelf
Context **configure chassis** *keyword chassis-number number power-shelf number admin-state keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms 7750 SR-s

description *string*

Synopsis Text description
Context **configure chassis** *keyword chassis-number number power-shelf number description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7750 SR-s

power-module [[power-module-id](#)] *number*

Synopsis Enter the **power-module** list instance
Context **configure chassis** *keyword chassis-number number power-shelf number power-module number*
Tree [power-module](#)
Introduced 16.0.R1
Platforms 7750 SR-s

[power-module-id] *number*

Synopsis Unique identifier for a power module in chassis
Context **configure chassis** *keyword chassis-number number power-shelf number power-module number*

Tree	power-module
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the power module
Context	configure chassis <i>keyword</i> chassis-number <i>number</i> power-shelf <i>number</i> power-module <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR-s

power-module-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Power module type
Context	configure chassis <i>keyword</i> chassis-number <i>number</i> power-shelf <i>number</i> power-module <i>number</i> power-module-type <i>keyword</i>
Tree	power-module-type
Options	ps-b-ac/hv-6000, ps-a-dc-4400, ps-a-dc-6000, ixr-ac-hvdc-3000, ixr-dc-3000
Introduced	16.0.R1
Platforms	7750 SR-s

power-shelf-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Power shelf type
Context	configure chassis <i>keyword chassis-number number power-shelf number power-shelf-type keyword</i>
Tree	power-shelf-type
Options	ps-a10-shelf-dc, ps-b10-shelf-ac/hv, ps-a4-shelf-dc, ps-b3-shelf-ac/hv
Introduced	16.0.R1
Platforms	7750 SR-s

power-supply [[power-supply-id](#)] *number*

Synopsis	Enter the power-supply list instance
Context	configure chassis <i>keyword chassis-number number power-supply number</i>
Tree	power-supply
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[power-supply-id] *number*

Synopsis	Unique identifier index for a power supply tray in the chassis
Context	configure chassis <i>keyword chassis-number number power-supply number</i>
Tree	power-supply
Range	1 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

power-supply-type *keyword*

Synopsis	Power supply type
Context	configure chassis <i>keyword chassis-number number power-supply number power-supply-type keyword</i>
Tree	power-supply-type
Default	auto
Options	none, dc-single, ac-single, ac-multiple, auto, dc-multiple
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12

3.11 connection-profile commands

```
configure
- connection-profile
- apply-groups reference
- apply-groups-exclude reference
- vlan number
- apply-groups reference
- apply-groups-exclude reference
- description string
- qtag-range number
- apply-groups reference
- apply-groups-exclude reference
- end number
```

3.11.1 connection-profile command descriptions

connection-profile

Synopsis	Enter the connection-profile context
Context	configure connection-profile
Tree	connection-profile
Introduced	16.0.R1
Platforms	All

vlan [[connection-profile-id](#)] *number*

Synopsis	Enter the vlan list instance
Context	configure connection-profile vlan <i>number</i>
Tree	vlan
Introduced	16.0.R7
Platforms	All

[[connection-profile-id](#)] *number*

Synopsis	Identifier of this connection profile
Context	configure connection-profile vlan <i>number</i>
Tree	vlan
Range	1 to 8000
Notes	This element is part of a list key.
Introduced	16.0.R7
Platforms	All

description *string*

Synopsis	Text description
Context	configure connection-profile vlan <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R7

Platforms All

qtag-range [*start*] *number*

Synopsis Enter the **qtag-range** list instance
Context **configure connection-profile vlan** *number* **qtag-range** *number*
Tree **qtag-range**
Introduced 16.0.R7
Platforms All

[start] *number*

Synopsis Lower bound of VLAN range for connection profile
Context **configure connection-profile vlan** *number* **qtag-range** *number*
Tree **qtag-range**
Range 1 to 4094
Notes This element is part of a list key.
Introduced 16.0.R7
Platforms All

end *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Upper bound of VLAN range for connection profile
Context **configure connection-profile vlan** *number* **qtag-range** *number* **end** *number*
Tree **end**
Range 1 to 4094
Introduced 16.0.R7
Platforms All

3.12 debug commands

```

debug
- call-trace
- ipoe
  - trace string
    - circuit-id string
    - mac string
    - max-jobs number
    - profile string
    - remote-id string
    - sap string
    - trace-existing-sessions boolean
- pppoe
  - trace string
    - circuit-id string
    - mac string
    - max-jobs number
    - profile string
    - remote-id string
    - sap string
    - trace-existing-sessions boolean
    - user-name string
- wlan-gw
  - ue string
  - mac string
  - profile string
- lag string
  - bfd boolean
  - config boolean
  - iom-updates boolean
  - lacp-packets boolean
  - multi-chassis boolean
  - multi-chassis-packets boolean
  - port string
    - bfd boolean
    - config boolean
    - lacp-packets boolean
    - multi-chassis boolean
    - port-states boolean
    - redundancy boolean
    - selection-logic boolean
    - state-machine boolean
    - timers boolean
  - port-states boolean
  - redundancy boolean
  - selection-logic boolean
  - state-machine boolean
  - timers boolean
- nat
  - l2-aware
  - subscriber string
  - upnp
    - subscriber string
      - events boolean
      - packets
        - detail boolean
  - large-scale
  - dual-stack-lite
    - subscriber inside-router string b4-address string
  - nat44

```

debug nat large-scale nat44 subscriber

```

    - subscriber inside-router string ip-address string
    - nat64
    - subscriber inside-router string ipv6-prefix string
- nat-import
- route (ipv4-unicast-address | keyword) inside-router string
- pcp
  - router string
    - server string
      - packets
        - detail boolean
        - direction keyword
- router string
- dhcp
  - all-packets
    - detail-level keyword
    - mode keyword
  - interface string
    - detail-level keyword
    - mode keyword
  - mac string
    - detail-level keyword
    - mode keyword
  - sap string
    - detail-level keyword
    - mode keyword
- igmp
  - group-interface
    - all-group-interfaces
    - forwarding-service string
    - group-interface-name string
  - host
    - group-interface
      - forwarding-service string
      - group-interface-name string
    - ip-address string
  - interface
    - all-interfaces
    - interface-name string
  - mcs
    - all-interfaces
    - interface-name string
  - miscellaneous boolean
  - packet
    - all-origins
    - dropped boolean
    - egress boolean
    - group-interface-name string
    - host-ip-address string
    - ingress boolean
    - interface-ip-address string
    - interface-name string
    - type keyword
- mld
  - group-interface
    - all-group-interfaces
    - forwarding-service string
    - group-interface-name string
  - host
    - group-interface
      - forwarding-service string
      - group-interface-name string
    - ip-address string
  - interface
    - all-interfaces

```

debug router mld interface interface-name

```

- interface-name string
- mcs
- all-interfaces
- interface-name string
- miscellaneous boolean
- packet
- all-origins
- dropped boolean
- egress boolean
- group-interface-name string
- host-ip-address string
- ingress boolean
- interface-ip-address string
- interface-name string
- type keyword
- msdp
- packet
- all-packet-types
- packet-types
- keep-alive
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- sa-request
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- sa-response
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-active
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- pim
- group-address string
- rtm
- rp-address string
- sa-db
- group-address string
- rp-address string
- source-address string
- mtrace
- miscellaneous
- packet
- all-packet-types
- packet-types
- query boolean
- request boolean
- response boolean
- mtrace2
- miscellaneous
- packet
- all-packet-types
- packet-types
- query boolean
- request boolean
- response boolean
- pim
- events
- adjacency
- all
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- assert
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- auto-rp
- bgp

```


debug router pim events bgp group-address

```

- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- bier-inband
  - detail boolean
- bsr
  - detail boolean
- data
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- db
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- dynmlldp
  - detail boolean
- extranet
  - detail boolean
- graft
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- interface
  - interface-name string
- jp
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- mofrr
- mrib
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- msg
- mvpn-rtcach
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- red
  - detail boolean
- register
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- rpfv
  - detail boolean
- rtm
  - detail boolean
- s-pmsi
  - detail boolean
  - vpn-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- tunnel-interface
  - ldp-p2mp-id number
  - rsvp-p2mp string
  - sender-address string
- packet
  - all-origins
  - all-packet-types
  - egress boolean
  - ingress boolean
  - interface-name string
  - ipv4 boolean
  - ipv6 boolean
  - packet-types

```

debug router pim packet packet-types assert

- **assert**
 - **all-origins**
 - **interface-name** *string*
- **auto-rp-announcement**
 - **all-origins**
 - **interface-name** *string*
- **auto-rp-mapping**
 - **all-origins**
 - **interface-name** *string*
- **bsr**
 - **all-origins**
 - **interface-name** *string*
- **crp**
 - **all-origins**
 - **interface-name** *string*
- **graft**
 - **all-origins**
 - **interface-name** *string*
- **graft-ack**
 - **all-origins**
 - **interface-name** *string*
- **hello**
 - **all-origins**
 - **interface-name** *string*
- **jp**
 - **all-origins**
 - **interface-name** *string*
- **mdt-tlv**
 - **all-origins**
 - **interface-name** *string*
- **register**
 - **all-origins**
 - **interface-name** *string*
- **register-stop**
 - **all-origins**
 - **interface-name** *string*
- **radius**
 - **proxy** *string*
 - **all-packet-types**
 - **client-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **detail-level** *keyword*
 - **direction** *keyword*
 - **dropped-only** *boolean*
 - **packet-types**
 - **access-accept** *boolean*
 - **access-challenge** *boolean*
 - **access-reject** *boolean*
 - **access-request** *boolean*
 - **accounting-request** *boolean*
 - **accounting-response** *boolean*
 - **other** *boolean*
- **servers**
 - **attribute** *string*
 - **extended-type** *number*
 - **transaction** *boolean*
 - **type** *number*
 - **value**
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **hex** *string*
 - **integer** *number*
 - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **string** *string*
 - **vendor-specific**
 - **encoding**

debug router radius servers attribute vendor-specific encoding length-size

```

    - length-size number
    - type-size number
    - vendor (number | keyword)
    - vendor-type number
  - detail-level keyword
  - packet-types
    - accounting boolean
    - authentication boolean
    - coa boolean
  - server-address (ipv4-address-no-zone | ipv6-address-no-zone)
- vrrp
  - events
    - all-events
    - interface string
      - ipv4
        - vrid number
      - ipv6
        - vrid number
  - packet
    - all-packets
    - interface string
      - ipv4
        - vrid number
      - ipv6
        - vrid number
  - wpp
    - packets
      - detail-level keyword
    - portal string
      - packets
        - detail-level keyword
- service
  - vpls string
    - igmp-snooping
      - packet
        - detail keyword
        - dropped boolean
        - egress boolean
        - evpn-mpls boolean
        - evpn-vxlan (ipv4-address-no-zone | ipv6-address-no-zone) vni number
        - ingress boolean
        - mac string
        - sap string
        - sdp-bind string
    - mld-snooping
      - packet
        - detail keyword
        - dropped boolean
        - egress boolean
        - evpn-mpls boolean
        - evpn-vxlan (ipv4-address-no-zone | ipv6-address-no-zone) vni number
        - ingress boolean
        - mac string
        - sap string
        - sdp-bind string
    - pim-snooping
      - events
        - adjacency
        - all
          - detail boolean
          - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
          - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - db
          - detail boolean

```

debug service vpls pim-snooping events db group-address

```

    - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - jp
    - detail boolean
    - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - mcs
    - detail boolean
  - port
    - detail boolean
    - evpn-mpls
    - sap-id string
    - sdp-bind-id string
    - vni number
    - vtep (ipv4-address-no-zone | ipv6-address-no-zone)
  - red
    - detail boolean
  - packet
    - all-origins
    - all-packet-types
    - packet-types
    - hello boolean
    - jp boolean
    - port
      - evpn-mpls
      - sap-id string
      - sdp-bind-id string
      - vni number
      - vtep (ipv4-address-no-zone | ipv6-address-no-zone)
  - subscriber-mgmt
    - gtp
      - events boolean
      - imsi string
      - packets
        - detail-level keyword
        - mode keyword
      - peer (ipv4-address-no-zone | ipv6-address-no-zone) router string
      - udp-port number
  - system
    - grpc
      - client
        - all
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - type keyword
    - grpc-tunnel
      - tunnel
        - all
        - name string
    - http-connections
      - client-ip-prefix (ipv4-prefix | ipv6-prefix | keyword)
  - management-interface
    - netconf keyword
    - remote-management
      - manager
        - all
        - manager-name string
      - service boolean
  - wlan-gw
    - group number
    - learn-ap-mac
      - tunnel-remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - statistic keyword name string
    - capture-packet boolean
    - ue

```

debug wlan-gw group ue bridge-domain

- **bridge-domain** *number*
- **mac-address** *string*
- **protocols**
 - **arp** *boolean*
 - **dhcp4** *boolean*
 - **dhcp6** *boolean*
 - **icmp4** *boolean*
 - **icmp6** *boolean*
 - **radius** *boolean*

3.12.1 debug command descriptions

debug

Synopsis	Configure application or protocol tracing
Context	debug
Tree	debug
Description	Commands in this context enable detailed debugging information for various protocols and router functions.
Introduced	21.5.R1
Platforms	All

call-trace

Synopsis	Enter the call-trace context
Context	debug call-trace
Tree	call-trace
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe

Synopsis	Enter the ipoe context
Context	debug call-trace ipoe
Tree	ipoe
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace [\[name\]](#) *string*

Synopsis	Enter the trace list instance
Context	debug call-trace ipoe trace <i>string</i>
Tree	trace
Max. Instances	50

Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Unique trace name
Context [debug call-trace ipoe trace string](#)
Tree [trace](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Circuit ID of the sessions to trace
Context [debug call-trace ipoe trace string circuit-id string](#)
Tree [circuit-id](#)
Description This command configures the circuit ID of the sessions to trace.
The circuit ID filter is ignored if it is not part of the IPoe session key.
String Length 1 to 255
Notes The following elements are part of a choice: **circuit-id** or **remote-id**.
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis MAC address of the sessions to trace

Context	<code>debug call-trace ipoe trace string mac string</code>
Tree	<code>mac</code>
String Length	1 to 17
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-jobs *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of trace jobs
Context	<code>debug call-trace ipoe trace string max-jobs number</code>
Tree	<code>max-jobs</code>
Range	1 to 50
Default	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profile *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Call trace profile applied for the trace
Context	<code>debug call-trace ipoe trace string profile string</code>
Tree	<code>profile</code>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Remote ID of the sessions to trace
Context	<code>debug call-trace ipoe trace string remote-id string</code>
Tree	<code>remote-id</code>
Description	This command configures the remote ID of the sessions to trace. The remote ID filter is ignored if it is not part of the IPoE session key.
String Length	1 to 255
Notes	The following elements are part of a choice: circuit-id or remote-id .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID of the sessions to trace
Context	<code>debug call-trace ipoe trace string sap string</code>
Tree	<code>sap</code>
String Length	1 to 45
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace-existing-sessions *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable call trace for existing sessions
Context	<code>debug call-trace ipoe trace string trace-existing-sessions boolean</code>
Tree	<code>trace-existing-sessions</code>

Description	When configured to true , the system traces existing sessions. When configured to false , only new sessions are traced.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the pppoe context
Context	debug call-trace pppoe
Tree	pppoe
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace [[name](#)] *string*

Synopsis	Enter the trace list instance
Context	debug call-trace pppoe trace <i>string</i>
Tree	trace
Max. Instances	50
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[\[name\]](#) *string*

Synopsis	Unique trace name
Context	debug call-trace pppoe trace <i>string</i>
Tree	trace
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Circuit ID of the sessions to trace
Context	<code>debug call-trace pppoe trace string circuit-id string</code>
Tree	<code>circuit-id</code>
String Length	1 to 255
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC address of the sessions to trace
Context	<code>debug call-trace pppoe trace string mac string</code>
Tree	<code>mac</code>
String Length	1 to 17
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-jobs *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of trace jobs
Context	<code>debug call-trace pppoe trace string max-jobs number</code>
Tree	<code>max-jobs</code>
Range	1 to 50
Default	1
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profile string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Call trace profile applied for the trace
Context [debug call-trace pppoe trace string profile string](#)
Tree [profile](#)
String Length 1 to 32
Notes This element is mandatory.
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Remote ID of the sessions to trace
Context [debug call-trace pppoe trace string remote-id string](#)
Tree [remote-id](#)
String Length 1 to 255
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis SAP ID of the sessions to trace
Context [debug call-trace pppoe trace string sap string](#)

Tree	sap
String Length	1 to 45
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace-existing-sessions *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable call trace for existing sessions
Context	debug call-trace pppoe trace string trace-existing-sessions boolean
Tree	trace-existing-sessions
Description	When configured to true , the system traces existing sessions. When configured to false , only new sessions are traced.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PPPoE username of the sessions to trace
Context	debug call-trace pppoe trace string user-name string
Tree	user-name
String Length	1 to 253
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the wlan-gw context
Context	debug call-trace wlan-gw

Tree	wlan-gw
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ue [[name](#)] *string*

Synopsis	Enter the ue list instance
Context	debug call-trace wlan-gw ue string
Tree	ue
Max. Instances	50
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Unique trace name
Context	debug call-trace wlan-gw ue string
Tree	ue
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC address of the sessions to trace
Context	debug call-trace wlan-gw ue string mac string
Tree	mac
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profile *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Call trace profile applied for the trace
Context	<code>debug call-trace wlan-gw ue string profile string</code>
Tree	<code>profile</code>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag [*lag-name*] *string*

Synopsis	Enter the lag list instance
Context	<code>debug lag string</code>
Tree	<code>lag</code>
Description	Commands in this context configure debugging for Link Aggregation Group (LAG).
Introduced	22.7.R1
Platforms	All

[*lag-name*] *string*

Synopsis	LAG name
Context	<code>debug lag string</code>
Tree	<code>lag</code>
Description	This command specifies the LAG name. In model-driven interfaces, the LAG name is used for configuration references and show commands. A service provider or administrator can use the defined LAG name to identify and manage LAGs within the SR OS platforms. The LAG name must always start with "lag-".
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	22.7.R1

Platforms All

bfd *boolean*

Synopsis Enable debugging for BFD
Context [debug lag string bfd boolean](#)
Tree [bfd](#)
Default false
Introduced 22.7.R1
Platforms All

config *boolean*

Synopsis Enable debugging for configuration changes
Context [debug lag string config boolean](#)
Tree [config](#)
Default false
Introduced 22.7.R1
Platforms All

iom-updates *boolean*

Synopsis Enable debugging for IOM updates
Context [debug lag string iom-updates boolean](#)
Tree [iom-updates](#)
Default false
Introduced 22.7.R1
Platforms All

lACP-packets *boolean*

Synopsis Enable debugging for LACP packets
Context [debug lag string lACP-packets boolean](#)
Tree [lACP-packets](#)
Default false

Introduced 22.7.R1
Platforms All

multi-chassis *boolean*

Synopsis Enable debugging for multi-chassis LAG
Context [debug lag string multi-chassis boolean](#)
Tree [multi-chassis](#)
Default false
Introduced 22.7.R1
Platforms All

multi-chassis-packets *boolean*

Synopsis Enable debugging for multi-chassis packets
Context [debug lag string multi-chassis-packets boolean](#)
Tree [multi-chassis-packets](#)
Default false
Introduced 22.7.R1
Platforms All

port [[port-id](#)] *string*

Synopsis Enter the **port** list instance
Context [debug lag string port string](#)
Tree [port](#)
Introduced 22.7.R1
Platforms All

[port-id] *string*

Synopsis Unique identifier for the port in the LAG
Context [debug lag string port string](#)
Tree [port](#)
Notes This element is part of a list key.

Introduced 22.7.R1
Platforms All

bfd *boolean*

Synopsis Enable debugging for BFD
Context [debug lag string port string bfd boolean](#)
Tree [bfd](#)
Default false
Introduced 22.7.R1
Platforms All

config *boolean*

Synopsis Enable debugging for configuration changes
Context [debug lag string port string config boolean](#)
Tree [config](#)
Default false
Introduced 22.7.R1
Platforms All

lacp-packets *boolean*

Synopsis Enable debugging for LACP packets
Context [debug lag string port string lacp-packets boolean](#)
Tree [lacp-packets](#)
Default false
Introduced 22.7.R1
Platforms All

multi-chassis *boolean*

Synopsis Enable debugging for multi-chassis LAG
Context [debug lag string port string multi-chassis boolean](#)
Tree [multi-chassis](#)

Default	false
Introduced	22.7.R1
Platforms	All

port-states *boolean*

Synopsis	Enable debugging for port-state changes
Context	debug lag string port string port-states boolean
Tree	port-states
Default	false
Introduced	22.7.R1
Platforms	All

redundancy *boolean*

Synopsis	Enable debugging for redundancy
Context	debug lag string port string redundancy boolean
Tree	redundancy
Default	false
Introduced	22.7.R1
Platforms	All

selection-logic *boolean*

Synopsis	Enable debugging for selection logic
Context	debug lag string port string selection-logic boolean
Tree	selection-logic
Default	false
Introduced	22.7.R1
Platforms	All

state-machine *boolean*

Synopsis	Enable debugging for state-machine changes
Context	debug lag string port string state-machine boolean

Tree	state-machine
Default	false
Introduced	22.7.R1
Platforms	All

timers *boolean*

Synopsis	Enable debugging for timers
Context	debug lag string port string timers <i>boolean</i>
Tree	timers
Default	false
Introduced	22.7.R1
Platforms	All

port-states *boolean*

Synopsis	Enable debugging for port-state changes
Context	debug lag string port-states <i>boolean</i>
Tree	port-states
Default	false
Introduced	22.7.R1
Platforms	All

redundancy *boolean*

Synopsis	Enable debugging for redundancy
Context	debug lag string redundancy <i>boolean</i>
Tree	redundancy
Default	false
Introduced	22.7.R1
Platforms	All

selection-logic *boolean*

Synopsis	Enable debugging for selection logic
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Context	debug lag <i>string</i> selection-logic <i>boolean</i>
Tree	selection-logic
Default	false
Introduced	22.7.R1
Platforms	All

state-machine *boolean*

Synopsis	Enable debugging for state-machine changes
Context	debug lag <i>string</i> state-machine <i>boolean</i>
Tree	state-machine
Default	false
Introduced	22.7.R1
Platforms	All

timers *boolean*

Synopsis	Enable debugging for timers
Context	debug lag <i>string</i> timers <i>boolean</i>
Tree	timers
Default	false
Introduced	22.7.R1
Platforms	All

nat

Synopsis	Enter the nat context
Context	debug nat
Tree	nat
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2-aware

Synopsis	Enter the I2-aware context
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Context	debug nat l2-aware
Tree	l2-aware
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber [[subscriber-id](#)] *string*

Synopsis	Add a list entry for subscriber
Context	debug nat l2-aware subscriber string
Tree	subscriber
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[subscriber-id] *string*

Synopsis	L2-aware subscriber ID
Context	debug nat l2-aware subscriber string
Tree	subscriber
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upnp

Synopsis	Enter the upnp context
Context	debug nat l2-aware upnp
Tree	upnp
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber [**subscriber-id**] *string*

Synopsis	Enter the subscriber list instance
Context	debug nat l2-aware upnp subscriber string
Tree	subscriber
Max. Instances	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[subscriber-id] *string*

Synopsis	L2-aware subscriber ID
Context	debug nat l2-aware upnp subscriber string
Tree	subscriber
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

events *boolean*

Synopsis	Enable UPnP event debugging
Context	debug nat l2-aware upnp subscriber string events boolean
Tree	events
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis	Enable the packets context
Context	debug nat l2-aware upnp subscriber string packets
Tree	packets
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

detail *boolean*

Synopsis	Include IP, UDP, and TCP headers in UPnP packet debug
Context	debug nat l2-aware upnp subscriber string packets detail boolean
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the large-scale context
Context	debug nat large-scale
Tree	large-scale
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite

Synopsis	Enter the dual-stack-lite context
Context	debug nat large-scale dual-stack-lite
Tree	dual-stack-lite
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber [inside-router string b4-address string](#)

Synopsis	Add a list entry for subscriber
Context	debug nat large-scale dual-stack-lite subscriber inside-router string b4-address string
Tree	subscriber
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router *string*

Synopsis	Inside router instance name
Context	debug nat large-scale dual-stack-lite subscriber inside-router <i>string</i> b4-address <i>string</i>
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

b4-address *string*

Synopsis	IPv6 B4 address of the DS-Lite subscriber
Context	debug nat large-scale dual-stack-lite subscriber inside-router <i>string</i> b4-address <i>string</i>
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44

Synopsis	Enter the nat44 context
Context	debug nat large-scale nat44
Tree	nat44
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber [inside-router](#) *string* [ip-address](#) *string*

Synopsis	Add a list entry for subscriber
Context	debug nat large-scale nat44 subscriber inside-router <i>string</i> ip-address <i>string</i>
Tree	subscriber
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router *string*

Synopsis	Inside router instance name
Context	debug nat large-scale nat44 subscriber inside-router <i>string ip-address string</i>
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	Inside IPv4 address of the NAT44 subscriber
Context	debug nat large-scale nat44 subscriber inside-router <i>string ip-address string</i>
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat64

Synopsis	Enter the nat64 context
Context	debug nat large-scale nat64
Tree	nat64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber [inside-router](#) *string ipv6-prefix string*

Synopsis	Add a list entry for subscriber
Context	debug nat large-scale nat64 subscriber inside-router <i>string ipv6-prefix string</i>
Tree	subscriber
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router *string*

Synopsis	Inside router instance name
Context	debug nat large-scale nat64 subscriber inside-router <i>string</i> ipv6-prefix <i>string</i>
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-prefix *string*

Synopsis	NAT64 IPv6 prefix of the subscriber
Context	debug nat large-scale nat64 subscriber inside-router <i>string</i> ipv6-prefix <i>string</i>
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-import

Synopsis	Enter the nat-import context
Context	debug nat nat-import
Tree	nat-import
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

route [[ip-address](#)] (*ipv4-unicast-address* | *keyword*) [inside-router](#) *string*

Synopsis	Add a list entry for route
Context	debug nat nat-import route (<i>ipv4-unicast-address</i> <i>keyword</i>) inside-router <i>string</i>
Tree	route
Max. Instances	32
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-address] (*ipv4-unicast-address* | *keyword*)

Synopsis	IPv4 address of imported route, or any
Context	debug nat nat-import route (<i>ipv4-unicast-address</i> <i>keyword</i>) inside-router <i>string</i>
Tree	route
Options	any
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router *string*

Synopsis	Router name or VPRN service name, or any
Context	debug nat nat-import route (<i>ipv4-unicast-address</i> <i>keyword</i>) inside-router <i>string</i>
Tree	route
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pcp

Synopsis	Enter the pcp context
Context	debug nat pcp
Tree	pcp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router [[router-instance](#)] *string*

Synopsis	Enter the router list instance
Context	debug nat pcp router <i>string</i>
Tree	router
Max. Instances	8
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[router-instance] string

Synopsis Inside router instance name
Context [debug nat pcp router string](#)
Tree [router](#)
Notes This element is part of a list key.
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [name] string

Synopsis Enter the **server** list instance
Context [debug nat pcp router string server string](#)
Tree [server](#)
Max. Instances 8
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis PCP server name
Context [debug nat pcp router string server string](#)
Tree [server](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis Enter the **packets** context
Context [debug nat pcp router string server string packets](#)

Tree [packets](#)
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

detail *boolean*

Synopsis Enable the detailed PCP packet debug output
Context [debug nat pcp router](#) *string server string packets detail boolean*
Tree [detail](#)
Default false
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis Direction of the PCP packet debugging
Context [debug nat pcp router](#) *string server string packets direction keyword*
Tree [direction](#)
Default ingress
Options ingress, egress, both
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router [[router-instance](#)] *string*

Synopsis Enter the **router** list instance
Context [debug router](#) *string*
Tree [router](#)
Introduced 22.5.R1
Platforms All

[router-instance] *string*

Synopsis Router name or VPRN service name
Context [debug router](#) *string*

Tree	router
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

dhcp

Synopsis	Enter the dhcp context
Context	debug router string dhcp
Tree	dhcp
Description	<p>Commands in this context enable DHCP debug for all packets in the specified routing instance or VPRN service, or for specific packets matching the specific MAC addresses, SAP identifiers, or interface names.</p> <p>When a DHCP packet matches a specified filter and is conforming the configured debug mode for that filter, the packet debug is available in the specified detail level. DHCP debug filter criteria are applied in the following order:</p> <ol style="list-style-type: none"> 1. MAC address 2. SAP identifier 3. interface names 4. all packets <p>Up to 8 MAC address filters, 8 SAP identifier filters, 4 interface name filters, and 4 all-packet filters can be specified simultaneously across all routing instances and VPRN services.</p>
Introduced	22.10.R1
Platforms	All

all-packets

Synopsis	Enable the all-packets context
Context	debug router string dhcp all-packets
Tree	all-packets
Introduced	22.10.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
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Context	<code>debug router string dhcp all-packets detail-level keyword</code>
Tree	<code>detail-level</code>
Default	high
Options	high, medium, low
Introduced	22.10.R1
Platforms	All

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	<code>debug router string dhcp all-packets mode keyword</code>
Tree	<code>mode</code>
Default	egress-ingress-and-dropped
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Introduced	22.10.R1
Platforms	All

interface [`interface-name`] *string*

Synopsis	Enter the interface list instance
Context	<code>debug router string dhcp interface string</code>
Tree	<code>interface</code>
Introduced	22.10.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	<code>debug router string dhcp interface string</code>
Tree	<code>interface</code>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	<code>debug router string dhcp interface string detail-level keyword</code>
Tree	<code>detail-level</code>
Default	high
Options	high, medium, low
Introduced	22.10.R1
Platforms	All

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	<code>debug router string dhcp interface string mode keyword</code>
Tree	<code>mode</code>
Default	egress-ingress-and-dropped
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Introduced	22.10.R1
Platforms	All

mac [`address`] *string*

Synopsis	Enter the mac list instance
Context	<code>debug router string dhcp mac string</code>
Tree	<code>mac</code>
Introduced	22.10.R1
Platforms	All

[`address`] *string*

Synopsis	MAC address matching the client hardware address field
Context	<code>debug router string dhcp mac string</code>
Tree	<code>mac</code>
Notes	This element is part of a list key.
Introduced	22.10.R1

Platforms All

detail-level *keyword*

Synopsis Detail level of the DHCP debug output
Context [debug router](#) *string* [dhcp mac](#) *string* **detail-level** *keyword*
Tree [detail-level](#)
Default high
Options high, medium, low
Introduced 22.10.R1
Platforms All

mode *keyword*

Synopsis DHCP packets present in the debug output
Context [debug router](#) *string* [dhcp mac](#) *string* **mode** *keyword*
Tree [mode](#)
Default egress-ingress-and-dropped
Options egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Introduced 22.10.R1
Platforms All

sap [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance
Context [debug router](#) *string* [dhcp sap](#) *string*
Tree [sap](#)
Introduced 22.10.R1
Platforms All

[[sap-id](#)] *string*

Synopsis SAP ID
Context [debug router](#) *string* [dhcp sap](#) *string*
Tree [sap](#)

String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router <i>string</i> dhcp sap <i>string</i> detail-level <i>keyword</i>
Tree	detail-level
Default	high
Options	high, medium, low
Introduced	22.10.R1
Platforms	All

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router <i>string</i> dhcp sap <i>string</i> mode <i>keyword</i>
Tree	mode
Default	egress-ingress-and-dropped
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Introduced	22.10.R1
Platforms	All

igmp

Synopsis	Enter the igmp context
Context	debug router <i>string</i> igmp
Tree	igmp
Introduced	22.10.R1
Platforms	All

group-interface

Synopsis	Enable the group-interface context
Context	debug router <i>string</i> igmp group-interface
Tree	group-interface
Introduced	22.10.R1
Platforms	All

all-group-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> igmp group-interface all-group-interfaces
Tree	all-group-interfaces
Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	22.10.R1
Platforms	All

forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	debug router <i>string</i> igmp group-interface forwarding-service <i>string</i>
Tree	forwarding-service
String Length	1 to 64
Default	<code>.././router-instance</code>
Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> igmp group-interface group-interface-name <i>string</i>
Tree	group-interface-name
String Length	1 to 32

Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	22.10.R1
Platforms	All

host

Synopsis	Enable the host context
Context	debug router string igmp host
Tree	host
Introduced	22.10.R1
Platforms	All

group-interface

Synopsis	Enter the group-interface context
Context	debug router string igmp host group-interface
Tree	group-interface
Introduced	22.10.R1
Platforms	All

forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	debug router string igmp host group-interface forwarding-service string
Tree	forwarding-service
String Length	1 to 64
Default	<code>../router-instance</code>
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	debug router string igmp host group-interface group-interface-name string

Tree	group-interface-name
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

ip-address *string*

Synopsis	IP address of the host to trace
Context	debug router <i>string</i> igmp host ip-address <i>string</i>
Tree	ip-address
Introduced	22.10.R1
Platforms	All

interface

Synopsis	Enable the interface context
Context	debug router <i>string</i> igmp interface
Tree	interface
Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> igmp interface all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> igmp interface interface-name <i>string</i>

Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

mcs

Synopsis	Enable the mcs context
Context	debug router string igmp mcs
Tree	mcs
Description	Commands in this context enable debugging for IGMP multicast servers.
Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
Context	debug router string igmp mcs all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router string igmp mcs interface-name string
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1

Platforms All

miscellaneous *boolean*

Synopsis Enable tracing of miscellaneous events
Context [debug router string igmp miscellaneous boolean](#)
Tree [miscellaneous](#)
Default false
Introduced 22.10.R1
Platforms All

packet

Synopsis Enable the **packet** context
Context [debug router string igmp packet](#)
Tree [packet](#)
Introduced 22.10.R1
Platforms All

all-origins

Synopsis Trace all origins
Context [debug router string igmp packet all-origins](#)
Tree [all-origins](#)
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced 22.10.R1
Platforms All

dropped *boolean*

Synopsis Enable tracing for dropped packets
Context [debug router string igmp packet dropped boolean](#)
Tree [dropped](#)
Default true

Introduced 22.10.R1
Platforms All

egress *boolean*

Synopsis Enable tracing for transmitted packets
Context [debug router](#) *string* [igmp packet egress](#) *boolean*
Tree [egress](#)
Default true
Introduced 22.10.R1
Platforms All

group-interface-name *string*

Synopsis Interface name
Context [debug router](#) *string* [igmp packet group-interface-name](#) *string*
Tree [group-interface-name](#)
String Length 1 to 32
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced 22.10.R1
Platforms All

host-ip-address *string*

Synopsis Address of the host to trace
Context [debug router](#) *string* [igmp packet host-ip-address](#) *string*
Tree [host-ip-address](#)
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced 22.10.R2
Platforms All

ingress *boolean*

Synopsis Enable tracing for received packets

Context	<code>debug router string igmp packet ingress boolean</code>
Tree	<code>ingress</code>
Default	true
Introduced	22.10.R1
Platforms	All

interface-ip-address *string*

Synopsis	Source address of the packet to trace
Context	<code>debug router string igmp packet interface-ip-address string</code>
Tree	<code>interface-ip-address</code>
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	22.10.R2
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	<code>debug router string igmp packet interface-name string</code>
Tree	<code>interface-name</code>
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	22.10.R1
Platforms	All

type *keyword*

Synopsis	Packet type to trace
Context	<code>debug router string igmp packet type keyword</code>
Tree	<code>type</code>
Default	all
Options	all, query, v1-report, v2-report, v2-leave, v3-report
Introduced	22.10.R1

Platforms All

mld

Synopsis Enter the **mld** context
Context [debug router string mld](#)
Tree [mld](#)
Introduced 22.10.R1
Platforms All

group-interface

Synopsis Enable the **group-interface** context
Context [debug router string mld group-interface](#)
Tree [group-interface](#)
Introduced 22.10.R1
Platforms All

all-group-interfaces

Synopsis Trace all interfaces
Context [debug router string mld group-interface all-group-interfaces](#)
Tree [all-group-interfaces](#)
Notes The following elements are part of a mandatory choice: **all-group-interfaces** or **(forwarding-service and group-interface-name)**.
Introduced 22.10.R1
Platforms All

forwarding-service *string*

Synopsis ID of the forwarding service to trace
Context [debug router string mld group-interface forwarding-service string](#)
Tree [forwarding-service](#)
String Length 1 to 64
Default [.././router-instance](#)

Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> mld group-interface group-interface-name <i>string</i>
Tree	group-interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	22.10.R1
Platforms	All

host

Synopsis	Enable the host context
Context	debug router <i>string</i> mld host
Tree	host
Introduced	22.10.R1
Platforms	All

group-interface

Synopsis	Enter the group-interface context
Context	debug router <i>string</i> mld host group-interface
Tree	group-interface
Introduced	22.10.R1
Platforms	All

forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	debug router <i>string</i> mld host group-interface forwarding-service <i>string</i>

Tree	forwarding-service
String Length	1 to 64
Default	.././router-instance
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> mld host group-interface group-interface-name <i>string</i>
Tree	group-interface-name
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

ip-address *string*

Synopsis	IP address of the host to trace
Context	debug router <i>string</i> mld host ip-address <i>string</i>
Tree	ip-address
Introduced	22.10.R1
Platforms	All

interface

Synopsis	Enable the interface context
Context	debug router <i>string</i> mld interface
Tree	interface
Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> mld interface all-interfaces

Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> mld interface interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

mcs

Synopsis	Enable the mcs context
Context	debug router <i>string</i> mld mcs
Tree	mcs
Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> mld mcs all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> mld mcs interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

miscellaneous *boolean*

Synopsis	Enable the tracing of miscellaneous events
Context	debug router <i>string</i> mld miscellaneous <i>boolean</i>
Tree	miscellaneous
Default	false
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug router <i>string</i> mld packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Allow trace for all origins
Context	debug router <i>string</i> mld packet all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	22.10.R1

Platforms All

dropped *boolean*

Synopsis Enable tracing for dropped packets
Context [debug router string mld packet dropped boolean](#)
Tree [dropped](#)
Default true
Introduced 22.10.R1
Platforms All

egress *boolean*

Synopsis Enable tracing for transmitted packets
Context [debug router string mld packet egress boolean](#)
Tree [egress](#)
Default true
Introduced 22.10.R1
Platforms All

group-interface-name *string*

Synopsis Interface name
Context [debug router string mld packet group-interface-name string](#)
Tree [group-interface-name](#)
String Length 1 to 32
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced 22.10.R1
Platforms All

host-ip-address *string*

Synopsis Address of the host to trace
Context [debug router string mld packet host-ip-address string](#)

Tree	host-ip-address
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	22.10.R2
Platforms	All

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	debug router <i>string</i> mld packet ingress <i>boolean</i>
Tree	ingress
Default	true
Introduced	22.10.R1
Platforms	All

interface-ip-address *string*

Synopsis	Source address of the packet to trace
Context	debug router <i>string</i> mld packet interface-ip-address <i>string</i>
Tree	interface-ip-address
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	22.10.R2
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> mld packet interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	22.10.R1
Platforms	All

type keyword

Synopsis	Packet type
Context	<code>debug router string mld packet type keyword</code>
Tree	<code>type</code>
Default	all
Options	all, query, v1-report, v2-report
Introduced	22.10.R1
Platforms	All

msdp

Synopsis	Enter the msdp context
Context	<code>debug router string msdp</code>
Tree	<code>msdp</code>
Description	Commands in this context configure debugging for the Multicast Source Discovery Protocol (MSDP).
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	<code>debug router string msdp packet</code>
Tree	<code>packet</code>
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable MSDP debugging for all packets
Context	<code>debug router string msdp packet all-packet-types</code>
Tree	<code>all-packet-types</code>
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1

Platforms All

packet-types

Synopsis Enter the **packet-types** context

Context [debug router string msdp packet packet-types](#)

Tree [packet-types](#)

Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.

Introduced 22.10.R1

Platforms All

keep-alive

Synopsis Enable the **keep-alive** context

Context [debug router string msdp packet packet-types keep-alive](#)

Tree [keep-alive](#)

Introduced 22.10.R1

Platforms All

peer-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Peer address used to trace packets

Context [debug router string msdp packet packet-types keep-alive peer-address \(*ipv4-address-no-zone* | *ipv6-address-no-zone*\)](#)

Tree [peer-address](#)

Introduced 22.10.R1

Platforms All

sa-request

Synopsis Enable the **sa-request** context

Context [debug router string msdp packet packet-types sa-request](#)

Tree [sa-request](#)

Introduced 22.10.R1

Platforms All

peer-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer address used to trace packets
Context	debug router string msdp packet packet-types sa-request peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	22.10.R1
Platforms	All

sa-response

Synopsis	Enable the sa-response context
Context	debug router string msdp packet packet-types sa-response
Tree	sa-response
Introduced	22.10.R1
Platforms	All

peer-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer address used to trace packets
Context	debug router string msdp packet packet-types sa-response peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	22.10.R1
Platforms	All

source-active

Synopsis	Enable the source-active context
Context	debug router string msdp packet packet-types source-active
Tree	source-active
Introduced	22.10.R1
Platforms	All

peer-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer address used to trace packets
Context	debug router string msdp packet packet-types source-active peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	22.10.R1
Platforms	All

pim

Synopsis	Enable the pim context
Context	debug router string msdp pim
Tree	pim
Description	Commands in this context enable MSDP PIM debugging.
Introduced	22.10.R1
Platforms	All

group-address *string*

Synopsis	IP multicast group address used to trace events
Context	debug router string msdp pim group-address string
Tree	group-address
Introduced	22.10.R1
Platforms	All

rtm

Synopsis	Enable the rtm context
Context	debug router string msdp rtm
Tree	rtm
Description	Commands in this context enable MSDP route table manager (RTM) debugging.
Introduced	22.10.R1
Platforms	All

rp-address string

Synopsis	IP multicast RP address used to trace events
Context	debug router string msdp rtm rp-address string
Tree	rp-address
Introduced	22.10.R1
Platforms	All

sa-db

Synopsis	Enable the sa-db context
Context	debug router string msdp sa-db
Tree	sa-db
Description	Commands in this context enable MSDP source-active database debugging.
Introduced	22.10.R1
Platforms	All

group-address string

Synopsis	IP multicast group address used to trace events
Context	debug router string msdp sa-db group-address string
Tree	group-address
Introduced	22.10.R1
Platforms	All

rp-address string

Synopsis	IP multicast RP address used to trace events
Context	debug router string msdp sa-db rp-address string
Tree	rp-address
Introduced	22.10.R1
Platforms	All

source-address string

Synopsis	Source address used to trace events
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Context	<code>debug router string msdp sa-db source-address string</code>
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

mtrace

Synopsis	Enter the mtrace context
Context	<code>debug router string mtrace</code>
Tree	<code>mtrace</code>
Introduced	22.10.R1
Platforms	All

miscellaneous

Synopsis	Enable the miscellaneous context
Context	<code>debug router string mtrace miscellaneous</code>
Tree	<code>miscellaneous</code>
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	<code>debug router string mtrace packet</code>
Tree	<code>packet</code>
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable debugging for all packets
Context	<code>debug router string mtrace packet all-packet-types</code>
Tree	<code>all-packet-types</code>
Notes	The following elements are part of a choice: all-packet-types or packet-types .

Introduced 22.10.R1
Platforms All

packet-types

Synopsis Enter the **packet-types** context
Context [debug router string mtrace packet packet-types](#)
Tree [packet-types](#)
Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced 22.10.R1
Platforms All

query *boolean*

Synopsis Debug query packets
Context [debug router string mtrace packet packet-types query boolean](#)
Tree [query](#)
Default false
Introduced 22.10.R1
Platforms All

request *boolean*

Synopsis Debug request packets
Context [debug router string mtrace packet packet-types request boolean](#)
Tree [request](#)
Default false
Introduced 22.10.R1
Platforms All

response *boolean*

Synopsis Debug response packets
Context [debug router string mtrace packet packet-types response boolean](#)
Tree [response](#)

Default	false
Introduced	22.10.R1
Platforms	All

mtrace2

Synopsis	Enter the mtrace2 context
Context	debug router <i>string</i> mtrace2
Tree	mtrace2
Introduced	22.10.R1
Platforms	All

miscellaneous

Synopsis	Enable the miscellaneous context
Context	debug router <i>string</i> mtrace2 miscellaneous
Tree	miscellaneous
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug router <i>string</i> mtrace2 packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable debugging for all packets
Context	debug router <i>string</i> mtrace2 packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1

Platforms All

packet-types

Synopsis Enter the **packet-types** context
Context [debug router string mtrace2 packet packet-types](#)
Tree [packet-types](#)
Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced 22.10.R1
Platforms All

query *boolean*

Synopsis Debug query packets
Context [debug router string mtrace2 packet packet-types query boolean](#)
Tree [query](#)
Default false
Introduced 22.10.R1
Platforms All

request *boolean*

Synopsis Debug request packets
Context [debug router string mtrace2 packet packet-types request boolean](#)
Tree [request](#)
Default false
Introduced 22.10.R1
Platforms All

response *boolean*

Synopsis Debug response packets
Context [debug router string mtrace2 packet packet-types response boolean](#)
Tree [response](#)
Default false

Introduced 22.10.R1
Platforms All

pim

Synopsis Enter the **pim** context
Context [debug router string pim](#)
Tree [pim](#)
Introduced 22.10.R1
Platforms All

events

Synopsis Enable the **events** context
Context [debug router string pim events](#)
Tree [events](#)
Introduced 22.10.R1
Platforms All

adjacency

Synopsis Enable the **adjacency** context
Context [debug router string pim events adjacency](#)
Tree [adjacency](#)
Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced 22.10.R1
Platforms All

all

Synopsis Enable the **all** context
Context [debug router string pim events all](#)
Tree [all](#)

Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events all detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> pim events all group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	debug router <i>string</i> pim events all source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	22.10.R1
Platforms	All

assert

Synopsis	Enable the assert context
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Context	debug router string pim events assert
Tree	assert
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router string pim events assert detail boolean
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	debug router string pim events assert group-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	debug router string pim events assert source-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	source-address
Introduced	22.10.R1
Platforms	All

auto-rp

Synopsis	Enable the auto-rp context
Context	<code>debug router string pim events auto-rp</code>
Tree	<code>auto-rp</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynml dp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach e , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

bgp

Synopsis	Enable the bgp context
Context	<code>debug router string pim events bgp</code>
Tree	<code>bgp</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynml dp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach e , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<code>debug router string pim events bgp group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)</code>
Tree	<code>group-address</code>
Introduced	22.10.R1
Platforms	All

peer-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	BGP peer address used to trace events
Context	<code>debug router string pim events bgp peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)</code>
Tree	<code>peer-address</code>
Introduced	22.10.R1

Platforms All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address used to trace events
Context [debug router string pim events bgp source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [source-address](#)
Introduced 22.10.R1
Platforms All

bier-inband

Synopsis Enable the **bier-inband** context
Context [debug router string pim events bier-inband](#)
Tree [bier-inband](#)
Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced 22.10.R1
Platforms All

detail *boolean*

Synopsis Enable detail tracing
Context [debug router string pim events bier-inband detail boolean](#)
Tree [detail](#)
Default false
Introduced 22.10.R1
Platforms All

bsr

Synopsis Enable the **bsr** context
Context [debug router string pim events bsr](#)
Tree [bsr](#)

Description	Commands in this context enable debugging for the PIM bootstrap mechanism.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events bsr detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

data

Synopsis	Enable the data context
Context	debug router <i>string</i> pim events data
Tree	data
Description	Commands in this context enable PIM data exception debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events data detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<code>debug router string pim events data group-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>group-address</code>
Introduced	22.10.R1
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<code>debug router string pim events data source-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

db

Synopsis	Enable the db context
Context	<code>debug router string pim events db</code>
Tree	<code>db</code>
Description	Commands in this context enable PIM database debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug router string pim events db detail boolean</code>
Tree	<code>detail</code>
Default	false

Introduced 22.10.R1
Platforms All

group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP multicast group address used to trace events
Context [debug router string pim events db group-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [group-address](#)
Introduced 22.10.R1
Platforms All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address used to trace events
Context [debug router string pim events db source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [source-address](#)
Introduced 22.10.R1
Platforms All

dynmldp

Synopsis Enable the **dynmldp** context
Context [debug router string pim events dynmldp](#)
Tree [dynmldp](#)
Description Commands in this context enable dynamic MLDP debugging.
Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced 22.10.R1
Platforms All

detail *boolean*

Synopsis Enable detail tracing

Context	<code>debug router string pim events dynml dp detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

extranet

Synopsis	Enable the extranet context
Context	<code>debug router string pim events extranet</code>
Tree	<code>extranet</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynml dp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach e , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug router string pim events extranet detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

graft

Synopsis	Enable the graft context
Context	<code>debug router string pim events graft</code>
Tree	<code>graft</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynml dp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach e , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router string pim events graft detail boolean
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	debug router string pim events graft group-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	debug router string pim events graft source-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	source-address
Introduced	22.10.R1
Platforms	All

interface

Synopsis	Enable the interface context
Context	debug router string pim events interface
Tree	interface
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1

Platforms All

interface-name *string*

Synopsis Interface name
Context [debug router](#) *string* [pim events interface](#) *interface-name* *string*
Tree [interface-name](#)
String Length 1 to 32
Introduced 22.10.R1
Platforms All

jp

Synopsis Enable the **jp** context
Context [debug router](#) *string* [pim events jp](#)
Tree [jp](#)
Description Commands in this context enable debugging for PIM join and prune mechanisms.
Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced 22.10.R1
Platforms All

detail *boolean*

Synopsis Enable detail tracing
Context [debug router](#) *string* [pim events jp detail](#) *boolean*
Tree [detail](#)
Default false
Introduced 22.10.R1
Platforms All

group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP multicast group address used to trace events

Context	<code>debug router string pim events jp group-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>group-address</code>
Introduced	22.10.R1
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<code>debug router string pim events jp source-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

mofrr

Synopsis	Enable the mofrr context
Context	<code>debug router string pim events mofrr</code>
Tree	<code>mofrr</code>
Description	Commands in this context enable debugging for PIM Multicast-only Fast Reroute (MoFRR).
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

mrrib

Synopsis	Enable the mrrib context
Context	<code>debug router string pim events mrrib</code>
Tree	<code>mrrib</code>
Description	Commands in this context enable Multicast Routing Information Base (MRIB) debugging.

Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events mrrib detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> pim events mrrib group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	debug router <i>string</i> pim events mrrib source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	22.10.R1
Platforms	All

msg

Synopsis	Enable the msg context
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Context	debug router string pim events msg
Tree	msg
Notes	The following elements are part of a choice: (adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynmldp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcache, red, register, rpfv, rtm, s-pmsi, and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

mvpn-rtcache

Synopsis	Enable the mvpn-rtcache context
Context	debug router string pim events mvpn-rtcache
Tree	mvpn-rtcache
Description	Commands in this context enable debugging for the PIM MVPN route cache.
Notes	The following elements are part of a choice: (adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynmldp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcache, red, register, rpfv, rtm, s-pmsi, and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

group-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Group address used to trace events
Context	debug router string pim events mvpn-rtcache group-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	group-address
Introduced	22.10.R1
Platforms	All

peer-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Peer address used to trace events
Context	debug router string pim events mvpn-rtcache peer-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	22.10.R1

Platforms All

red

Synopsis Enable the **red** context

Context [debug router string pim events red](#)

Tree [red](#)

Description Commands in this context enable debugging for PIM redundancy messages to the standby CPM.

Notes The following elements are part of a choice: (**adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynmldp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcache, red, register, rpfv, rtm, s-pmsi**, and **tunnel-interface**) or **all**.

Introduced 22.10.R1

Platforms All

detail *boolean*

Synopsis Enable detail tracing

Context [debug router string pim events red detail boolean](#)

Tree [detail](#)

Default false

Introduced 22.10.R1

Platforms All

register

Synopsis Enable the **register** context

Context [debug router string pim events register](#)

Tree [register](#)

Notes The following elements are part of a choice: (**adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynmldp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcache, red, register, rpfv, rtm, s-pmsi**, and **tunnel-interface**) or **all**.

Introduced 22.10.R1

Platforms All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events register detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> pim events register group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	debug router <i>string</i> pim events register source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	22.10.R1
Platforms	All

rpfv

Synopsis	Enable the rpfv context
Context	debug router <i>string</i> pim events rpfv
Tree	rpfv
Description	Commands in this context enable PIM RPF vector debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1

Platforms All

detail *boolean*

Synopsis Enable detail tracing
 Context [debug router string pim events rpfv detail boolean](#)
 Tree [detail](#)
 Default false
 Introduced 22.10.R1
 Platforms All

rtm

Synopsis Enable the **rtm** context
 Context [debug router string pim events rtm](#)
 Tree [rtm](#)
 Notes The following elements are part of a choice: (**adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynmldp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcache, red, register, rpfv, rtm, s-pmsi, and tunnel-interface**) or **all**.
 Introduced 22.10.R1
 Platforms All

detail *boolean*

Synopsis Enable detail tracing
 Context [debug router string pim events rtm detail boolean](#)
 Tree [detail](#)
 Default false
 Introduced 22.10.R1
 Platforms All

s-pmsi

Synopsis Enable the **s-pmsi** context
 Context [debug router string pim events s-pmsi](#)
 Tree [s-pmsi](#)

Description	Commands in this context enable debugging for the PIM selective provider multicast service interface.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router string pim events s-pmsi detail boolean
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

vpn-source-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	VPN source address used to trace events
Context	debug router string pim events s-pmsi vpn-source-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	vpn-source-address
Introduced	22.10.R1
Platforms	All

tunnel-interface

Synopsis	Enable the tunnel-interface context
Context	debug router string pim events tunnel-interface
Tree	tunnel-interface
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

ldp-p2mp-id *number*

Synopsis	LDP P2MP ID
Context	debug router <i>string</i> pim events tunnel-interface ldp-p2mp-id <i>number</i>
Tree	ldp-p2mp-id
Range	1 to 8192
Introduced	22.10.R1
Platforms	All

rsvp-p2mp *string*

Synopsis	RSVP P2MP LSP name
Context	debug router <i>string</i> pim events tunnel-interface rsvp-p2mp <i>string</i>
Tree	rsvp-p2mp
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

sender-address *string*

Synopsis	IP address of the sender
Context	debug router <i>string</i> pim events tunnel-interface sender-address <i>string</i>
Tree	sender-address
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug router <i>string</i> pim packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	<code>debug router string pim packet all-origins</code>
Tree	<code>all-origins</code>
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable PIM debugging for all packets
Context	<code>debug router string pim packet all-packet-types</code>
Tree	<code>all-packet-types</code>
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	<code>debug router string pim packet egress boolean</code>
Tree	<code>egress</code>
Default	true
Introduced	22.10.R1
Platforms	All

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	<code>debug router string pim packet ingress boolean</code>
Tree	<code>ingress</code>
Default	true
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable tracing for PIM IPv4 packets
Context	debug router <i>string</i> pim packet ipv4 <i>boolean</i>
Tree	ipv4
Default	true
Introduced	22.10.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable tracing for PIM IPv6 packets
Context	debug router <i>string</i> pim packet ipv6 <i>boolean</i>
Tree	ipv6
Default	true
Introduced	22.10.R1
Platforms	All

packet-types

Synopsis	Enter the packet-types context
Context	debug router <i>string</i> pim packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1

Platforms All

assert

Synopsis Enable the **assert** context
Context [debug router string pim packet packet-types assert](#)
Tree [assert](#)
Introduced 22.10.R1
Platforms All

all-origins

Synopsis Enable trace for all origins
Context [debug router string pim packet packet-types assert all-origins](#)
Tree [all-origins](#)
Notes The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced 22.10.R1
Platforms All

interface-name *string*

Synopsis Interface name
Context [debug router string pim packet packet-types assert interface-name string](#)
Tree [interface-name](#)
String Length 1 to 32
Notes The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced 22.10.R1
Platforms All

auto-rp-announcement

Synopsis Enable the **auto-rp-announcement** context
Context [debug router string pim packet packet-types auto-rp-announcement](#)
Tree [auto-rp-announcement](#)
Introduced 22.10.R1

Platforms All

all-origins

Synopsis Enable trace for all origins
Context [debug router string pim packet packet-types auto-rp-announcement all-origins](#)
Tree [all-origins](#)
Notes The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced 22.10.R1
Platforms All

interface-name *string*

Synopsis Interface name
Context [debug router string pim packet packet-types auto-rp-announcement interface-name string](#)
Tree [interface-name](#)
String Length 1 to 32
Notes The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced 22.10.R1
Platforms All

auto-rp-mapping

Synopsis Enable the **auto-rp-mapping** context
Context [debug router string pim packet packet-types auto-rp-mapping](#)
Tree [auto-rp-mapping](#)
Introduced 22.10.R1
Platforms All

all-origins

Synopsis Enable trace for all origins
Context [debug router string pim packet packet-types auto-rp-mapping all-origins](#)
Tree [all-origins](#)

Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types auto-rp-mapping interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

bsr

Synopsis	Enable the bsr context
Context	debug router <i>string</i> pim packet packet-types bsr
Tree	bsr
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types bsr all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types bsr interface-name <i>string</i>

Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

crp

Synopsis	Enable the crp context
Context	debug router string pim packet packet-types crp
Tree	crp
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router string pim packet packet-types crp all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router string pim packet packet-types crp interface-name string
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

graft

Synopsis	Enable the graft context
Context	debug router <i>string</i> pim packet packet-types graft
Tree	graft
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types graft all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types graft interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

graft-ack

Synopsis	Enable the graft-ack context
Context	debug router <i>string</i> pim packet packet-types graft-ack
Tree	graft-ack
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types graft-ack all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types graft-ack interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

hello

Synopsis	Enable the hello context
Context	debug router <i>string</i> pim packet packet-types hello
Tree	hello
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types hello all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types hello interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

jp

Synopsis	Enable the jp context
Context	debug router <i>string</i> pim packet packet-types jp
Tree	jp
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types jp all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types jp interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1

Platforms All

mdt-tlv

Synopsis Enable the **mdt-tlv** context
Context [debug router string pim packet packet-types mdt-tlv](#)
Tree [mdt-tlv](#)
Introduced 22.10.R1
Platforms All

all-origins

Synopsis Enable trace for all origins
Context [debug router string pim packet packet-types mdt-tlv all-origins](#)
Tree [all-origins](#)
Notes The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced 22.10.R1
Platforms All

interface-name *string*

Synopsis Interface name
Context [debug router string pim packet packet-types mdt-tlv interface-name string](#)
Tree [interface-name](#)
String Length 1 to 32
Notes The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced 22.10.R1
Platforms All

register

Synopsis Enable the **register** context
Context [debug router string pim packet packet-types register](#)
Tree [register](#)
Introduced 22.10.R1

Platforms All

all-origins

Synopsis Enable trace for all origins
Context [debug router string pim packet packet-types register all-origins](#)
Tree [all-origins](#)
Notes The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced 22.10.R1
Platforms All

interface-name *string*

Synopsis Interface name
Context [debug router string pim packet packet-types register interface-name string](#)
Tree [interface-name](#)
String Length 1 to 32
Notes The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced 22.10.R1
Platforms All

register-stop

Synopsis Enable the **register-stop** context
Context [debug router string pim packet packet-types register-stop](#)
Tree [register-stop](#)
Introduced 22.10.R1
Platforms All

all-origins

Synopsis Enable trace for all origins
Context [debug router string pim packet packet-types register-stop all-origins](#)
Tree [all-origins](#)
Notes The following elements are part of a choice: **all-origins** or **interface-name**.

Introduced 22.10.R1
Platforms All

interface-name *string*

Synopsis Interface name
Context [debug router](#) *string* [pim packet packet-types register-stop interface-name](#) *string*
Tree [interface-name](#)
String Length 1 to 32
Notes The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced 22.10.R1
Platforms All

radius

Synopsis Enter the **radius** context
Context [debug router](#) *string* [radius](#)
Tree [radius](#)
Introduced 22.5.R1
Platforms All

proxy [[name](#)] *string*

Synopsis Enter the **proxy** list instance
Context [debug router](#) *string* [radius proxy](#) *string*
Tree [proxy](#)
Max. Instances 8
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis RADIUS proxy server name
Context [debug router](#) *string* [radius proxy](#) *string*

Tree	proxy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-packet-types

Synopsis	Enable RADIUS proxy debugging for all packets
Context	debug router <i>string</i> radius proxy <i>string</i> all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a mandatory choice: all-packet-types or packet-types .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-address [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for client-address
Context	debug router <i>string</i> radius proxy <i>string</i> client-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	client-address
Max. Instances	10
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS client
Context	debug router <i>string</i> radius proxy <i>string</i> client-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	client-address
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

detail-level *keyword*

Synopsis	Detail level of the RADIUS proxy debug output
Context	debug router <i>string</i> radius proxy <i>string</i> detail-level <i>keyword</i>
Tree	detail-level
Default	low
Options	low, high
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of the RADIUS proxy packet debugging
Context	debug router <i>string</i> radius proxy <i>string</i> direction <i>keyword</i>
Tree	direction
Default	both
Options	ingress, egress, both
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dropped-only *boolean*

Synopsis	Show dropped packets only
Context	debug router <i>string</i> radius proxy <i>string</i> dropped-only <i>boolean</i>
Tree	dropped-only
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-types

Synopsis	Enter the packet-types context
Context	debug router <i>string</i> radius proxy <i>string</i> packet-types
Tree	packet-types

Notes	The following elements are part of a mandatory choice: all-packet-types or packet-types .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-accept *boolean*

Synopsis	Debug Access-Accept packets
Context	debug router <i>string</i> radius proxy <i>string</i> packet-types access-accept <i>boolean</i>
Tree	access-accept
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-challenge *boolean*

Synopsis	Debug Access-Challenge packets
Context	debug router <i>string</i> radius proxy <i>string</i> packet-types access-challenge <i>boolean</i>
Tree	access-challenge
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-reject *boolean*

Synopsis	Debug Access-Reject packets
Context	debug router <i>string</i> radius proxy <i>string</i> packet-types access-reject <i>boolean</i>
Tree	access-reject
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-request *boolean*

Synopsis	Debug Access-Request packets
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Context [debug router string radius proxy string packet-types access-request boolean](#)
Tree [access-request](#)
Default false
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-request boolean

Synopsis Debug Accounting-Request packets
Context [debug router string radius proxy string packet-types accounting-request boolean](#)
Tree [accounting-request](#)
Default false
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-response boolean

Synopsis Debug Accounting-Response packets
Context [debug router string radius proxy string packet-types accounting-response boolean](#)
Tree [accounting-response](#)
Default false
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other boolean

Synopsis Debug other packet types
Context [debug router string radius proxy string packet-types other boolean](#)
Tree [other](#)
Default false
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

servers

Synopsis	Enable the servers context
Context	debug router <i>string</i> radius servers
Tree	servers
Introduced	22.5.R1
Platforms	All

attribute [name] *string*

Synopsis	Enter the attribute list instance
Context	debug router <i>string</i> radius servers attribute <i>string</i>
Tree	attribute
Max. Instances	10
Introduced	22.5.R1
Platforms	All

[name] *string*

Synopsis	Attribute filter name
Context	debug router <i>string</i> radius servers attribute <i>string</i>
Tree	attribute
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

extended-type *number*

Synopsis	RADIUS attribute extended type
Context	debug router <i>string</i> radius servers attribute <i>string</i> extended-type <i>number</i>
Tree	extended-type
Range	1 to 255
Introduced	22.5.R1
Platforms	All

transaction *boolean*

Synopsis	Debug request and response transaction
Context	debug router <i>string</i> radius servers attribute <i>string</i> transaction <i>boolean</i>
Tree	transaction
Default	false
Introduced	22.5.R1
Platforms	All

type *number*

Synopsis	RADIUS attribute type
Context	debug router <i>string</i> radius servers attribute <i>string</i> type <i>number</i>
Tree	type
Range	1 to 255
Notes	This element is mandatory.
Introduced	22.5.R1
Platforms	All

value

Synopsis	Enter the value context
Context	debug router <i>string</i> radius servers attribute <i>string</i> value
Tree	value
Introduced	22.5.R1
Platforms	All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Attribute value specified as an IP address
Context	debug router <i>string</i> radius servers attribute <i>string</i> value address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	The following elements are part of a choice: address , hex , integer , prefix , or string .
Introduced	22.5.R1

Platforms All

hex string

Synopsis Attribute value specified as a hexadecimal string
Context [debug router string radius servers attribute string value hex string](#)
Tree [hex](#)
String Length 1 to 253
Notes The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.
Introduced 22.5.R1
Platforms All

integer number

Synopsis Attribute value specified as an integer
Context [debug router string radius servers attribute string value integer number](#)
Tree [integer](#)
Max. Range 0 to 4294967295
Notes The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.
Introduced 22.5.R1
Platforms All

prefix (ipv4-prefix | ipv6-prefix)

Synopsis Attribute value specified as an IP prefix
Context [debug router string radius servers attribute string value prefix \(ipv4-prefix | ipv6-prefix\)](#)
Tree [prefix](#)
Notes The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.
Introduced 22.5.R1
Platforms All

string string

Synopsis Attribute value specified as a string
Context [debug router string radius servers attribute string value string string](#)

Tree	string
String Length	1 to 253
Notes	The following elements are part of a choice: address , hex , integer , prefix , or string .
Introduced	22.5.R1
Platforms	All

vendor-specific

Synopsis	Enter the vendor-specific context
Context	debug router string radius servers attribute string vendor-specific
Tree	vendor-specific
Introduced	22.5.R1
Platforms	All

encoding

Synopsis	Enter the encoding context
Context	debug router string radius servers attribute string vendor-specific encoding
Tree	encoding
Introduced	22.5.R1
Platforms	All

length-size *number*

Synopsis	Size of the vendor-length field
Context	debug router string radius servers attribute string vendor-specific encoding length-size number
Tree	length-size
Range	0 to 2
Default	1
Introduced	22.5.R1
Platforms	All

type-size *number*

Synopsis	Size of the vendor-type field
Context	debug router <i>string</i> radius servers attribute <i>string</i> vendor-specific encoding <i>type-size number</i>
Tree	type-size
Range	1 to 4
Default	1
Introduced	22.5.R1
Platforms	All

vendor (*number* | *keyword*)

Synopsis	RADIUS vendor ID
Context	debug router <i>string</i> radius servers attribute <i>string</i> vendor-specific vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	22.5.R1
Platforms	All

vendor-type *number*

Synopsis	RADIUS vendor specific type
Context	debug router <i>string</i> radius servers attribute <i>string</i> vendor-specific vendor-type <i>number</i>
Tree	vendor-type
Max. Range	0 to 4294967295
Introduced	22.5.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the RADIUS debug output
Context	debug router <i>string</i> radius servers detail-level <i>keyword</i>
Tree	detail-level

Default	medium
Options	low, medium, high
Introduced	22.5.R1
Platforms	All

packet-types

Synopsis	Enter the packet-types context
Context	debug router <i>string</i> radius servers packet-types
Tree	packet-types
Introduced	22.7.R1
Platforms	All

accounting *boolean*

Synopsis	Debug accounting packets
Context	debug router <i>string</i> radius servers packet-types accounting <i>boolean</i>
Tree	accounting
Default	true
Introduced	22.7.R1
Platforms	All

authentication *boolean*

Synopsis	Debug authentication packets
Context	debug router <i>string</i> radius servers packet-types authentication <i>boolean</i>
Tree	authentication
Default	true
Introduced	22.7.R1
Platforms	All

coa *boolean*

Synopsis	Debug CoA and DM packets
Context	debug router <i>string</i> radius servers packet-types coa <i>boolean</i>

Tree	coa
Default	true
Introduced	22.7.R1
Platforms	All

server-address [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for server-address
Context	debug router string radius servers server-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	server-address
Max. Instances	10
Introduced	22.5.R1
Platforms	All

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	debug router string radius servers server-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	server-address
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

vrrp

Synopsis	Enter the vrrp context
Context	debug router string vrrp
Tree	vrrp
Introduced	22.10.R1
Platforms	All

events

Synopsis	Enter the events context
Context	debug router <i>string</i> vrrp events
Tree	events
Description	Commands in this context enable debugging for VRRP events and state changes.
Introduced	22.10.R1
Platforms	All

all-events

Synopsis	Enable the all-events context
Context	debug router <i>string</i> vrrp events all-events
Tree	all-events
Introduced	22.10.R1
Platforms	All

interface [[interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	debug router <i>string</i> vrrp events interface <i>string</i>
Tree	interface
Introduced	22.10.R1
Platforms	All

[[interface-name](#)] *string*

Synopsis	Interface name
Context	debug router <i>string</i> vrrp events interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	debug router <i>string</i> vrrp events interface <i>string</i> ipv4
Tree	ipv4
Introduced	22.10.R1
Platforms	All

vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for vrid
Context	debug router <i>string</i> vrrp events interface <i>string</i> ipv4 vrid <i>number</i>
Tree	vrid
Max. Instances	4
Introduced	22.10.R1
Platforms	All

[[virtual-router-id](#)] *number*

Synopsis	Virtual router ID to debug
Context	debug router <i>string</i> vrrp events interface <i>string</i> ipv4 vrid <i>number</i>
Tree	vrid
Range	0 to 255
Default	0
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	debug router <i>string</i> vrrp events interface <i>string</i> ipv6
Tree	ipv6
Introduced	22.10.R1
Platforms	All

vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for vrid
Context	debug router string vrrp events interface string ipv6 vrid number
Tree	vrid
Max. Instances	4
Introduced	22.10.R1
Platforms	All

[virtual-router-id] *number*

Synopsis	Virtual router ID to debug
Context	debug router string vrrp events interface string ipv6 vrid number
Tree	vrid
Range	0 to 255
Default	0
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enter the packet context
Context	debug router string vrrp packet
Tree	packet
Description	Commands in this context enable debugging for VRRP packet exchanges.
Introduced	22.10.R1
Platforms	All

all-packets

Synopsis	Enable the all-packets context
Context	debug router string vrrp packet all-packets
Tree	all-packets

Introduced 22.10.R1
Platforms All

interface [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance
Context [debug router string vrrp packet interface string](#)
Tree [interface](#)
Introduced 22.10.R1
Platforms All

[interface-name] *string*

Synopsis Interface name
Context [debug router string vrrp packet interface string](#)
Tree [interface](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 22.10.R1
Platforms All

ipv4

Synopsis Enter the **ipv4** context
Context [debug router string vrrp packet interface string ipv4](#)
Tree [ipv4](#)
Introduced 22.10.R1
Platforms All

vrid [[virtual-router-id](#)] *number*

Synopsis Add a list entry for **vrid**
Context [debug router string vrrp packet interface string ipv4 vrid number](#)
Tree [vrid](#)

Max. Instances	4
Introduced	22.10.R1
Platforms	All

[virtual-router-id] number

Synopsis	Virtual router ID to debug
Context	debug router string vrrp packet interface string ipv4 vrid number
Tree	vrid
Range	0 to 255
Default	0
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	debug router string vrrp packet interface string ipv6
Tree	ipv6
Introduced	22.10.R1
Platforms	All

vrid [virtual-router-id] number

Synopsis	Add a list entry for vrid
Context	debug router string vrrp packet interface string ipv6 vrid number
Tree	vrid
Max. Instances	4
Introduced	22.10.R1
Platforms	All

[virtual-router-id] *number*

Synopsis	Virtual router ID to debug
Context	debug router <i>string</i> vrrp packet interface <i>string</i> ipv6 vrid <i>number</i>
Tree	vrid
Range	0 to 255
Default	0
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

wpp

Synopsis	Enter the wpp context
Context	debug router <i>string</i> wpp
Tree	wpp
Introduced	22.7.R1
Platforms	All

packets

Synopsis	Enable the packets context
Context	debug router <i>string</i> wpp packets
Tree	packets
Introduced	22.7.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the WPP packet debug output
Context	debug router <i>string</i> wpp packets detail-level <i>keyword</i>
Tree	detail-level
Default	low
Options	low, high
Introduced	22.7.R1
Platforms	All

portal [*name*] *string*

Synopsis	Enter the portal list instance
Context	debug router <i>string</i> wpp portal <i>string</i>
Tree	portal
Introduced	22.7.R1
Platforms	All

[name] *string*

Synopsis	WPP portal name
Context	debug router <i>string</i> wpp portal <i>string</i>
Tree	portal
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

packets

Synopsis	Enter the packets context
Context	debug router <i>string</i> wpp portal <i>string</i> packets
Tree	packets
Introduced	22.7.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the WPP packet debug output
Context	debug router <i>string</i> wpp portal <i>string</i> packets detail-level <i>keyword</i>
Tree	detail-level
Default	low
Options	low, high
Introduced	22.7.R1
Platforms	All

service

Synopsis	Enter the service context
Context	debug service
Tree	service
Introduced	22.10.R1
Platforms	All

vpls [[service-name](#)] *string*

Synopsis	Enter the vpls list instance
Context	debug service vpls string
Tree	vpls
Introduced	22.10.R1
Platforms	All

[[service-name](#)] *string*

Synopsis	Administrative service name
Context	debug service vpls string
Tree	vpls
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	debug service vpls string igmp-snooping
Tree	igmp-snooping
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug service vpls <i>string</i> igmp-snooping packet
Tree	packet
Introduced	22.10.R1
Platforms	All

detail *keyword*

Synopsis	Detail level of the debug output
Context	debug service vpls <i>string</i> igmp-snooping packet detail <i>keyword</i>
Tree	detail
Default	medium
Options	low, medium, high
Introduced	22.10.R1
Platforms	All

dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	debug service vpls <i>string</i> igmp-snooping packet dropped <i>boolean</i>
Tree	dropped
Default	true
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug service vpls <i>string</i> igmp-snooping packet egress <i>boolean</i>
Tree	egress
Default	true
Introduced	22.10.R1
Platforms	All

evpn-mpls *boolean*

Synopsis	Allow debugging for EVPN-MPLS destinations
Context	<code>debug service vpls string igmp-snooping packet evpn-mpls boolean</code>
Tree	<code>evpn-mpls</code>
Default	false
Introduced	22.10.R1
Platforms	All

evpn-vxlan [`ip-address`] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) `vni number`

Synopsis	Add a list entry for evpn-vxlan
Context	<code>debug service vpls string igmp-snooping packet evpn-vxlan (ipv4-address-no-zone ipv6-address-no-zone) vni number</code>
Tree	<code>evpn-vxlan</code>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[`ip-address`] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the VXLAN Tunnel Endpoint
Context	<code>debug service vpls string igmp-snooping packet evpn-vxlan (ipv4-address-no-zone ipv6-address-no-zone) vni number</code>
Tree	<code>evpn-vxlan</code>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

vni number

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	<code>debug service vpls string igmp-snooping packet evpn-vxlan (ipv4-address-no-zone ipv6-address-no-zone) vni number</code>
Tree	<code>evpn-vxlan</code>

Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	debug service vpls <i>string</i> igmp-snooping packet ingress <i>boolean</i>
Tree	ingress
Default	true
Introduced	22.10.R1
Platforms	All

mac [[mac-address](#)] *string*

Synopsis	Add a list entry for mac
Context	debug service vpls <i>string</i> igmp-snooping packet mac <i>string</i>
Tree	mac
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[mac-address] *string*

Synopsis	MAC address
Context	debug service vpls <i>string</i> igmp-snooping packet mac <i>string</i>
Tree	mac
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

sap [**sap-id**] *string*

Synopsis	Add a list entry for sap
Context	debug service vpls <i>string</i> igmp-snooping packet sap <i>string</i>
Tree	sap
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
Context	debug service vpls <i>string</i> igmp-snooping packet sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

sdp-bind [**sdp-bind-id**] *string*

Synopsis	Add a list entry for sdp-bind
Context	debug service vpls <i>string</i> igmp-snooping packet sdp-bind <i>string</i>
Tree	sdp-bind
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[sdp-bind-id] *string*

Synopsis	SDP bind ID
Context	debug service vpls <i>string</i> igmp-snooping packet sdp-bind <i>string</i>
Tree	sdp-bind
String Length	3 to 16

Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

mld-snooping

Synopsis	Enter the mld-snooping context
Context	debug service vpls string mld-snooping
Tree	mld-snooping
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug service vpls string mld-snooping packet
Tree	packet
Introduced	22.10.R1
Platforms	All

detail keyword

Synopsis	Detail level of the debug output
Context	debug service vpls string mld-snooping packet detail keyword
Tree	detail
Default	medium
Options	low, medium, high
Introduced	22.10.R1
Platforms	All

dropped boolean

Synopsis	Enable tracing for dropped packets
Context	debug service vpls string mld-snooping packet dropped boolean
Tree	dropped

Default	true
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug service vpls <i>string</i> mld-snooping packet egress <i>boolean</i>
Tree	egress
Default	true
Introduced	22.10.R1
Platforms	All

evpn-mpls *boolean*

Synopsis	Allow debugging for EVPN-MPLS destinations
Context	debug service vpls <i>string</i> mld-snooping packet evpn-mpls <i>boolean</i>
Tree	evpn-mpls
Default	false
Introduced	22.10.R1
Platforms	All

evpn-vxlan [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *vni number*

Synopsis	Add a list entry for evpn-vxlan
Context	debug service vpls <i>string</i> mld-snooping packet evpn-vxlan (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) <i>vni number</i>
Tree	evpn-vxlan
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the VXLAN Tunnel Endpoint
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Context	<code>debug service vpls string mld-snooping packet evpn-vxlan (ipv4-address-no-zone ipv6-address-no-zone) vni number</code>
Tree	<code>evpn-vxlan</code>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

vni number

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	<code>debug service vpls string mld-snooping packet evpn-vxlan (ipv4-address-no-zone ipv6-address-no-zone) vni number</code>
Tree	<code>evpn-vxlan</code>
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ingress boolean

Synopsis	Enable tracing for received packets
Context	<code>debug service vpls string mld-snooping packet ingress boolean</code>
Tree	<code>ingress</code>
Default	true
Introduced	22.10.R1
Platforms	All

mac [mac-address] string

Synopsis	Add a list entry for mac
Context	<code>debug service vpls string mld-snooping packet mac string</code>
Tree	<code>mac</code>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[**mac-address**] *string*

Synopsis	MAC address
Context	debug service vpls string mld-snooping packet mac string
Tree	mac
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

sap [[sap-id](#)] *string*

Synopsis	Add a list entry for sap
Context	debug service vpls string mld-snooping packet sap string
Tree	sap
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	debug service vpls string mld-snooping packet sap string
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

sdp-bind [[sdp-bind-id](#)] *string*

Synopsis	Add a list entry for sdp-bind
Context	debug service vpls string mld-snooping packet sdp-bind string
Tree	sdp-bind

Max. Instances	8
Introduced	22.10.R1
Platforms	All

[sdp-bind-id] *string*

Synopsis	SDP bind ID
Context	debug service vpls string mld-snooping packet sdp-bind string
Tree	sdp-bind
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

pim-snooping

Synopsis	Enter the pim-snooping context
Context	debug service vpls string pim-snooping
Tree	pim-snooping
Introduced	22.10.R1
Platforms	All

events

Synopsis	Enable the events context
Context	debug service vpls string pim-snooping events
Tree	events
Introduced	22.10.R1
Platforms	All

adjacency

Synopsis	Enable the adjacency context
Context	debug service vpls string pim-snooping events adjacency

Tree	adjacency
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	22.10.R1
Platforms	All

all

Synopsis	Enable the all context
Context	debug service vpls string pim-snooping events all
Tree	all
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	22.10.R1
Platforms	All

detail boolean

Synopsis	Enable detail tracing
Context	debug service vpls string pim-snooping events all detail boolean
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	debug service vpls string pim-snooping events all group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<code>debug service vpls string pim-snooping events all source-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

db

Synopsis	Enable the db context
Context	<code>debug service vpls string pim-snooping events db</code>
Tree	<code>db</code>
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug service vpls string pim-snooping events db detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<code>debug service vpls string pim-snooping events db group-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>group-address</code>
Introduced	22.10.R1
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<code>debug service vpls string pim-snooping events db source-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

jp

Synopsis	Enable the jp context
Context	<code>debug service vpls string pim-snooping events jp</code>
Tree	<code>jp</code>
Description	Commands in this context enable debugging for PIM join and prune mechanisms.
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug service vpls string pim-snooping events jp detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<code>debug service vpls string pim-snooping events jp group-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>group-address</code>
Introduced	22.10.R1

Platforms All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address used to trace events

Context [debug service vpls string pim-snooping events jp source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [source-address](#)

Introduced 22.10.R1

Platforms All

mcs

Synopsis Enable the **mcs** context

Context [debug service vpls string pim-snooping events mcs](#)

Tree [mcs](#)

Description Commands in this context enable debugging for PIM snooping multi-chassis synchronization.

Notes The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.

Introduced 22.10.R1

Platforms All

detail *boolean*

Synopsis Enable detail tracing

Context [debug service vpls string pim-snooping events mcs detail boolean](#)

Tree [detail](#)

Default false

Introduced 22.10.R1

Platforms All

port

Synopsis Enable the **port** context

Context [debug service vpls string pim-snooping events port](#)

Tree	port
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls <i>string</i> pim-snooping events port detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	debug service vpls <i>string</i> pim-snooping events port evpn-mpls
Tree	evpn-mpls
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

sap-id *string*

Synopsis	SAP ID
Context	debug service vpls <i>string</i> pim-snooping events port sap-id <i>string</i>
Tree	sap-id
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

sdp-bind-id *string*

Synopsis	SDP bind ID
Context	debug service vpls <i>string</i> pim-snooping events port sdp-bind-id <i>string</i>
Tree	sdp-bind-id
String Length	3 to 16
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

vni *number*

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	debug service vpls <i>string</i> pim-snooping events port vni <i>number</i>
Tree	vni
Range	1 to 16777215
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

vtep (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the tunnel endpoint
Context	debug service vpls <i>string</i> pim-snooping events port vtep (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	vtep
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

red

Synopsis	Enable the red context
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Context	debug service vpls string pim-snooping events red
Tree	red
Description	Commands in this context enable debugging for PIM messages sent to the standby CPM.
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls string pim-snooping events red detail boolean
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug service vpls string pim-snooping packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Allow tracing on all ports
Context	debug service vpls string pim-snooping packet all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or port .
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable PIM debugging for all packets
Context	debug service vpls <i>string</i> pim-snooping packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1
Platforms	All

packet-types

Synopsis	Enter the packet-types context
Context	debug service vpls <i>string</i> pim-snooping packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1
Platforms	All

hello *boolean*

Synopsis	Debug Hello packets
Context	debug service vpls <i>string</i> pim-snooping packet packet-types hello <i>boolean</i>
Tree	hello
Default	false
Introduced	22.10.R1
Platforms	All

jp *boolean*

Synopsis	Debug join and prune packets
Context	debug service vpls <i>string</i> pim-snooping packet packet-types jp <i>boolean</i>
Tree	jp
Default	false
Introduced	22.10.R1
Platforms	All

port

Synopsis	Enable the port context
Context	<code>debug service vpls string pim-snooping packet port</code>
Tree	<code>port</code>
Notes	The following elements are part of a choice: all-origins or port .
Introduced	22.10.R1
Platforms	All

evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	<code>debug service vpls string pim-snooping packet port evpn-mpls</code>
Tree	<code>evpn-mpls</code>
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

sap-id *string*

Synopsis	SAP ID
Context	<code>debug service vpls string pim-snooping packet port sap-id string</code>
Tree	<code>sap-id</code>
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

sdp-bind-id *string*

Synopsis	SDP bind ID
Context	<code>debug service vpls string pim-snooping packet port sdp-bind-id string</code>
Tree	<code>sdp-bind-id</code>

String Length	3 to 16
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

vni number

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	debug service vpls <i>string</i> pim-snooping packet port vni number
Tree	vni
Range	1 to 16777215
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

vtep (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	IP address of the tunnel endpoint
Context	debug service vpls <i>string</i> pim-snooping packet port vtep (ipv4-address-no-zone ipv6-address-no-zone)
Tree	vtep
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	debug subscriber-mgmt
Tree	subscriber-mgmt
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp

Synopsis	Enter the gtp context
Context	debug subscriber-mgmt gtp
Tree	gtp
Description	This command enables the context to configure box-wide GTP parameters and profiles.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

events *boolean*

Synopsis	Enable GTP event debugging
Context	debug subscriber-mgmt gtp events <i>boolean</i>
Tree	events
Default	false
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi [[imsi-instance](#)] *string*

Synopsis	Add a list entry for imsi
Context	debug subscriber-mgmt gtp imsi <i>string</i>
Tree	imsi
Max. Instances	8
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[imsi-instance] *string*

Synopsis	IMSI of GTP sessions to debug
Context	debug subscriber-mgmt gtp imsi <i>string</i>
Tree	imsi
String Length	0 to 15
Notes	This element is part of a list key.

Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis	Enable the packets context
Context	debug subscriber-mgmt gtp packets
Tree	packets
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

detail-level *keyword*

Synopsis	Detail level of the GTP packet debug output
Context	debug subscriber-mgmt gtp packets detail-level <i>keyword</i>
Tree	detail-level
Default	low
Options	high, low
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	GTP packets to include in the debug output
Context	debug subscriber-mgmt gtp packets mode <i>keyword</i>
Tree	mode
Default	dropped
Options	all, dropped
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [router string](#)

Synopsis	Enter the peer list instance
Context	debug subscriber-mgmt gtp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router string

Tree	peer
Max. Instances	8
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Remote IP address of the GTP peer
Context	debug subscriber-mgmt gtp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router string
Tree	peer
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router string

Synopsis	Router instance where GTP peer packets are expected
Context	debug subscriber-mgmt gtp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router string
Tree	peer
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port number

Synopsis	UDP source (Rx packets) / destination (Tx packets) port
Context	debug subscriber-mgmt gtp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router string udp-port number
Tree	udp-port
Description	This command configures the UDP source port of received packets or the UDP destination port of transmitted packets.
Range	0 1 to 65535
Default	2123

Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

system

Synopsis	Enter the system context
Context	debug system
Tree	system
Introduced	21.5.R1
Platforms	All

grpc

Synopsis	Enter the grpc context
Context	debug system grpc
Tree	grpc
Introduced	21.5.R1
Platforms	All

client

Synopsis	Enter the client context
Context	debug system grpc client
Tree	client
Introduced	21.5.R1
Platforms	All

all

Synopsis	Enable debugging for all clients
Context	debug system grpc client all
Tree	all
Notes	The following elements are part of a choice: all or ip-address .
Introduced	21.5.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address for debugging
Context	debug system grpc client ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: all or ip-address .
Introduced	21.5.R1
Platforms	All

type *keyword*

Synopsis	RPCs or service types to debug
Context	debug system grpc type keyword
Tree	type
Options	gnmi-capabilities, gnmi-get, gnmi-set, gnmi-subscribe, rib-api-modify, rib-api-getversion, gnoi-cert-mgmt-rpcs, gnoi-file-rpcs, gnoi-system-rpcs
Max. Instances	10
Introduced	21.5.R1
Platforms	All

grpc-tunnel

Synopsis	Enter the grpc-tunnel context
Context	debug system grpc-tunnel
Tree	grpc-tunnel
Introduced	22.10.R1
Platforms	All

tunnel

Synopsis	Enter the tunnel context
Context	debug system grpc-tunnel tunnel
Tree	tunnel
Introduced	22.10.R1

Platforms All

all

Synopsis Set debug output for all tunnels
Context [debug system grpc-tunnel tunnel all](#)
Tree [all](#)
Notes The following elements are part of a choice: **all** or **name**.
Introduced 22.10.R1
Platforms All

name *string*

Synopsis Name of the tunnel to restrict the debug output
Context [debug system grpc-tunnel tunnel name *string*](#)
Tree [name](#)
String Length 1 to 32
Notes The following elements are part of a choice: **all** or **name**.
Introduced 22.10.R1
Platforms All

http-connections

Synopsis Enable the **http-connections** context
Context [debug system http-connections](#)
Tree [http-connections](#)
Introduced 22.10.R1
Platforms All

client-ip-prefix (*ipv4-prefix* | *ipv6-prefix* | *keyword*)

Synopsis HTTP client IP prefix
Context [debug system http-connections client-ip-prefix \(*ipv4-prefix* | *ipv6-prefix* | *keyword*\)](#)
Tree [client-ip-prefix](#)
Default any

Options	any
Introduced	22.10.R1
Platforms	All

management-interface

Synopsis	Enter the management-interface context
Context	debug system management-interface
Tree	management-interface
Introduced	21.5.R1
Platforms	All

netconf *keyword*

Synopsis	Debugging verbosity for NETCONF
Context	debug system management-interface netconf <i>keyword</i>
Tree	netconf
Options	error, warning, info
Introduced	21.5.R1
Platforms	All

remote-management

Synopsis	Enter the remote-management context
Context	debug system management-interface remote-management
Tree	remote-management
Introduced	21.7.R1
Platforms	All

manager

Synopsis	Enter the manager context
Context	debug system management-interface remote-management manager
Tree	manager
Introduced	21.7.R1

Platforms All

all

Synopsis Enable debug of all managers
Context [debug system management-interface remote-management manager all](#)
Tree [all](#)
Notes The following elements are part of a choice: **all** or **manager-name**.
Introduced 21.7.R1
Platforms All

manager-name [[name](#)] *string*

Synopsis Add a list entry for **manager-name**
Context [debug system management-interface remote-management manager manager-name string](#)
Tree [manager-name](#)
Notes The following elements are part of a choice: **all** or **manager-name**.
Introduced 21.7.R1
Platforms All

[name] *string*

Synopsis Manager name
Context [debug system management-interface remote-management manager manager-name string](#)
Tree [manager-name](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 21.7.R1
Platforms All

service *boolean*

Synopsis Enable service level debug
Context [debug system management-interface remote-management service boolean](#)

Tree	service
Default	false
Introduced	21.7.R1
Platforms	All

wlan-gw

Synopsis	Enter the wlan-gw context
Context	debug wlan-gw
Tree	wlan-gw
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

group [*id*] *number*

Synopsis	Enter the group list instance
Context	debug wlan-gw group <i>number</i>
Tree	group
Max. Instances	1
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*id*] *number*

Synopsis	WLAN-GW group ID in the system
Context	debug wlan-gw group <i>number</i>
Tree	group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-ap-mac

Synopsis	Enable the learn-ap-mac context
Context	<code>debug wlan-gw group number learn-ap-mac</code>
Tree	<code>learn-ap-mac</code>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-remote-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote tunnel endpoint
Context	<code>debug wlan-gw group number learn-ap-mac tunnel-remote-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)</code>
Tree	<code>tunnel-remote-address</code>
Notes	This element is mandatory.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

statistic [*type*] *keyword name string*

Synopsis	Enter the statistic list instance
Context	<code>debug wlan-gw group number statistic keyword name string</code>
Tree	<code>statistic</code>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*type*] *keyword*

Synopsis	Type of statistic to trace
Context	<code>debug wlan-gw group number statistic keyword name string</code>
Tree	<code>statistic</code>
Options	packet-error, host-error, bd-error, forwarding, reassembly, aa, radius, arp, dhcp4, dhcp6, icmp4, icmp6
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Name of the statistic to trace
Context	<code>debug wlan-gw group number statistic keyword name string</code>
Tree	<code>statistic</code>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

capture-packet *boolean*

Synopsis	Set a single packet capture trigger for the statistic
Context	<code>debug wlan-gw group number statistic keyword name string capture-packet boolean</code>
Tree	<code>capture-packet</code>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ue

Synopsis	Enable the ue context
Context	<code>debug wlan-gw group number ue</code>
Tree	<code>ue</code>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bridge-domain *number*

Synopsis	Bridge domain of the UEs to debug
Context	<code>debug wlan-gw group number ue bridge-domain number</code>
Tree	<code>bridge-domain</code>
Range	1 to 4294967295
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *string*

Synopsis	MAC address of the UE to debug
Context	debug wlan-gw group number ue mac-address string
Tree	mac-address
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocols

Synopsis	Enable the protocols context
Context	debug wlan-gw group number ue protocols
Tree	protocols
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp *boolean*

Synopsis	Enable debugging for the ARP protocol
Context	debug wlan-gw group number ue protocols arp boolean
Tree	arp
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp4 *boolean*

Synopsis	Enable debugging for the DHCP protocol
Context	debug wlan-gw group number ue protocols dhcp4 boolean
Tree	dhcp4
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6 boolean

Synopsis	Enable debugging for the DHCPv6 protocol
Context	debug wlan-gw group number ue protocols dhcp6 boolean
Tree	dhcp6
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp4 boolean

Synopsis	Enable debugging for the ICMP protocol
Context	debug wlan-gw group number ue protocols icmp4 boolean
Tree	icmp4
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6 boolean

Synopsis	Enable debugging for the ICMPv6 protocol
Context	debug wlan-gw group number ue protocols icmp6 boolean
Tree	icmp6
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius boolean

Synopsis	Enable debugging for the RADIUS protocol
Context	debug wlan-gw group number ue protocols radius boolean
Tree	radius
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.13 esa commands

```
configure
- esa number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - host-port string
  - vm number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cores number
    - description string
    - host-port reference
    - memory number
    - vm-type keyword
```

3.13.1 esa command descriptions

esa [[esa-id](#)] *number*

Synopsis	Enter the esa list instance
Context	configure esa <i>number</i>
Tree	esa
Description	Commands in this context configure the Extended Services Appliance (ESA) instance.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[esa-id] *number*

Synopsis	ESA ID
Context	configure esa <i>number</i>
Tree	esa
Range	1 to 16
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the ESA
Context	configure esa <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description
----------	------------------

Context	configure <i>esa number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

host-port [*host-port*] *string*

Synopsis	Add a list entry for host-port
Context	configure <i>esa number host-port string</i>
Tree	<i>host-port</i>
Max. Instances	4
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[host-port] *string*

Synopsis	Ethernet port associated with the ESA
Context	configure <i>esa number host-port string</i>
Tree	<i>host-port</i>
Description	This command configures an Ethernet port associated with the ESA-VM instance. The port ID must be the same as the port ID associated with the ESA context on which the ESA-VM is configured.
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm [*vm-id*] *number*

Synopsis	Enter the vm list instance
Context	configure <i>esa number vm number</i>
Tree	<i>vm</i>
Description	Commands in this context configure the ESA-VM instance.
Introduced	20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[vm-id] number

Synopsis VM ID
 Context **configure** *esa number vm number*
 Tree *vm*
 Range 1 to 4
 Notes This element is part of a list key.
 Introduced 20.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state keyword

Synopsis Administrative state of the ESA-VM instance
 Context **configure** *esa number vm number admin-state keyword*
 Tree *admin-state*
 Description This command configures the administrative state of the ESA-VM instance. The state affects the operational state of the instance and all entities contained within the instance; however, configuration settings or statistics are not changed, reset, or removed.
 Default disable
 Options enable, disable
 Introduced 20.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

cores number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of CPU physical cores allocated to the ESA-VM
 Context **configure** *esa number vm number cores number*
 Tree *cores*
 Description This command specifies the number of CPU physical cores allocated to the ESA-VM instance. If an invalid value is configured for the number of cores, the VM remains in a failed state.

Range	0 to 128
Default	0
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description
Context	configure <i>esa number vm number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

host-port *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ethernet port associated with the ESA-VM instance
Context	configure <i>esa number vm number host-port reference</i>
Tree	<i>host-port</i>
Description	This command configures an Ethernet port associated with the ESA-VM instance. The port ID must be the same as the port ID associated with the ESA context on which the ESA-VM is configured.
Reference	configure <i>esa number host-port string</i>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

memory *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of memory allocated to the ESA-VM
----------	--

Context	configure <i>esa number vm number memory number</i>
Tree	<i>memory</i>
Range	0 to 256
Default	0
Units	gigabytes
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESA-VM type
Context	configure <i>esa number vm number vm-type keyword</i>
Tree	<i>vm-type</i>
Options	aa, bb, tunnel, video
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

3.14 eth-cfm commands

```

configure
- eth-cfm
- apply-groups reference
- apply-groups-exclude reference
- default-domain
- apply-groups reference
- apply-groups-exclude reference
- bridge-identifier string vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- id-permission keyword
- mhf-creation
- level (number | keyword)
- mhf-type keyword
- mip-ltr-priority (number | keyword)
- domain string
- apply-groups reference
- apply-groups-exclude reference
- association string
- apply-groups reference
- apply-groups-exclude reference
- auto-mep-discovery boolean
- bridge-identifier string
- apply-groups reference
- apply-groups-exclude reference
- id-permission keyword
- mhf-creation keyword
- mip-ltr-priority number
- vlan number
- ccm-hold-time
- down number
- ccm-interval keyword
- facility-id-permission keyword
- icc-based string
- integer number
- ma-index number
- remote-mep number
- apply-groups reference
- apply-groups-exclude reference
- remote-mac string
- string string
- vid number
- vpn-id string
- dns string
- format keyword
- level number
- mac string
- md-index number
- name string

```

3.14.1 eth-cfm command descriptions

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure eth-cfm
Tree	eth-cfm
Description	Commands in this context configure ETH-CFM parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default-domain

Synopsis	Enter the default-domain context
Context	configure eth-cfm default-domain
Tree	default-domain
Description	<p>Commands in this context configure MIP creation parameters per index (bridge-identifier <i>bridge-id</i> vlan <i>vlan-id</i>) if the MIP creation statement exists as part of the service connection.</p> <p>The MIP creation statement must be present on the connection before any configuration can occur for a MIP under this context. Whether a MIP uses the default-domain creation method is determined by the MIP authoritative nature of the eth-cfm domain association. The eth-cfm default-domain MIP creation is considered only if the eth-cfm domain association is not authoritative.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bridge-identifier [[bridge-name](#)] *string* **vlan** (*number* | *keyword*)

Synopsis	Enter the bridge-identifier list instance
Context	configure eth-cfm default-domain bridge-identifier <i>string</i> vlan (<i>number</i> <i>keyword</i>)
Tree	bridge-identifier
Description	<p>Commands in this context configure the references required to link the CFM function with the service context, allowing the entry of MIP-specific parameters for the index in the default domain table.</p> <p>The info and info detail commands do not display any entries for the instance unless they have previously been accessed. The possible candidates for the instance can be located using the show eth-cfm default-domain command.</p>

Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[bridge-name] *string*

Synopsis Bridge name in the default domain table
Context **configure eth-cfm default-domain bridge-identifier string vlan** (*number | keyword*)
Tree [bridge-identifier](#)
Description This command specifies the bridge name to enter in the default domain associated with the MIP.
String Length 1 to 64
Notes This element is part of a list key.
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan (*number | keyword*)

Synopsis VLAN ID for the default domain
Context **configure eth-cfm default-domain bridge-identifier string vlan** (*number | keyword*)
Tree [bridge-identifier](#)
Description This command configures a VLAN ID for the default domain.
Range 1 to 4094
Options none
Notes This element is part of a list key.
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

id-permission *keyword*

Synopsis Strategy for the inclusion of Sender ID TLV information
Context **configure eth-cfm default-domain bridge-identifier string vlan** (*number | keyword*) [id-permission](#) *keyword*
Tree [id-permission](#)
Description This command specifies how the Sender ID TLV information is included for installed MEPs and MIPs. The Sender ID TLV is supported for ETH-CCM, ETH-LB, and ETH-LB PDUs.

Default	defer
Options	none, chassis, defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mhf-creation

Synopsis	Enter the mhf-creation context
Context	configure eth-cfm default-domain bridge-identifier string vlan (<i>number</i> <i>keyword</i>) mhf-creation
Tree	mhf-creation
Description	Commands in this context configure the MIP method of creation. MIP creation mode and other factors are part of the MIP creation authority (association or default-domain) logic. The MIP creation algorithm may result in multiple potential MIPs. Only the lowest-level valid MIP is instantiated.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level (*number* | *keyword*)

Synopsis	Requested level of the MIP
Context	configure eth-cfm default-domain bridge-identifier string vlan (<i>number</i> <i>keyword</i>) mhf-creation level (<i>number</i> <i>keyword</i>)
Tree	level
Description	This command configures the requested level of the MIP. This is used by the MIP creation algorithm to determine its validity in comparison to other ETH-CFM MIPs and MEPs. If the level is configured as defer , the level value is inherited from the global read-only system values.
Range	0 to 7
Default	defer
Options	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mhf-type *keyword*

Synopsis	MIP creation mode
----------	-------------------

Context	configure eth-cfm default-domain bridge-identifier <i>string</i> vlan (<i>number</i> <i>keyword</i>) mhf-creation mhf-type <i>keyword</i>
Tree	mhf-type
Default	defer
Options	none, default, explicit, defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip-ltr-priority (*number* | *keyword*)

Synopsis	Priority of the Linktrace Response
Context	configure eth-cfm default-domain bridge-identifier <i>string</i> vlan (<i>number</i> <i>keyword</i>) mip-ltr-priority (<i>number</i> <i>keyword</i>)
Tree	mip-ltr-priority
Description	This command allows the operator to set the priority of the Linktrace Response Message (ETH-LTR) from a MIP for this association.
Range	0 to 7
Default	defer
Options	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

domain [**md-admin-name**] *string*

Synopsis	Enter the domain list instance
Context	configure eth-cfm domain <i>string</i>
Tree	domain
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[md-admin-name] *string*

Synopsis	Unique domain name
Context	configure eth-cfm domain <i>string</i>
Tree	domain
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

association [[ma-admin-name](#)] *string*

Synopsis	Enter the association list instance
Context	configure eth-cfm domain <i>string</i> association <i>string</i>
Tree	association
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[ma-admin-name] *string*

Synopsis	Domain association name
Context	configure eth-cfm domain <i>string</i> association <i>string</i>
Tree	association
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

auto-mep-discovery *boolean*

Synopsis	Enable the ability to auto-discover remote MEPs in the network
Context	configure eth-cfm domain <i>string</i> association <i>string</i> auto-mep-discovery <i>boolean</i>
Tree	auto-mep-discovery
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bridge-identifier [[bridge-name](#)] *string*

Synopsis	Enter the bridge-identifier list instance
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i>

Tree	bridge-identifier
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[bridge-name] *string*

Synopsis	Bridge name that links to the service
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i>
Tree	bridge-identifier
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

id-permission *keyword*

Synopsis	Strategy for the inclusion of Sender ID TLV information
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i> id-permission <i>keyword</i>
Tree	id-permission
Description	This command specifies how the Sender ID TLV information is included for installed MEPs and MIPs. The Sender ID TLV is supported for ETH-CCM, ETH-LB, and ETH-LB PDUs.
Default	none
Options	none, chassis
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mhf-creation *keyword*

Synopsis	MIP method of creation
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i> mhf-creation <i>keyword</i>
Tree	mhf-creation

Default	none
Options	none, default, explicit, static
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip-ltr-priority *number*

Synopsis	Priority of the Linktrace Response Message (ETH-LTR) from a MIP
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i> mip-ltr-priority <i>number</i>
Tree	mip-ltr-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan *number*

Synopsis	VLAN ID for the default domain index
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i> vlan <i>number</i>
Tree	vlan
Range	1 to 4094
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-hold-time

Synopsis	Enter the ccm-hold-time context
Context	configure eth-cfm domain <i>string</i> association <i>string</i> ccm-hold-time
Tree	ccm-hold-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

down *number*

Synopsis	Additional time before a MEP declares a fault, in CCM timeout conditions
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Context	configure eth-cfm domain string association string ccm-hold-time down number
Tree	down
Range	1 to 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-interval keyword

Synopsis	CCM transmission interval for all MEPs in association
Context	configure eth-cfm domain string association string ccm-interval keyword
Tree	ccm-interval
Default	10s
Options	300hz, 10ms, 100ms, 1s, 10s, 60s, 600s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-id-permission keyword

Synopsis	Sender ID TLV information for facility base MEPs
Context	configure eth-cfm domain string association string facility-id-permission keyword
Tree	facility-id-permission
Default	none
Options	none, chassis
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

icc-based string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in ICC-based format
Context	configure eth-cfm domain string association string icc-based string
Tree	icc-based

String Length	8 to 13
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

integer number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in integer format
Context	configure eth-cfm domain string association string integer number
Tree	integer
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-index number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association (MA) table index
Context	configure eth-cfm domain string association string ma-index number
Tree	ma-index
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-mep [mep-id] number

Synopsis	Enter the remote-mep list instance
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Context	configure eth-cfm domain string association string remote-mep number
Tree	remote-mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[mep-id] number

Synopsis	Remote MEP ID
Context	configure eth-cfm domain string association string remote-mep number
Tree	remote-mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-mac string

Synopsis	Remote MAC Address for transmitting CFM packets to remote MEPs
Context	configure eth-cfm domain string association string remote-mep number remote-mac string
Tree	remote-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

string string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in raw ASCII string format
Context	configure eth-cfm domain string association string string string
Tree	string
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vid number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Primary VLAN ID for the Maintenance Association name
Context **configure eth-cfm domain string association string vid number**
Tree **vid**
Range 0 to 4094
Notes The following elements are part of a mandatory choice: **icc-based**, **integer**, **string**, **vid**, or **vpn-id**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vpn-id string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPN ID for the Maintenance Association name
Context **configure eth-cfm domain string association string vpn-id string**
Tree **vpn-id**
String Length 0 to 15
Notes The following elements are part of a mandatory choice: **icc-based**, **integer**, **string**, **vid**, or **vpn-id**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dns string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Domain name like text string derived from a DNS name
Context	configure <i>eth-cfm domain string dns string</i>
Tree	<i>dns</i>
String Length	1 to 43
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

format keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance domain name not to be provided
Context	configure <i>eth-cfm domain string format keyword</i>
Tree	<i>format</i>
Options	none
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Domain Level (MD Level)
Context	configure <i>eth-cfm domain string level number</i>
Tree	<i>level</i>
Range	0 to 7

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance domain MAC name
Context	configure eth-cfm domain string mac string
Tree	mac
String Length	13 to 23
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-index number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	The index of the Maintenance Domain (MD)
Context	configure eth-cfm domain string md-index number
Tree	md-index
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Domain name
Context	configure eth-cfm domain <i>string name string</i>
Tree	<i>name</i>
String Length	1 to 43
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

3.15 eth-ring commands

```

configure
- eth-ring number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- ccm-hold-time
- down number
- up number
- compatible-version number
- description string
- guard-time number
- node-id string
- path string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- eth-cfm
- mep md-admin-name reference ma-admin-name reference mep-id number
- admin-state keyword
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- control-mep boolean
- description string
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- port-and-raps-tag string
- rpl-end boolean
- revert-time number
- rpl-node keyword
- sub-ring
- interconnect
- propagate-topology-change boolean
- ring-id reference
- vpls
- type keyword

```

3.15.1 eth-ring command descriptions

eth-ring [ring-index] *number*

Synopsis	Enter the eth-ring list instance
Context	configure eth-ring number
Tree	eth-ring
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[ring-index] *number*

Synopsis	Ring ID
Context	configure eth-ring number
Tree	eth-ring
Range	1 to 128
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the Ethernet ring
Context	configure eth-ring number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-hold-time

Synopsis	Enter the ccm-hold-time context
Context	configure eth-ring number ccm-hold-time
Tree	ccm-hold-time

Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

down *number*

Synopsis Hold timer for down event dampening
Context **configure eth-ring** *number* **ccm-hold-time** *down number*
Tree **down**
Range 1 to 5000
Units centiseconds
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

up *number*

Synopsis Hold timer for recovery reporting
Context **configure eth-ring** *number* **ccm-hold-time** *up number*
Tree **up**
Range 0 to 5000
Default 20
Units deciseconds
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

compatible-version *number*

Synopsis Compatibility version for the Ethernet ring
Context **configure eth-ring** *number* **compatible-version** *number*
Tree **compatible-version**
Range 1 to 2
Default 2
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure eth-ring number description string
Tree	description
String Length	0 to 80
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

guard-time *number*

Synopsis	Ethernet ring guard time
Context	configure eth-ring number guard-time number
Tree	guard-time
Range	1 to 20
Default	5
Units	deciseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

node-id *string*

Synopsis	MAC address of the RPL link
Context	configure eth-ring number node-id string
Tree	node-id
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

path [*path-index*] *string*

Synopsis	Enter the path list instance
Context	configure eth-ring number path string
Tree	path
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[path-index] *string*

Synopsis	Path ID
Context	configure eth-ring number path string
Tree	path
String Length	1
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the Ethernet ring path
Context	configure eth-ring number path string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure eth-ring number path string description string
Tree	description
String Length	0 to 80
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure eth-ring number path string eth-cfm
Tree	eth-cfm
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis Enter the **mep** list instance

Context **configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name reference

Synopsis Maintenance Domain (MD) name

Context **configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

Reference **configure eth-cfm domain string**

Notes This element is part of a list key.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name reference

Synopsis Maintenance Association (MA) name

Context **configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

Reference **configure eth-cfm domain string association string**

Notes This element is part of a list key.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id number

Synopsis Maintenance Endpoint (MEP) ID

Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
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Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i>
Tree	ccm
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7

Default	7
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number
Tree	ccm-padding-size
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.</p>
Range	3 to 1500
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

control-mep *boolean*

Synopsis	Enable Ethernet ring control on the MEP
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number control-mep boolean
Tree	control-mep
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string
Tree	description
String Length	1 to 80

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number
Tree	priority
Range	0 to 7
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean
Tree	rx-eth-ed

Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace
Description	<p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	all-def
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
----------	------------------------

Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold number

Synopsis	Threshold time limit for the one-way delay test
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-and-raps-tag string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port ID and Ring APS tag ID
Context	configure eth-ring number path string port-and-raps-tag string
Tree	port-and-raps-tag
String Length	1 to 45
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rpl-end *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable path as a Ring Protection Link (RPL) end
Context	configure <i>eth-ring number path string rpl-end boolean</i>
Tree	<i>rpl-end</i>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

revert-time *number*

Synopsis	Revert time for the Ethernet ring
Context	configure <i>eth-ring number revert-time number</i>
Tree	<i>revert-time</i>
Range	0 60 to 720
Default	300
Units	seconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rpl-node *keyword*

Synopsis	Ring Protection Link (RPL) type for the Ethernet ring
Context	configure <i>eth-ring number rpl-node keyword</i>
Tree	<i>rpl-node</i>
Options	owner, neighbor
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sub-ring

Synopsis	Enter the sub-ring context
Context	configure <i>eth-ring number sub-ring</i>

Tree	sub-ring
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interconnect

Synopsis	Enter the interconnect context
Context	configure eth-ring <i>number</i> sub-ring interconnect
Tree	interconnect
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

propagate-topology-change *boolean*

Synopsis	Propagate topology changes
Context	configure eth-ring <i>number</i> sub-ring interconnect propagate-topology-change <i>boolean</i>
Tree	propagate-topology-change
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ring-id *reference*

Synopsis	Ring instance of the connection ring for the sub-ring
Context	configure eth-ring <i>number</i> sub-ring interconnect ring-id <i>reference</i>
Tree	ring-id
Reference	configure eth-ring <i>number</i>
Notes	The following elements are part of a choice: ring-id or vpls .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vpls

Synopsis	Connect sub-ring to VPLS ID that contains sub-ring SAP
Context	configure eth-ring <i>number</i> sub-ring interconnect vpls

Tree	vpls
Notes	The following elements are part of a choice: ring-id or vpls .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

Synopsis	Sub-ring type
Context	configure eth-ring <i>number</i> sub-ring type <i>keyword</i>
Tree	type
Options	virtual-link, non-virtual-link
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

3.16 filter commands

```

configure
- filter
- apply-groups reference
- apply-groups-exclude reference
- dhcp-filter number
- apply-groups reference
- apply-groups-exclude reference
- default-action
- bypass-host-creation
- drop
- description string
- entry number
- action
- bypass-host-creation
- drop
- apply-groups reference
- apply-groups-exclude reference
- option
- absent
- match
- exact boolean
- hex string
- invert boolean
- string string
- number number
- present
- dhcp6-filter number
- apply-groups reference
- apply-groups-exclude reference
- default-action
- bypass-host-creation
- na boolean
- pd boolean
- drop
- description string
- entry number
- action
- bypass-host-creation
- na boolean
- pd boolean
- drop
- apply-groups reference
- apply-groups-exclude reference
- option
- absent
- match
- exact boolean
- hex string
- invert boolean
- string string
- number number
- present
- gre-tunnel-template string
- apply-groups reference
- apply-groups-exclude reference
- description string
- ipv4
- destination-address string
- gre-key (keyword | number)

```

configure filter gre-tunnel-template ipv4 skip-ttl-decrement

```

- skip-ttl-decrement boolean
- source-address string
- ipv6
- destination-address string
- gre-key keyword
- skip-hop-decrement boolean
- source-address string
- ip-exception string
- apply-groups reference
- apply-groups-exclude reference
- description string
- entry number
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
- dst-ip
- address (ipv4-address | ipv4-prefix-with-host-bits)
- mask string
- dst-port
- eq number
- gt number
- lt number
- range
- end number
- start number
- icmp
- code number
- type number
- protocol (number | keyword)
- src-ip
- address (ipv4-address | ipv4-prefix-with-host-bits)
- mask string
- src-port
- eq number
- gt number
- lt number
- range
- end number
- start number
- filter-id number
- ip-filter string
- apply-groups reference
- apply-groups-exclude reference
- chain-to-system-filter boolean
- default-action keyword
- description string
- embed
- filter reference offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- flowspec offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- group number
- router-instance string
- openflow reference offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- grt
- sap reference

```

configure filter ip-filter embed openflow system

```

- system
- vpls reference
- vprn reference
- entry number
- action
- accept
- accept-when
- pattern
- expression string
- mask string
- offset-type keyword
- offset-value number
- apply-groups reference
- apply-groups-exclude reference
- drop
- drop-when
- extracted-traffic
- packet-length
- eq number
- gt number
- lt number
- range
- end number
- start number
- pattern
- expression string
- mask string
- offset-type keyword
- offset-value number
- ttl
- eq number
- gt number
- lt number
- range
- end number
- start number
- fc keyword
- forward
- bonding-connection number
- esi-l2
- esi-value string
- vpls reference
- esi-l3
- esi-value string
- sf-ip string
- vas-interface reference
- vprn reference
- gre-tunnel reference
- lsp string
- mpls-policy
- endpoint string
- next-hop
- interface-name string
- nh-ip
- address string
- indirect boolean
- nh-ip-vrf
- address string
- indirect boolean
- router-instance string
- redirect-policy reference
- router-instance string
- sap
- sap-id reference

```

configure filter ip-filter entry action forward sap vpls

```
- vpls reference
- sdp
- sdp-bind-id string
- vpls reference
- srte-policy
- color number
- endpoint string
- vprn-target
- adv-prefix string
- bgp-nh string
- lsp string
- vprn reference
- gtp-local-breakout
- http-redirect
- allow-override boolean
- url (keyword | http-redirect-url)
- ignore-match
- l2-aware-nat-bypass boolean
- nat
- nat-policy reference
- rate-limit
- extracted-traffic
- packet-length
- eq number
- gt number
- lt number
- range
- end number
- start number
- pattern
- expression string
- mask string
- offset-type keyword
- offset-value number
- pir (number | keyword)
- pps-pir (number | keyword)
- ttl
- eq number
- gt number
- lt number
- range
- end number
- start number
- reassemble
- remark
- dscp keyword
- secondary
- apply-groups reference
- apply-groups-exclude reference
- forward
- next-hop
- nh-ip-vrf
- address string
- indirect boolean
- router-instance string
- sap
- sap-id reference
- vpls reference
- sdp
- sdp-bind-id string
- vpls reference
- vprn-target
- adv-prefix string
- bgp-nh string
```

configure filter ip-filter entry action secondary forward vprn-target lsp

```

    - lsp string
    - vprn reference
  - remark
    - dscp keyword
  - tcp-mss-adjust
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress-pbr keyword
- filter-sample boolean
- interface-sample boolean
- log reference
- match
  - destination-class number
  - dscp keyword
  - dst-ip
    - address (ipv4-address | ipv4-prefix-with-host-bits)
    - ip-prefix-list reference
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - fragment keyword
  - icmp
    - code number
    - type number
  - ip
    - address (ipv4-address | ipv4-prefix-with-host-bits)
    - ip-prefix-list reference
    - mask string
  - ip-option
    - mask number
    - type number
  - multiple-option boolean
  - option-present boolean
  - packet-length
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - protocol (number | keyword)
  - protocol-list reference
  - src-ip
    - address (ipv4-address | ipv4-prefix-with-host-bits)
    - ip-prefix-list reference
    - mask string
  - src-mac
    - address string
    - mask string

```


configure filter ip-filter entry match src-port

- **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **src-route-option** *boolean*
- **tcp-established**
- **tcp-flags**
 - **ack** *boolean*
 - **cwr** *boolean*
 - **ece** *boolean*
 - **fin** *boolean*
 - **ns** *boolean*
 - **psh** *boolean*
 - **rst** *boolean*
 - **syn** *boolean*
 - **urg** *boolean*
- **ttl**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
- **pbr-down-action-override** *keyword*
- **sample-profile** *reference*
- **sticky-dest** (*number* | *keyword*)
- **filter-id** *number*
- **scope** *keyword*
- **shared-policer** *boolean*
- **subscriber-mgmt**
 - **host-specific-entry**
 - **credit-control**
 - **range**
 - **end** *number*
 - **start** *number*
 - **filter-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **watermark**
 - **high** *number*
 - **low** *number*
 - **shared-entry**
 - **filter-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **pcc-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **watermark**
 - **high** *number*
 - **low** *number*
- **type** *keyword*
- **ipv6-exception** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*

configure filter ipv6-exception entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **match**
 - **dst-ip**
 - **address** (*ipv6-address | ipv6-prefix-with-host-bits*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **icmp**
 - **code** *number*
 - **type** *number*
 - **next-header** (*number | keyword*)
 - **port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **src-ip**
 - **address** (*ipv6-address | ipv6-prefix-with-host-bits*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
 - **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **filter-id** *number*
- **ipv6-filter** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **chain-to-system-filter** *boolean*
 - **default-action** *keyword*
 - **description** *string*
 - **embed**
 - **filter** *reference* **offset** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **flowspec** **offset** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group** *number*
 - **router-instance** *string*
 - **openflow** *reference* **offset** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **grt**
 - **sap** *reference*

configure filter ipv6-filter embed openflow system

```

- system
- vpls reference
- vprn reference
- entry number
  - action
    - accept
    - accept-when
      - pattern
        - expression string
        - mask string
        - offset-type keyword
        - offset-value number
    - apply-groups reference
    - apply-groups-exclude reference
    - drop
    - drop-when
      - extracted-traffic
      - hop-limit
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - pattern
        - expression string
        - mask string
        - offset-type keyword
        - offset-value number
      - payload-length
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
    - fc keyword
    - forward
      - bonding-connection number
      - esi-l2
        - esi-value string
        - vpls reference
      - esi-l3
        - esi-value string
        - sf-ip string
        - vas-interface reference
        - vprn reference
      - gre-tunnel reference
      - lsp string
      - mpls-policy
        - endpoint string
      - next-hop
        - nh-ip
          - address string
          - indirect boolean
        - nh-ip-vrf
          - address string
          - indirect boolean
          - router-instance string
      - redirect-policy reference
      - router-instance string
    - sap
      - sap-id reference
      - vpls reference

```

configure filter ipv6-filter entry action forward sdp

```

- sdp
  - sdp-bind-id string
  - vpls reference
- srte-policy
  - color number
  - endpoint string
- vprn-target
  - adv-prefix string
  - bgp-nh string
  - lsp string
  - vprn reference
- http-redirect
  - allow-override boolean
  - url (keyword | http-redirect-url)
- ignore-match
- nat
  - nat-policy reference
  - nat-type keyword
- rate-limit
  - extracted-traffic
  - hop-limit
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- pattern
  - expression string
  - mask string
  - offset-type keyword
  - offset-value number
- payload-length
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- pir (number | keyword)
- pps-pir (number | keyword)
- remark
  - dscp keyword
- secondary
  - apply-groups reference
  - apply-groups-exclude reference
- forward
  - next-hop
    - nh-ip-vrf
      - address string
      - indirect boolean
      - router-instance string
  - sap
    - sap-id reference
    - vpls reference
- sdp
  - sdp-bind-id string
  - vpls reference
- vprn-target
  - adv-prefix string
  - bgp-nh string
  - lsp string
  - vprn reference
- remark

```

configure filter ipv6-filter entry action secondary remark dscp

- **dscp** *keyword*
- **tcp-mss-adjust**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **egress-pbr** *keyword*
- **filter-sample** *boolean*
- **interface-sample** *boolean*
- **log** *reference*
- **match**
 - **destination-class** *number*
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **extension-header**
 - **ah** *boolean*
 - **esp** *boolean*
 - **hop-by-hop** *boolean*
 - **routing-type0** *boolean*
 - **flow-label**
 - **mask** *number*
 - **value** *number*
 - **fragment** *keyword*
 - **hop-limit**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
 - **icmp**
 - **code** *number*
 - **type** *number*
 - **ip**
 - **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
 - **next-header** (*number* | *keyword*)
 - **next-header-list** *reference*
 - **packet-length**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
 - **port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*

configure filter ipv6-filter entry match src-ip

- **src-ip**
 - **address** (*ipv6-address | ipv6-prefix-with-host-bits*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
- **src-mac**
 - **address** *string*
 - **mask** *string*
- **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **tcp-established**
- **tcp-flags**
 - **ack** *boolean*
 - **cwr** *boolean*
 - **ece** *boolean*
 - **fin** *boolean*
 - **ns** *boolean*
 - **psh** *boolean*
 - **rst** *boolean*
 - **syn** *boolean*
 - **urg** *boolean*
- **pbr-down-action-override** *keyword*
- **sample-profile** *reference*
- **sticky-dest** (*number | keyword*)
- **filter-id** *number*
- **scope** *keyword*
- **shared-policer** *boolean*
- **subscriber-mgmt**
- **host-specific-entry**
 - **credit-control**
 - **range**
 - **end** *number*
 - **start** *number*
 - **filter-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **watermark**
 - **high** *number*
 - **low** *number*
- **shared-entry**
 - **filter-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **pcc-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **watermark**
 - **high** *number*
 - **low** *number*
- **type** *keyword*
- **log** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **destination**

configure filter log destination memory

- **memory**
 - **max-entries** *number*
 - **stop-on-full** *boolean*
- **syslog**
 - **name** *reference*
 - **summary**
 - **admin-state** *keyword*
 - **summary-crit** *keyword*
- **mac-filter** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **description** *string*
 - **embed**
 - **entry** *number*
 - **action**
 - **accept**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop**
 - **forward**
 - **esi-l2**
 - **esi-value** *string*
 - **vpls** *reference*
 - **sap**
 - **sap-id** *reference*
 - **vpls** *reference*
 - **sdp**
 - **sdp-bind-id** *string*
 - **vpls** *reference*
 - **http-redirect**
 - **url** *string*
 - **ignore-match**
 - **rate-limit**
 - **pir** (*number* | *keyword*)
 - **secondary**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **forward**
 - **sap**
 - **sap-id** *reference*
 - **vpls** *reference*
 - **sdp**
 - **sdp-bind-id** *string*
 - **vpls** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **log** *reference*
 - **match**
 - **dot1p**
 - **mask** *number*
 - **priority** *number*
 - **dst-mac**
 - **address** *string*
 - **mask** *string*
 - **etype** *string*
 - **frame-type** *keyword*
 - **inner-tag**
 - **mask** *number*
 - **tag** *number*
 - **isid**
 - **range**
 - **end** *number*

configure filter mac-filter entry match isid range start

```

    - start number
    - value number
  - llc-dsap
    - dsap number
    - mask number
  - llc-ssap
    - mask number
    - ssap number
  - outer-tag
    - mask number
    - tag number
  - snap-oui keyword
  - snap-pid number
  - src-mac
    - address string
    - mask string
  - pbr-down-action-override keyword
  - sticky-dest (number | keyword)
- filter-id number
- scope keyword
- type keyword
- match-list
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-prefix-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - apply-path
      - bgp-peers number
        - apply-groups reference
        - apply-groups-exclude reference
        - group string
        - neighbor string
        - router-instance string
      - description string
      - prefix string
      - prefix-exclude string
  - ipv6-prefix-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - apply-path
      - bgp-peers number
        - apply-groups reference
        - apply-groups-exclude reference
        - group string
        - neighbor string
        - router-instance string
      - description string
      - prefix string
      - prefix-exclude string
  - port-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - port number
    - range start number end number
  - protocol-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - protocol (number | keyword)
- md-auto-id
  - filter-id-range
    - apply-groups reference

```


configure filter md-auto-id filter-id-range apply-groups-exclude

- **apply-groups-exclude** *reference*
- **end** *number*
- **start** *number*
- **redirect-policy** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **ping-test**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **drop-count** *number*
- **hold-down** *number*
- **interval** *number*
- **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **timeout** *number*
- **priority** *number*
- **unicast-rt-test**
- **notify-dest-change** *boolean*
- **router-instance** *string*
- **sticky-dest** (*number* | *keyword*)
- **redirect-policy-binding** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **binding-operator** *keyword*
- **redirect-policy** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **destination** *reference*
- **system-filter**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ip** *reference*
- **ipv6** *reference*

3.16.1 filter command descriptions

filter

Synopsis	Enter the filter context
Context	configure filter
Tree	filter
Introduced	16.0.R1
Platforms	All

dhcp-filter [[filter-id](#)] *number*

Synopsis	Enter the dhcp-filter list instance
Context	configure filter dhcp-filter <i>number</i>
Tree	dhcp-filter
Introduced	16.0.R1
Platforms	All

[\[filter-id\]](#) *number*

Synopsis	Unique DHCP filter policy ID
Context	configure filter dhcp-filter <i>number</i>
Tree	dhcp-filter
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-action

Synopsis	Enable the default-action context
Context	configure filter dhcp-filter <i>number</i> default-action
Tree	default-action
Introduced	16.0.R1

Platforms All

bypass-host-creation

Synopsis Host creation options to bypass
Context **configure filter dhcp-filter number default-action bypass-host-creation**
Tree [bypass-host-creation](#)
Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis DHCP host creation when the filter entry is matched
Context **configure filter dhcp-filter number default-action drop**
Tree [drop](#)
Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure filter dhcp-filter number description string**
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance
Context **configure filter dhcp-filter number entry number**
Tree [entry](#)

Max. Instances	10
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	DHCP filter entry index
Context	configure filter dhcp-filter <i>number entry number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the action context
Context	configure filter dhcp-filter <i>number entry number action</i>
Tree	action
Introduced	16.0.R1
Platforms	All

bypass-host-creation

Synopsis	Host creation options to bypass
Context	configure filter dhcp-filter <i>number entry number action bypass-host-creation</i>
Tree	bypass-host-creation
Notes	The following elements are part of a mandatory choice: bypass-host-creation or drop .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	DHCP host creation when the filter entry is matched
----------	---

Context	configure filter dhcp-filter number entry number action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: bypass-host-creation or drop .
Introduced	16.0.R1
Platforms	All

option

Synopsis	Enable the option context
Context	configure filter dhcp-filter number entry number option
Tree	option
Introduced	16.0.R1
Platforms	All

absent

Synopsis	Require the absence of related option
Context	configure filter dhcp-filter number entry number option absent
Tree	absent
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enable the match context
Context	configure filter dhcp-filter number entry number option match
Tree	match
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	16.0.R1
Platforms	All

exact *boolean*

Synopsis	Use an exact match pattern (not partial)
----------	--

Context	configure filter dhcp-filter number entry number option match exact boolean
Tree	exact
Default	false
Introduced	16.0.R1
Platforms	All

hex string

Synopsis	Matching pattern for the filtered option
Context	configure filter dhcp-filter number entry number option match hex string
Tree	hex
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: hex or string .
Introduced	16.0.R1
Platforms	All

invert boolean

Synopsis	Invert (partial) matching criteria
Context	configure filter dhcp-filter number entry number option match invert boolean
Tree	invert
Default	false
Introduced	16.0.R1
Platforms	All

string string

Synopsis	Matching pattern for the filtered option
Context	configure filter dhcp-filter number entry number option match string string
Tree	string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: hex or string .
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number for DHCP or DHCPv6 option to filter on
Context	configure filter dhcp-filter <i>number entry number option number number</i>
Tree	number
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

present

Synopsis	Require the presence of related option
Context	configure filter dhcp-filter <i>number entry number option present</i>
Tree	present
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	16.0.R1
Platforms	All

dhcp6-filter [*filter-id*] *number*

Synopsis	Enter the dhcp6-filter list instance
Context	configure filter dhcp6-filter <i>number</i>
Tree	dhcp6-filter
Introduced	16.0.R1
Platforms	All

[filter-id] *number*

Synopsis	Unique DHCP filter policy ID
Context	configure filter dhcp6-filter <i>number</i>
Tree	dhcp6-filter
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

default-action

Synopsis Enable the **default-action** context
 Context **configure filter dhcp6-filter number default-action**
 Tree [default-action](#)
 Introduced 16.0.R1
 Platforms All

bypass-host-creation

Synopsis Enable the **bypass-host-creation** context
 Context **configure filter dhcp6-filter number default-action bypass-host-creation**
 Tree [bypass-host-creation](#)
 Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

na boolean

Synopsis Bypass the DHCPv6 NA host creation
 Context **configure filter dhcp6-filter number default-action bypass-host-creation na boolean**
 Tree [na](#)
 Default true
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pd boolean

Synopsis Bypass the DHCPv6 PD host creation
 Context **configure filter dhcp6-filter number default-action bypass-host-creation pd boolean**
 Tree [pd](#)
 Default true
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis Drop DHCPv6 message (do not process)
Context **configure filter dhcp6-filter number default-action drop**
Tree [drop](#)
Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure filter dhcp6-filter number description string**
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance
Context **configure filter dhcp6-filter number entry number**
Tree [entry](#)
Max. Instances 10
Introduced 16.0.R1
Platforms All

[\[entry-id\]](#) *number*

Synopsis DHCP filter entry index
Context **configure filter dhcp6-filter number entry number**
Tree [entry](#)

Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the action context
Context	configure filter dhcp6-filter number entry number action
Tree	action
Introduced	16.0.R1
Platforms	All

bypass-host-creation

Synopsis	Enable the bypass-host-creation context
Context	configure filter dhcp6-filter number entry number action bypass-host-creation
Tree	bypass-host-creation
Notes	The following elements are part of a mandatory choice: bypass-host-creation or drop .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

na boolean

Synopsis	Bypass the DHCPv6 NA host creation
Context	configure filter dhcp6-filter number entry number action bypass-host-creation na boolean
Tree	na
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pd boolean

Synopsis	Bypass the DHCPv6 PD host creation
----------	------------------------------------

Context	configure filter dhcp6-filter <i>number</i> entry <i>number</i> action bypass-host-creation pd <i>boolean</i>
Tree	pd
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	Drop DHCPv6 message (do not process)
Context	configure filter dhcp6-filter <i>number</i> entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: bypass-host-creation or drop .
Introduced	16.0.R1
Platforms	All

option

Synopsis	Enable the option context
Context	configure filter dhcp6-filter <i>number</i> entry <i>number</i> option
Tree	option
Introduced	16.0.R1
Platforms	All

absent

Synopsis	Require the absence of related option
Context	configure filter dhcp6-filter <i>number</i> entry <i>number</i> option absent
Tree	absent
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enable the match context
Context	configure filter dhcp6-filter number entry number option match
Tree	match
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	16.0.R1
Platforms	All

exact *boolean*

Synopsis	Use an exact match pattern (not partial)
Context	configure filter dhcp6-filter number entry number option match exact <i>boolean</i>
Tree	exact
Default	false
Introduced	16.0.R1
Platforms	All

hex *string*

Synopsis	Matching pattern for the filtered option
Context	configure filter dhcp6-filter number entry number option match hex <i>string</i>
Tree	hex
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: hex or string .
Introduced	16.0.R1
Platforms	All

invert *boolean*

Synopsis	Invert (partial) matching criteria
Context	configure filter dhcp6-filter number entry number option match invert <i>boolean</i>
Tree	invert
Default	false
Introduced	16.0.R1

Platforms All

string *string*

Synopsis Matching pattern for the filtered option
Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) [match](#) *string* *string*
Tree [string](#)
String Length 1 to 127
Notes The following elements are part of a mandatory choice: **hex** or **string**.
Introduced 16.0.R1
Platforms All

number *number*

Synopsis Number for DHCP or DHCPv6 option to filter on
Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) [number](#) *number*
Tree [number](#)
Range 0 to 255
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

present

Synopsis Require the presence of related option
Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) [present](#)
Tree [present](#)
Notes The following elements are part of a mandatory choice: **absent**, **match**, or **present**.
Introduced 16.0.R1
Platforms All

gre-tunnel-template [[gre-tunnel-template-name](#)] *string*

Synopsis Enter the **gre-tunnel-template** list instance
Context **configure** [filter](#) [gre-tunnel-template](#) *string*

Tree	gre-tunnel-template
Max. Instances	8191
Introduced	16.0.R1
Platforms	All

[gre-tunnel-template-name] *string*

Synopsis	GRE tunnel template ID
Context	configure filter gre-tunnel-template <i>string</i>
Tree	gre-tunnel-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter gre-tunnel-template <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure filter gre-tunnel-template <i>string</i> ipv4
Tree	ipv4
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	16.0.R1
Platforms	All

destination-address [[address](#)] *string*

Synopsis	Add a list entry for destination-address
Context	configure filter gre-tunnel-template <i>string ipv4 destination-address string</i>
Tree	destination-address
Description	This command defines a destination for the GRE IP header used to encapsulate the matching IPv4/IPv6 packet. A single destination address can be specified for an IPv6 gre-tunnel-template . Traffic matching the associated IPv4 or IPv6 filter is hashed across any available ECMP or UCMP route next hop available to the destination address. If no destination address is available, then matching traffic follows the configured pbr-down-action-override action, if configured. If no pbr-down-action-override is configured traffic is discarded.
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[address] *string*

Synopsis	Destination IPv4 address
Context	configure filter gre-tunnel-template <i>string ipv4 destination-address string</i>
Tree	destination-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

gre-key (*keyword | number*)

Synopsis	GRE key
Context	configure filter gre-tunnel-template <i>string ipv4 gre-key (keyword number)</i>
Tree	gre-key
Max. Range	0 to 4294967295
Options	if-index
Introduced	16.0.R1
Platforms	All

skip-ttl-decrement *boolean*

Synopsis	Decrement TTL
Context	configure filter gre-tunnel-template <i>string</i> ipv4 skip-ttl-decrement <i>boolean</i>
Tree	skip-ttl-decrement
Default	false
Introduced	16.0.R1
Platforms	All

source-address *string*

Synopsis	Source IP address of the GRE encapsulated
Context	configure filter gre-tunnel-template <i>string</i> ipv4 source-address <i>string</i>
Tree	source-address
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure filter gre-tunnel-template <i>string</i> ipv6
Tree	ipv6
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	22.7.R1
Platforms	All

destination-address [[address](#)] *string*

Synopsis	Add a list entry for destination-address
Context	configure filter gre-tunnel-template <i>string</i> ipv6 destination-address <i>string</i>
Tree	destination-address
Max. Instances	1
Introduced	22.7.R1
Platforms	All

[address] *string*

Synopsis	IPv6 destination address
Context	configure filter gre-tunnel-template <i>string</i> ipv6 destination-address <i>string</i>
Tree	destination-address
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

gre-key *keyword*

Synopsis	Include a key value in GRE header
Context	configure filter gre-tunnel-template <i>string</i> ipv6 gre-key <i>keyword</i>
Tree	gre-key
Description	This command includes a key value in the GRE header of ifIndex of the ingress interface.
Options	if-index
Introduced	22.7.R1
Platforms	All

skip-hop-decrement *boolean*

Synopsis	Decrement TTL of the received packet
Context	configure filter gre-tunnel-template <i>string</i> ipv6 skip-hop-decrement <i>boolean</i>
Tree	skip-hop-decrement
Description	When configured to true , the system decrements the TTL of the IP packet matching the IPv4 or IPv6 filter when it is encapsulated into the GRE tunnel header. When configured to false , the system increases the TTL of the received packet.
Default	false
Introduced	22.7.R1
Platforms	All

source-address *string*

Synopsis	Source IPv6 address of the GRE encapsulated
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Context	configure filter gre-tunnel-template <i>string ipv6 source-address string</i>
Tree	source-address
Introduced	22.7.R1
Platforms	All

ip-exception [[filter-name](#)] *string*

Synopsis	Enter the ip-exception list instance
Context	configure filter ip-exception <i>string</i>
Tree	ip-exception
Introduced	20.10.R1
Platforms	VSR

[filter-name] *string*

Synopsis	Filter name
Context	configure filter ip-exception <i>string</i>
Tree	ip-exception
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	configure filter ip-exception <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
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Context	configure filter ip-exception string entry number
Tree	entry
Introduced	20.10.R1
Platforms	VSR

[entry-id] number

Synopsis	ID for a match criteria and the corresponding action
Context	configure filter ip-exception string entry number
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

description string

Synopsis	Text description
Context	configure filter ip-exception string entry number description string
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

match

Synopsis	Enter the match context
Context	configure filter ip-exception string entry number match
Tree	match
Introduced	20.10.R1
Platforms	VSR

dst-ip

Synopsis	Enter the dst-ip context
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Context	configure filter ip-exception string entry number match dst-ip
Tree	dst-ip
Introduced	20.10.R1
Platforms	VSR

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	IP address to match
Context	configure filter ip-exception string entry number match dst-ip address (<i>ipv4-address</i> <i>ipv4-prefix-with-host-bits</i>)
Tree	address
Introduced	20.10.R1
Platforms	VSR

mask string

Synopsis	Mask applied as an AND to the IP address
Context	configure filter ip-exception string entry number match dst-ip mask string
Tree	mask
Introduced	20.10.R1
Platforms	VSR

dst-port

Synopsis	Enter the dst-port context
Context	configure filter ip-exception string entry number match dst-port
Tree	dst-port
Introduced	20.10.R1
Platforms	VSR

eq number

Synopsis	Exact match criterion
Context	configure filter ip-exception string entry number match dst-port eq number
Tree	eq
Range	0 to 65535

Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

gt number

Synopsis	Condition on being greater than the specified value.
Context	configure filter ip-exception string entry number match dst-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

lt number

Synopsis	Condition on being less than the specified value.
Context	configure filter ip-exception string entry number match dst-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

range

Synopsis	Enable the range context
Context	configure filter ip-exception string entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

end number

Synopsis	Upper bound of the port range to match
Context	configure filter ip-exception string entry number match dst-port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

start number

Synopsis	Lower bound of the port range to match
Context	configure filter ip-exception string entry number match dst-port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

icmp

Synopsis	Enter the icmp context
Context	configure filter ip-exception string entry number match icmp
Tree	icmp
Introduced	20.10.R1
Platforms	VSR

code number

Synopsis	ICMP code value to match
Context	configure filter ip-exception string entry number match icmp code number
Tree	code
Range	0 to 255
Introduced	20.10.R1

Platforms VSR

type number

Synopsis ICMP type value to match
 Context **configure filter ip-exception string entry number match icmp type number**
 Tree [type](#)
 Range 0 to 255
 Introduced 20.10.R1
 Platforms VSR

protocol (number | keyword)

Synopsis IP protocol to match.
 Context **configure filter ip-exception string entry number match protocol (number | keyword)**
 Tree [protocol](#)
 Range 0 to 255
 Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
 Introduced 20.10.R1
 Platforms VSR

src-ip

Synopsis Enter the **src-ip** context
 Context **configure filter ip-exception string entry number match src-ip**
 Tree [src-ip](#)
 Introduced 20.10.R1
 Platforms VSR

address (ipv4-address | ipv4-prefix-with-host-bits)

Synopsis IP address to match
 Context **configure filter ip-exception string entry number match src-ip address (ipv4-address | ipv4-prefix-with-host-bits)**

Tree	address
Introduced	20.10.R1
Platforms	VSR

mask string

Synopsis	Mask applied as an AND to the IP address
Context	configure filter ip-exception string entry number match src-ip mask string
Tree	mask
Introduced	20.10.R1
Platforms	VSR

src-port

Synopsis	Enter the src-port context
Context	configure filter ip-exception string entry number match src-port
Tree	src-port
Introduced	20.10.R1
Platforms	VSR

eq number

Synopsis	Exact match criterion
Context	configure filter ip-exception string entry number match src-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

gt number

Synopsis	Condition on being greater than the specified value.
Context	configure filter ip-exception string entry number match src-port gt number
Tree	gt

Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

lt number

Synopsis	Condition on being less than the specified value.
Context	configure filter ip-exception string entry number match src-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

range

Synopsis	Enable the range context
Context	configure filter ip-exception string entry number match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

end number

Synopsis	Upper bound of the port range to match
Context	configure filter ip-exception string entry number match src-port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

start number

Synopsis	Lower bound of the port range to match
Context	configure filter ip-exception string entry number match src-port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

filter-id number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Filter ID
Context	configure filter ip-exception string filter-id number
Tree	filter-id
Range	1 to 65535
Introduced	20.10.R1
Platforms	VSR

ip-filter [filter-name] string

Synopsis	Enter the ip-filter list instance
Context	configure filter ip-filter string
Tree	ip-filter
Introduced	16.0.R1
Platforms	All

[filter-name] string

Synopsis	Filter name
Context	configure filter ip-filter string
Tree	ip-filter
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

chain-to-system-filter *boolean*

Synopsis	Chain filter policy to the active IPvX system filter policy
Context	configure filter ip-filter <i>string</i> chain-to-system-filter <i>boolean</i>
Tree	chain-to-system-filter
Default	false
Introduced	16.0.R1
Platforms	All

default-action *keyword*

Synopsis	Action for packets that do not match any entry
Context	configure filter ip-filter <i>string</i> default-action <i>keyword</i>
Tree	default-action
Default	drop
Options	drop, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter ip-filter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

embed

Synopsis	Enter the embed context
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Context	configure filter ip-filter string embed
Tree	embed
Description	Commands in this context embed a previously defined IPv4 embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

filter [name] reference offset number

Synopsis	Enter the filter list instance
Context	configure filter ip-filter string embed filter reference offset number
Tree	filter
Introduced	16.0.R1
Platforms	All

[name] reference

Synopsis	IPv4 policy to be embedded in the filter
Context	configure filter ip-filter string embed filter reference offset number
Tree	filter
Reference	configure filter ip-filter string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

offset number

Synopsis	Offset of the inserted entries
Context	configure filter ip-filter string embed filter reference offset number
Tree	filter
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the embedded filter
 Context **configure** filter ip-filter *string* embed filter *reference* offset *number* admin-state *keyword*
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

flowspec [offset](#) *number*

Synopsis Enter the **flowspec** list instance
 Context **configure** filter ip-filter *string* embed flowspec [offset](#) *number*
 Tree [flowspec](#)
 Introduced 16.0.R1
 Platforms All

offset *number*

Synopsis Offset of the inserted entries
 Context **configure** filter ip-filter *string* embed flowspec [offset](#) *number*
 Tree [flowspec](#)
 Range 0 to 2097151
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the embedded filter
 Context **configure** filter ip-filter *string* embed flowspec [offset](#) *number* admin-state *keyword*
 Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface group ID for an external configured set of flowspec rules
Context	configure filter ip-filter <i>string</i> embed flowspec offset <i>number</i> group <i>number</i>
Tree	group
Range	0 to 16383
Introduced	16.0.R1
Platforms	All

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual router for an external configured set of flowspec rules
Context	configure filter ip-filter <i>string</i> embed flowspec offset <i>number</i> router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

openflow [*of-switch*] *reference* offset *number*

Synopsis	Enter the openflow list instance
Context	configure filter ip-filter <i>string</i> embed openflow <i>reference</i> offset <i>number</i>
Tree	openflow
Introduced	16.0.R4

Platforms All

[of-switch] *reference*

Synopsis Referenced Hybrid OpenFlow Switch (OFS) name
Context **configure** filter ip-filter string embed openflow reference offset number
Tree openflow
Reference **configure** openflow of-switch string
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

offset *number*

Synopsis Offset of the inserted entries
Context **configure** filter ip-filter string embed openflow reference offset number
Tree openflow
Range 0 to 2097150
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

admin-state *keyword*

Synopsis Administrative state of the embedded filter
Context **configure** filter ip-filter string embed openflow reference offset number admin-state keyword
Tree admin-state
Default enable
Options enable, disable
Introduced 16.0.R4
Platforms All

grt



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Global routing context
Context	configure filter ip-filter string embed openflow reference offset number grt
Tree	grt
Notes	The following elements are part of a choice: grt, system, (sap and vpls), or vprn.
Introduced	16.0.R4
Platforms	All

sap reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP context
Context	configure filter ip-filter string embed openflow reference offset number sap reference
Tree	sap
Reference	configure service vpls string sap string
Notes	The following elements are part of a choice: grt, system, (sap and vpls), or vprn.
Introduced	16.0.R4
Platforms	All

system



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	System context
Context	configure filter ip-filter string embed openflow reference offset number system
Tree	system
Notes	The following elements are part of a choice: grt, system, (sap and vpls), or vprn.
Introduced	16.0.R4

Platforms All

vpls reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPLS context
 Context **configure** filter ip-filter string embed openflow reference offset number vpls reference
 Tree vpls
 Reference **configure** service vpls string
 Notes The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
 Introduced 16.0.R4
 Platforms All

vprn reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPRN context
 Context **configure** filter ip-filter string embed openflow reference offset number vprn reference
 Tree vprn
 Reference **configure** service vprn string
 Notes The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
 Introduced 16.0.R4
 Platforms All

entry [entry-id] number

Synopsis Enter the **entry** list instance
 Context **configure** filter ip-filter string entry number
 Tree entry
 Introduced 16.0.R1

Platforms All

[entry-id] *number*

Synopsis ID for a match criteria and the corresponding action
 Context **configure filter ip-filter string entry number**
 Tree [entry](#)
 Range 1 to 2097151
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

action

Synopsis Enable the **action** context
 Context **configure filter ip-filter string entry number action**
 Tree [action](#)
 Introduced 16.0.R1
 Platforms All

accept

Synopsis Accept regular routing to forward a matching packet
 Context **configure filter ip-filter string entry number action accept**
 Tree [accept](#)
 Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
 Introduced 16.0.R1
 Platforms All

accept-when

Synopsis Enable the **accept-when** context
 Context **configure filter ip-filter string entry number action accept-when**
 Tree [accept-when](#)

Introduced 19.5.R1
Platforms All

pattern

Synopsis Enable the **pattern** context
Context **configure filter ip-filter string entry number action accept-when pattern**
Tree [pattern](#)
Introduced 19.5.R1
Platforms All

expression string

Synopsis Pattern expression to match
Context **configure filter ip-filter string entry number action accept-when pattern expression string**
Tree [expression](#)
String Length 3 to 18
Notes This element is mandatory.
Introduced 19.5.R1
Platforms All

mask string

Synopsis Mask for the pattern expression
Context **configure filter ip-filter string entry number action accept-when pattern mask string**
Tree [mask](#)
String Length 3 to 18
Notes This element is mandatory.
Introduced 19.5.R1
Platforms All

offset-type keyword

Synopsis Starting point reference for offset value of pattern

Context	configure filter ip-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-type <i>keyword</i>
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

drop

Synopsis	Drop a packet matching this entry
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

drop-when

Synopsis	Enable the drop-when context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action drop-when
Tree	drop-when
Introduced	16.0.R1

Platforms All

extracted-traffic

Synopsis Drop traffic extracted to CPM
Context **configure filter ip-filter** *string entry number action drop-when extracted-traffic*
Tree [extracted-traffic](#)
Introduced 16.0.R1
Platforms All

packet-length

Synopsis Enable the **packet-length** context
Context **configure filter ip-filter** *string entry number action drop-when packet-length*
Tree [packet-length](#)
Notes The following elements are part of a choice: **packet-length** or **tll**.
Introduced 16.0.R1
Platforms All

eq *number*

Synopsis Exact match criterion for the length
Context **configure filter ip-filter** *string entry number action drop-when packet-length eq number*
Tree [eq](#)
Range 0 to 65535
Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

gt *number*

Synopsis Greater than match criterion for the length
Context **configure filter ip-filter** *string entry number action drop-when packet-length gt number*
Tree [gt](#)
Range 0 to 65534

Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the length
Context	configure filter ip-filter string entry number action drop-when packet-length lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter string entry number action drop-when packet-length range
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the length range
Context	configure filter ip-filter string entry number action drop-when packet-length range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the length range
Context	configure filter ip-filter string entry number action drop-when packet-length range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pattern

Synopsis	Enable the pattern context
Context	configure filter ip-filter string entry number action drop-when pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

expression string

Synopsis	Pattern expression to match
Context	configure filter ip-filter string entry number action drop-when pattern expression string
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask string

Synopsis	Mask for the pattern expression
Context	configure filter ip-filter string entry number action drop-when pattern mask string
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.

Introduced 16.0.R4
Platforms All

offset-type *keyword*

Synopsis Starting point reference for offset value of pattern
Context **configure** filter ip-filter *string* entry *number* action drop-when pattern offset-type *keyword*
Tree [offset-type](#)
Options layer-3, layer-4, data, dns-qtype
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

offset-value *number*

Synopsis Offset value for the pattern expression
Context **configure** filter ip-filter *string* entry *number* action drop-when pattern offset-value *number*
Tree [offset-value](#)
Range 0 to 255
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

ttl

Synopsis Enable the **ttl** context
Context **configure** filter ip-filter *string* entry *number* action drop-when **ttl**
Tree [ttl](#)
Notes The following elements are part of a choice: **packet-length** or **ttl**.
Introduced 16.0.R1
Platforms All

eq number

Synopsis	Equal to condition match value
Context	configure filter ip-filter string entry number action drop-when ttl eq number
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than condition match value
Context	configure filter ip-filter string entry number action drop-when ttl gt number
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than condition match value
Context	configure filter ip-filter string entry number action drop-when ttl lt number
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter string entry number action drop-when ttl range
Tree	range

Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the range
Context	configure filter ip-filter string entry number action drop-when ttl range end number
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the range
Context	configure filter ip-filter string entry number action drop-when ttl range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Class name to be forwarded for matching packets
Context	configure filter ip-filter string entry number action fc keyword
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the forward context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward
Tree	forward
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

bonding-connection *number*

Synopsis	Connection ID over which packet is forwarded
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward bonding-connection <i>number</i>
Tree	bonding-connection
Range	1 to 2
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esi-l2

Synopsis	Enable the esi-l2 context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward esi-l2
Tree	esi-l2
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

esi-value *string*

Synopsis	ESI of the first ESI-identified appliance
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Context	configure filter ip-filter string entry number action forward esi-l2 esi-value string
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS service name
Context	configure filter ip-filter string entry number action forward esi-l2 vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

esi-l3

Synopsis	Enable the esi-l3 context
Context	configure filter ip-filter string entry number action forward esi-l3
Tree	esi-l3
Notes	The following elements are part of a choice: bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, or vprn-target.
Introduced	16.0.R1
Platforms	All

esi-value string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESI of the first ESI-identified appliance
Context	configure filter ip-filter string entry number action forward esi-l3 esi-value string
Tree	esi-value

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sf-ip string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the service function to forward traffic
Context	configure filter ip-filter string entry number action forward esi-l3 sf-ip string
Tree	sf-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vas-interface reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Egress R-VPLS IP interface name
Context	configure filter ip-filter string entry number action forward esi-l3 vas-interface reference
Tree	vas-interface
Reference	configure service vprn string interface string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN service name
Context	configure filter ip-filter <i>string entry number action forward esi-l3 vprn reference</i>
Tree	vprn
Reference	configure service vprn <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

gre-tunnel *reference*

Synopsis	GRE tunnel template ID that sets the location where an encapsulated matching packet is transported
Context	configure filter ip-filter <i>string entry number action forward gre-tunnel reference</i>
Tree	gre-tunnel
Reference	configure filter gre-tunnel-template <i>string</i>
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

lsp *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ip-filter <i>string entry number action forward lsp string</i>
Tree	lsp
String Length	1 to 64
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

mpls-policy

Synopsis	Enable the mpls-policy context
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Context	configure filter ip-filter string entry number action forward mpls-policy
Tree	mpls-policy
Notes	The following elements are part of a choice: bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, or vprn-target.
Introduced	19.10.R1
Platforms	All

endpoint string

Synopsis	MPLS forwarding policy endpoint IPv4 address
Context	configure filter ip-filter string entry number action forward mpls-policy endpoint string
Tree	endpoint
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

next-hop

Synopsis	Enable the next-hop context
Context	configure filter ip-filter string entry number action forward next-hop
Tree	next-hop
Notes	The following elements are part of a choice: bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, or vprn-target.
Introduced	16.0.R1
Platforms	All

interface-name string

Synopsis	IP interface name that forwards matching packets
Context	configure filter ip-filter string entry number action forward next-hop interface-name string
Tree	interface-name
String Length	1 to 32

Notes	The following elements are part of a mandatory choice: interface-name , nh-ip , or nh-ip-vrf .
Introduced	16.0.R1
Platforms	All

nh-ip

Synopsis	Enable the nh-ip context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip
Tree	nh-ip
Notes	The following elements are part of a mandatory choice: interface-name , nh-ip , or nh-ip-vrf .
Introduced	16.0.R1
Platforms	All

address *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address of next hop to forward matching packets
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip indirect <i>boolean</i>
Tree	indirect
Default	false
Introduced	16.0.R1

Platforms All

nh-ip-vrf

Synopsis Enable the **nh-ip-vrf** context

Context **configure filter ip-filter string entry number action forward next-hop nh-ip-vrf**

Tree [nh-ip-vrf](#)

Notes The following elements are part of a mandatory choice: **interface-name**, **nh-ip**, or **nh-ip-vrf**.

Introduced 16.0.R1

Platforms All

address string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IPv4 address of next hop to forward matching packets

Context **configure filter ip-filter string entry number action forward next-hop nh-ip-vrf address string**

Tree [address](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

indirect boolean

Synopsis Allow next hop to be indirectly reachable

Context **configure filter ip-filter string entry number action forward next-hop nh-ip-vrf indirect boolean**

Tree [indirect](#)

Default false

Introduced 16.0.R1

Platforms All

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip-vrf router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

redirect-policy *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward redirect-policy <i>reference</i>
Tree	redirect-policy
Reference	configure filter redirect-policy <i>string</i>
Notes	The following elements are part of a choice: bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, or vprn-target.
Introduced	16.0.R1
Platforms	All

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Router name or VPRN service name
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward router-instance <i>string</i>
Tree	router-instance

Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter ip-filter string entry number action forward sap
Tree	sap
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap-id reference

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	configure filter ip-filter string entry number action forward sap sap-id reference
Tree	sap-id
Reference	configure service vpls string sap string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS associated with the SAP
Context	configure filter ip-filter string entry number action forward sap vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

sdp

Synopsis Enable the **sdp** context

Context **configure filter ip-filter string entry number action forward sdp**

Tree **sdp**

Notes The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, or **vprn-target**.

Introduced 16.0.R1

Platforms All

sdp-bind-id string

Synopsis VPLS SDP bind ID used to forward matching packets

Context **configure filter ip-filter string entry number action forward sdp sdp-bind-id string**

Tree **sdp-bind-id**

String Length 3 to 16

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

vpls reference

Synopsis VPLS associated with the SDP

Context **configure filter ip-filter string entry number action forward sdp vpls reference**

Tree **vpls**

Reference **configure service vpls string**

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

srte-policy

Synopsis	Enable the srte-policy context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward srte-policy
Tree	srte-policy
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	19.10.R1
Platforms	All

color *number*

Synopsis	SR-TE policy color ID
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward srte-policy color <i>number</i>
Tree	color
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

endpoint *string*

Synopsis	SR-TE policy endpoint IPv4 address
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward srte-policy endpoint <i>string</i>
Tree	endpoint
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

vprn-target

Synopsis	Enable the vprn-target context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward vprn-target
Tree	vprn-target

Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

adv-prefix string

Synopsis	Advertised IP prefix for target destination
Context	configure filter ip-filter string entry number action forward vprn-target adv-prefix string
Tree	adv-prefix
Introduced	16.0.R1
Platforms	All

bgp-nh string

Synopsis	Target BGP next hop IP address
Context	configure filter ip-filter string entry number action forward vprn-target bgp-nh string
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

lsp string

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ip-filter string entry number action forward vprn-target lsp string
Tree	lsp
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

vprn reference

Synopsis	Routing context used for route lookup
Context	configure filter ip-filter string entry number action forward vprn-target vprn reference

Tree	vprn
Reference	configure service vprn <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

gtp-local-breakout

Synopsis	Break out matching traffic locally from a GTP tunnel for GTP-subscriber-hosts, or forward for other entities
Context	configure filter ip-filter <i>string</i> entry number action gtp-local-breakout
Tree	gtp-local-breakout
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enable the http-redirect context
Context	configure filter ip-filter <i>string</i> entry number action http-redirect
Tree	http-redirect
Description	Commands in this context configure the filter entry action for HTTP redirection.
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

allow-override *boolean*

Synopsis	Override the HTTP redirect URL by a RADIUS VSA
Context	configure filter ip-filter <i>string</i> entry number action http-redirect allow-override <i>boolean</i>
Tree	allow-override
Description	This command specifies whether the RADIUS VSA can override the configured HTTP redirect URL for this filter entry. When configured to true , the RADIUS VSA can override the HTTP redirect URL.

When configured to **false**, the HTTP redirect URL is not overridden.
This does not apply if the CPF option is specified for the URL.

Default	false
Introduced	16.0.R1
Platforms	All

url (*keyword* | *http-redirect-url*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL used for HTTP redirect action
Context	configure filter <i>ip-filter</i> string <i>entry</i> number <i>action</i> http-redirect url (<i>keyword</i> <i>http-redirect-url</i>)
Tree	url
Description	<p>This command specifies the URL to use for HTTP redirection for this filter entry.</p> <p>A URL can be specified or the CPF option can be used for BNG CUPS ESM sessions only.</p> <p>The following macro substitutions may be used:</p> <p>\$URL — request-URI in the HTTP GET request received</p> <p>\$MAC — a string that represents the MAC address of the subscriber host</p> <p>\$IP — a string that represents the IP address of the subscriber host</p> <p>\$SUB — a string that represents the subscriber ID</p> <p>\$SAP — a string that represents a SAP ID</p> <p>\$SAPDESC — description string configured on the SAP</p> <p>\$CID — a string that represents the circuit ID or interface ID of the subscriber host (hexadecimal format)</p> <p>\$RID — a string that represents the remote ID of the subscriber host (hexadecimal format)</p>
String Length	1 to 255
Options	from-cpf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ignore-match

Synopsis	Ignore match criteria for the entry
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action ignore-match
Tree	ignore-match
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

l2-aware-nat-bypass *boolean*

Synopsis	Divert traffic from an L2-Aware NAT subscriber
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action l2-aware-nat-bypass <i>boolean</i>
Tree	l2-aware-nat-bypass
Description	<p>When configured to true, the filter action selectively diverts traffic from a L2-Aware NAT subscriber away from NAT. This action is only applicable to L2-Aware NAT subscribers and must be configured together with action accept. Traffic identified in the match condition bypasses L2-Aware NAT. An example is to bypass NAT for on-net destinations (within the customer network).</p> <p>For selective NAT bypass to take effect, in addition to IP filter configuration, the L2-Aware NAT subscriber must be specifically enabled for selective bypass via the allow-bypass configuration option in the configure subscriber-mgmt sub-profile nat allow-bypass context.</p> <p>When configured to false, traffic that is not classified for bypass automatically diverts to L2-Aware NAT, unless it is explicitly configured in the IP filter action to be dropped.</p>
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis	Enable the nat context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action nat
Tree	nat
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis NAT policy name when action is NAT
Context **configure** filter ip-filter *string* entry *number* action nat nat-policy *reference*
Tree [nat-policy](#)
Reference **configure** service nat nat-policy *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit

Synopsis Enable the **rate-limit** context
Context **configure** filter ip-filter *string* entry *number* action rate-limit
Tree [rate-limit](#)
Introduced 16.0.R1
Platforms All

extracted-traffic

Synopsis Limit the rate of traffic extracted to the CPM
Context **configure** filter ip-filter *string* entry *number* action rate-limit extracted-traffic
Tree [extracted-traffic](#)
Introduced 22.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

packet-length

Synopsis Enable the **packet-length** context
Context **configure** filter ip-filter *string* entry *number* action rate-limit packet-length
Tree [packet-length](#)
Notes The following elements are part of a choice: **packet-length** or **ttl**.

Introduced 16.0.R1
Platforms All

eq *number*

Synopsis Exact match criterion for the length
Context **configure** filter ip-filter *string* entry *number* action rate-limit packet-length eq *number*
Tree eq
Range 0 to 65535
Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

gt *number*

Synopsis Greater than match criterion for the length
Context **configure** filter ip-filter *string* entry *number* action rate-limit packet-length gt *number*
Tree gt
Range 0 to 65534
Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

lt *number*

Synopsis Less than match criterion for the length
Context **configure** filter ip-filter *string* entry *number* action rate-limit packet-length lt *number*
Tree lt
Range 1 to 65535
Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

range

Synopsis	Enable the range context
Context	configure filter ip-filter string entry number action rate-limit packet-length range
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the length range
Context	configure filter ip-filter string entry number action rate-limit packet-length range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the length range
Context	configure filter ip-filter string entry number action rate-limit packet-length range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pattern

Synopsis	Enable the pattern context
Context	configure filter ip-filter string entry number action rate-limit pattern
Tree	pattern

Introduced 16.0.R4
Platforms All

expression *string*

Synopsis Pattern expression to match
Context **configure** filter ip-filter *string* entry *number* action rate-limit pattern expression *string*
Tree [expression](#)
String Length 3 to 18
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

mask *string*

Synopsis Mask for the pattern expression
Context **configure** filter ip-filter *string* entry *number* action rate-limit pattern mask *string*
Tree [mask](#)
String Length 3 to 18
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

offset-type *keyword*

Synopsis Starting point reference for offset value of pattern
Context **configure** filter ip-filter *string* entry *number* action rate-limit pattern offset-type *keyword*
Tree [offset-type](#)
Options layer-3, layer-4, data, dns-qtype
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action rate-limit pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

pir (*number* | *keyword*)

Synopsis	Peak information rate
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action rate-limit pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	0 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a mandatory choice: pir or pps-pir .
Introduced	16.0.R1
Platforms	All

pps-pir (*number* | *keyword*)

Synopsis	Peak information rate
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action rate-limit pps-pir (<i>number</i> <i>keyword</i>)
Tree	pps-pir
Range	0 to 100000000
Units	packets per second
Options	max
Notes	The following elements are part of a mandatory choice: pir or pps-pir .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

t*ttl*

Synopsis	Enable the ttl context
Context	configure filter ip-filter string entry number action rate-limit ttl
Tree	ttl
Notes	The following elements are part of a choice: packet-length or ttl .
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	configure filter ip-filter string entry number action rate-limit ttl eq number
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	configure filter ip-filter string entry number action rate-limit ttl gt number
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than condition match value
Context	configure filter ip-filter string entry number action rate-limit ttl lt number
Tree	lt
Range	1 to 255

Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action rate-limit tll range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the range
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action rate-limit tll range end <i>number</i>
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the range
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action rate-limit tll range start <i>number</i>
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

reassemble

Synopsis	Forward matching packets to reassembly function
Context	configure filter ip-filter <i>string entry number action reassemble</i>
Tree	reassemble
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remark

Synopsis	Enable the remark context
Context	configure filter ip-filter <i>string entry number action remark</i>
Tree	remark
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	Destination SAP
Context	configure filter ip-filter <i>string entry number action remark dscp keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

secondary

Synopsis	Enable the secondary context
Context	configure filter ip-filter <i>string entry number action secondary</i>

Tree	secondary
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the forward context
Context	configure filter ip-filter string entry number action secondary forward
Tree	forward
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

next-hop

Synopsis	Enable the next-hop context
Context	configure filter ip-filter string entry number action secondary forward next-hop
Tree	next-hop
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

nh-ip-vrf

Synopsis	Enable the nh-ip-vrf context
Context	configure filter ip-filter string entry number action secondary forward next-hop nh-ip-vrf
Tree	nh-ip-vrf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

address *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address of next hop to forward matching packets
Context	configure filter ip-filter <i>string</i> entry number action secondary forward next-hop nh-ip-vrf address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ip-filter <i>string</i> entry number action secondary forward next-hop nh-ip-vrf indirect boolean
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	configure filter ip-filter <i>string</i> entry number action secondary forward next-hop nh-ip-vrf router-instance string
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward sap
Tree	sap
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap-id reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward sap sap-id <i>reference</i>
Tree	sap-id
Reference	configure service vpls <i>string</i> sap <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS the sdp-bind-id belongs to
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward sap vpls <i>reference</i>
Tree	vpls
Reference	configure service vpls <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the sdp context
Context	configure filter ip-filter string entry number action secondary forward sdp
Tree	sdp
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

sdp-bind-id string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	configure filter ip-filter string entry number action secondary forward sdp sdp-bind-id string
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS associated with the SDP
Context	configure filter ip-filter string entry number action secondary forward sdp vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn-target

Synopsis	Enable the vprn-target context
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Context	configure filter ip-filter string entry number action secondary forward vprn-target
Tree	vprn-target
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	21.7.R1
Platforms	All

adv-prefix string

Synopsis	Advertised IP prefix for the target destination
Context	configure filter ip-filter string entry number action secondary forward vprn-target adv-prefix string
Tree	adv-prefix
Introduced	21.7.R1
Platforms	All

bgp-nh string

Synopsis	Target BGP next hop IP address
Context	configure filter ip-filter string entry number action secondary forward vprn-target bgp-nh string
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

lsp string

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ip-filter string entry number action secondary forward vprn-target lsp string
Tree	lsp
String Length	1 to 64
Introduced	21.7.R1
Platforms	All

vprn reference

Synopsis	Routing context used for route lookup
Context	configure filter ip-filter <i>string</i> entry number action secondary forward vprn-target vprn reference
Tree	vprn
Reference	configure service vprn <i>string</i>
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

remark

Synopsis	Enable the remark context
Context	configure filter ip-filter <i>string</i> entry number action secondary remark
Tree	remark
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	Destination SAP
Context	configure filter ip-filter <i>string</i> entry number action secondary remark dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

tcp-mss-adjust

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
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Context	configure filter ip-filter string entry number action tcp-mss-adjust
Tree	tcp-mss-adjust
Notes	The following elements are part of a mandatory choice: accept, drop, forward, gtp-local-breakout, http-redirect, ignore-match, nat, reassemble, or tcp-mss-adjust.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure filter ip-filter string entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress-pbr *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBR that has an effect when this filter is applied on egress
Context	configure filter ip-filter string entry number egress-pbr keyword
Tree	egress-pbr
Options	true, true-with-l4lb
Introduced	16.0.R1
Platforms	All

filter-sample *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd ACL mode
Context	configure filter ip-filter string entry number filter-sample boolean
Tree	filter-sample
Default	false
Introduced	16.0.R1

Platforms All

interface-sample *boolean*

Synopsis Sample matching traffic if IP interface is set to cflowd interface mode
 Context **configure filter ip-filter** *string entry number interface-sample boolean*
 Tree [interface-sample](#)
 Default true
 Introduced 16.0.R1
 Platforms All

log *reference*

Synopsis Log that is used for packets matching this entry
 Context **configure filter ip-filter** *string entry number log reference*
 Tree [log](#)
 Reference **configure filter log** *number*
 Introduced 16.0.R1
 Platforms All

match

Synopsis Enter the **match** context
 Context **configure filter ip-filter** *string entry number match*
 Tree [match](#)
 Description Commands in this context configure match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.
 Introduced 16.0.R1
 Platforms All

destination-class *number*

Synopsis Destination class as a match criterion
 Context **configure filter ip-filter** *string entry number match destination-class number*
 Tree [destination-class](#)

Description	This command configures the BGP destination class value as a match criterion. Filtering egress traffic on the destination class requires the destination-class-lookup command (under the ingress context for the service interface) to be enabled (set to true).
Range	1 to 255
Introduced	20.7.R1
Platforms	All

dscp keyword

Synopsis	DSCP used as an IP filter match criterion
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match dst-ip
Tree	dst-ip
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	16.0.R1
Platforms	All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	IPv4 address used as the match criterion
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match dst-ip address (<i>ipv4-address</i> <i>ipv4-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1

Platforms All

ip-prefix-list *reference*

Synopsis IPv4 address prefix list used as match criterion
Context **configure** filter ip-filter *string* entry *number* match dst-ip ip-prefix-list *reference*
Tree ip-prefix-list
Reference **configure** filter match-list ip-prefix-list *string*
Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced 16.0.R1
Platforms All

mask *string*

Synopsis IPv4 address mask used as the match criterion
Context **configure** filter ip-filter *string* entry *number* match dst-ip mask *string*
Tree mask
Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced 16.0.R1
Platforms All

dst-port

Synopsis Enter the **dst-port** context
Context **configure** filter ip-filter *string* entry *number* match dst-port
Tree dst-port
Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced 16.0.R1
Platforms All

eq *number*

Synopsis Exact match criterion for the port number
Context **configure** filter ip-filter *string* entry *number* match dst-port eq *number*
Tree eq

Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ip-filter string entry number match dst-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the port number
Context	configure filter ip-filter string entry number match dst-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ip-filter string entry number match dst-port port-list reference
Tree	port-list
Reference	configure filter match-list port-list string
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter string entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ip-filter string entry number match dst-port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ip-filter string entry number match dst-port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fragment keyword

Synopsis	Match criterion for fragmented packets
Context	configure filter ip-filter string entry number match fragment keyword
Tree	fragment
Options	false, true, first-only, non-first-only

Introduced 16.0.R1
Platforms All

icmp

Synopsis Enter the **icmp** context
Context **configure filter ip-filter string entry number match icmp**
Tree [icmp](#)
Introduced 16.0.R1
Platforms All

code number

Synopsis ICMP code value to match
Context **configure filter ip-filter string entry number match icmp code number**
Tree [code](#)
Range 0 to 255
Introduced 16.0.R1
Platforms All

type number

Synopsis ICMP type value to match
Context **configure filter ip-filter string entry number match icmp type number**
Tree [type](#)
Range 0 to 255
Introduced 16.0.R1
Platforms All

ip

Synopsis Enter the **ip** context
Context **configure filter ip-filter string entry number match ip**
Tree [ip](#)
Notes The following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).

Introduced 21.10.R1
Platforms All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis IPv4 address used as the match criterion
Context **configure filter ip-filter** *string* **entry** *number* **match ip address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)
Tree [address](#)
Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced 21.10.R1
Platforms All

ip-prefix-list *reference*

Synopsis IP4 address prefix list used as match criterion
Context **configure filter ip-filter** *string* **entry** *number* **match ip ip-prefix-list** *reference*
Tree [ip-prefix-list](#)
Reference **configure filter match-list ip-prefix-list** *string*
Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced 21.10.R1
Platforms All

mask *string*

Synopsis IPv4 address mask used as the match criterion
Context **configure filter ip-filter** *string* **entry** *number* **match ip mask** *string*
Tree [mask](#)
Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced 21.10.R1
Platforms All

ip-option

Synopsis Enable the **ip-option** context

Context	configure filter ip-filter <i>string entry number match ip-option</i>
Tree	ip-option
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	Mask that is ANDed with ip-option value in the packet header
Context	configure filter ip-filter <i>string entry number match ip-option mask number</i>
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

type *number*

Synopsis	Specific IP option to match
Context	configure filter ip-filter <i>string entry number match ip-option type number</i>
Tree	type
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

multiple-option *boolean*

Synopsis	Match based on presence of multiple options in header
Context	configure filter ip-filter <i>string entry number match multiple-option boolean</i>
Tree	multiple-option
Introduced	16.0.R1
Platforms	All

option-present *boolean*

Synopsis	Match on the presence of any IP option in the packet
Context	configure filter ip-filter <i>string</i> entry number match option-present <i>boolean</i>
Tree	option-present
Introduced	16.0.R1
Platforms	All

packet-length

Synopsis	Enable the packet-length context
Context	configure filter ip-filter <i>string</i> entry number match packet-length
Tree	packet-length
Introduced	19.5.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the length
Context	configure filter ip-filter <i>string</i> entry number match packet-length eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the length
Context	configure filter ip-filter <i>string</i> entry number match packet-length gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the length
Context	configure filter ip-filter string entry number match packet-length lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter string entry number match packet-length range
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

end number

Synopsis	Upper bound of the length range
Context	configure filter ip-filter string entry number match packet-length range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

start number

Synopsis	Lower bound of the length range
Context	configure filter ip-filter string entry number match packet-length range start number
Tree	start
Range	0 to 65534

Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

port

Synopsis	Enter the port context
Context	configure filter ip-filter string entry number match port
Tree	port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Exact match criterion for the port number
Context	configure filter ip-filter string entry number match port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ip-filter string entry number match port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the port number
Context	configure filter ip-filter string entry number match port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ip-filter string entry number match port port-list reference
Tree	port-list
Reference	configure filter match-list port-list string
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter string entry number match port range
Tree	range
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ip-filter string entry number match port range end number
Tree	end
Range	1 to 65535

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ip-filter string entry number match port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

protocol (number | keyword)

Synopsis	IP protocol identifier as a match criterion
Context	configure filter ip-filter string entry number match protocol (number keyword)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: protocol or protocol-list .
Introduced	16.0.R1
Platforms	All

protocol-list reference

Synopsis	Name of the protocol list as a match criterion
Context	configure filter ip-filter string entry number match protocol-list reference
Tree	protocol-list
Reference	configure filter match-list protocol-list string
Notes	The following elements are part of a choice: protocol or protocol-list .
Introduced	20.7.R1

Platforms All

src-ip

Synopsis Enter the **src-ip** context

Context **configure filter ip-filter string entry number match src-ip**

Tree [src-ip](#)

Notes The following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).

Introduced 16.0.R1

Platforms All

address (*ipv4-address | ipv4-prefix-with-host-bits*)

Synopsis IPv4 address used as the match criterion

Context **configure filter ip-filter string entry number match src-ip address (*ipv4-address | ipv4-prefix-with-host-bits*)**

Tree [address](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

ip-prefix-list *reference*

Synopsis IP4 address prefix list used as match criterion

Context **configure filter ip-filter string entry number match src-ip ip-prefix-list reference**

Tree [ip-prefix-list](#)

Reference **configure filter match-list ip-prefix-list string**

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

mask *string*

Synopsis IPv4 address mask used as the match criterion

Context **configure filter ip-filter string entry number match src-ip mask string**

Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

src-mac

Synopsis	Enable the src-mac context
Context	configure filter ip-filter string entry number match src-mac
Tree	src-mac
Introduced	19.5.R1
Platforms	All

address string

Synopsis	MAC address used as the match criterion
Context	configure filter ip-filter string entry number match src-mac address string
Tree	address
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

mask string

Synopsis	MAC address mask as the match criterion
Context	configure filter ip-filter string entry number match src-mac mask string
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	19.5.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure filter ip-filter string entry number match src-port

Tree	src-port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Exact match criterion for the port number
Context	configure filter ip-filter string entry number match src-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ip-filter string entry number match src-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the port number
Context	configure filter ip-filter string entry number match src-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	configure filter ip-filter <i>string entry number match src-port port-list reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>string entry number match src-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ip-filter <i>string entry number match src-port range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ip-filter <i>string entry number match src-port range start number</i>
Tree	start
Range	0 to 65534

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

src-route-option *boolean*

Synopsis	Match based on presence of source route option
Context	configure filter ip-filter string entry number match src-route-option boolean
Tree	src-route-option
Introduced	16.0.R1
Platforms	All

tcp-established

Synopsis	Match packets containing the TCP flag as ACK or RST
Context	configure filter ip-filter string entry number match tcp-established
Tree	tcp-established
Notes	The following elements are part of a choice: tcp-established or tcp-flags .
Introduced	22.10.R1
Platforms	All

tcp-flags

Synopsis	Enter the tcp-flags context
Context	configure filter ip-filter string entry number match tcp-flags
Tree	tcp-flags
Notes	The following elements are part of a choice: tcp-established or tcp-flags .
Introduced	16.0.R1
Platforms	All

ack *boolean*

Synopsis	Match TCP ACK as per value of the ACK TCP flag bit
Context	configure filter ip-filter string entry number match tcp-flags ack boolean
Tree	ack

Introduced 16.0.R1
Platforms All

cwr boolean

Synopsis Match TCP CWR as per value of the CWR TCP flag bit
Context **configure filter ip-filter string entry number match tcp-flags cwr boolean**
Tree [cwr](#)
Introduced 16.0.R1
Platforms All

ece boolean

Synopsis Match TCP ECE as per value of the ECE TCP flag bit
Context **configure filter ip-filter string entry number match tcp-flags ece boolean**
Tree [ece](#)
Introduced 16.0.R1
Platforms All

fin boolean

Synopsis Match TCP FIN as per value of the FIN TCP flag bit
Context **configure filter ip-filter string entry number match tcp-flags fin boolean**
Tree [fin](#)
Introduced 16.0.R1
Platforms All

ns boolean

Synopsis Match TCP NS as per value of the NS TCP flag bit
Context **configure filter ip-filter string entry number match tcp-flags ns boolean**
Tree [ns](#)
Introduced 16.0.R1
Platforms All

psh boolean

Synopsis	Match TCP PSH as per value of the PSH TCP flag bit
Context	configure filter ip-filter string entry number match tcp-flags psh boolean
Tree	psh
Introduced	16.0.R1
Platforms	All

rst boolean

Synopsis	Match TCP RST as per value of the RST TCP flag bit
Context	configure filter ip-filter string entry number match tcp-flags rst boolean
Tree	rst
Introduced	16.0.R1
Platforms	All

syn boolean

Synopsis	Match TCP SYN as per value of the SYN TCP flag bit
Context	configure filter ip-filter string entry number match tcp-flags syn boolean
Tree	syn
Introduced	16.0.R1
Platforms	All

urg boolean

Synopsis	Match TCP URG as per value of the URG TCP flag bit
Context	configure filter ip-filter string entry number match tcp-flags urg boolean
Tree	urg
Introduced	16.0.R1
Platforms	All

ttl

Synopsis	Enable the ttl context
Context	configure filter ip-filter string entry number match ttl

Tree	ttl
Introduced	21.10.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match ttl eq <i>number</i>
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match ttl gt <i>number</i>
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1
Platforms	All

lt *number*

Synopsis	Less than condition match value
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match ttl lt <i>number</i>
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>string</i> entry number match ttl range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1
Platforms	All

end number

Synopsis	Upper bound of the range
Context	configure filter ip-filter <i>string</i> entry number match ttl range end number
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

start number

Synopsis	Lower bound of the range
Context	configure filter ip-filter <i>string</i> entry number match ttl range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

pbr-down-action-override *keyword*

Synopsis	Action when PBR or PBF target for this entry is not available
Context	configure filter ip-filter <i>string</i> entry number pbr-down-action-override <i>keyword</i>

Tree	pbr-down-action-override
Options	drop, forward, filter-default-action
Introduced	16.0.R1
Platforms	All

sample-profile *reference*

Synopsis	Cflowd sample profile ID to match packets
Context	configure filter ip-filter <i>string</i> entry number sample-profile <i>reference</i>
Tree	sample-profile
Description	This command allows traffic matching an IPv4 or IPv6 filter to be sampled for cflowd processing using a specific sample profile ID. This option is only compatible if the associated interface is configured for interface-based sampling and is only supported for ingress sampling. An IP filter can only specify a single alternate sample profile ID for cflowd sampling, but the ID can be used in multiple entries.
Reference	configure cflowd sample-profile <i>number</i>
Introduced	20.10.R1
Platforms	All

sticky-dest (*number* | *keyword*)

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	configure filter ip-filter <i>string</i> entry number sticky-dest (<i>number</i> <i>keyword</i>)
Tree	sticky-dest
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

filter-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP filter ID
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Context	configure filter ip-filter <i>string filter-id number</i>
Tree	filter-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Scope of this filter definition
Context	configure filter ip-filter <i>string scope keyword</i>
Tree	scope
Default	template
Options	exclusive, template, embedded, system
Introduced	16.0.R1
Platforms	All

shared-policer *boolean*

Synopsis	Share policer among active ports in the LAG
Context	configure filter ip-filter <i>string shared-policer boolean</i>
Tree	shared-policer
Description	<p>When configured to true, and when the filter policy is configured on a LAG endpoint, the system programs the policer rates in the filter policy per line card FP of the LAG based on the number of active ports in the LAG for each FP.</p> <p>When configured to false, and when the filter policy is configured on a LAG endpoint, the system programs the same policer rate on each line card FP of the LAG.</p>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure filter ip-filter <i>string subscriber-mgmt</i>
Tree	subscriber-mgmt
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-specific-entry

Synopsis Enter the **host-specific-entry** context
Context **configure filter ip-filter string subscriber-mgmt host-specific-entry**
Tree [host-specific-entry](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-control

Synopsis Enter the **credit-control** context
Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control**
Tree [credit-control](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis Enable the **range** context
Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range**
Tree [range](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis Upper bound of range for credit control filter entries
Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range end number**
Tree [end](#)
Range 1 to 2097151
Notes This element is mandatory.
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis Lower bound of range for credit control filter entries
Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range start number**
Tree **start**
Range 1 to 2097151
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis Enter the **filter-rule** context
Context **configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule**
Tree **filter-rule**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis Enable the **range** context
Context **configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule range**
Tree **range**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis Upper bound of range for inserting filter rule entries
Context **configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule range end number**
Tree **end**
Range 1 to 2097151

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of range for inserting filter rule entries
Context	configure filter ip-filter <i>string</i> subscriber-mgmt host-specific-entry filter-rule range start <i>number</i>
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis	Enter the watermark context
Context	configure filter ip-filter <i>string</i> subscriber-mgmt host-specific-entry watermark
Tree	watermark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark for host-specific entries, to raise a table full alarm
Context	configure filter ip-filter <i>string</i> subscriber-mgmt host-specific-entry watermark high <i>number</i>
Tree	high
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark for host-specific entries, to clear a table full alarm
Context	configure filter ip-filter <i>string</i> subscriber-mgmt host-specific-entry watermark low <i>number</i>
Tree	low
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shared-entry

Synopsis	Enter the shared-entry context
Context	configure filter ip-filter <i>string</i> subscriber-mgmt shared-entry
Tree	shared-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis	Enter the filter-rule context
Context	configure filter ip-filter <i>string</i> subscriber-mgmt shared-entry filter-rule
Tree	filter-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>string</i> subscriber-mgmt shared-entry filter-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of range for inserting shared host rules
Context	configure filter ip-filter string subscriber-mgmt shared-entry filter-rule range end number
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of range for inserting shared host rules
Context	configure filter ip-filter string subscriber-mgmt shared-entry filter-rule range start number
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule

Synopsis	Enter the pcc-rule context
Context	configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule
Tree	pcc-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the range for PCC rule filter entries
Context	configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range end number
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the range for PCC rule filter entries
Context	configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range start number
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis	Enable the watermark context
Context	configure filter ip-filter string subscriber-mgmt shared-entry watermark
Tree	watermark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	Limit of RADIUS shared filters before generating high watermark notification
Context	configure filter ip-filter string subscriber-mgmt shared-entry watermark high number
Tree	high
Range	1 to 8000
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Limit of RADIUS or Diameter shared filters before clearing high watermark notification
Context	configure filter ip-filter <i>string</i> subscriber-mgmt shared-entry watermark low number
Tree	low
Range	0 to 7999
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis	Set of match criteria for the filter policy
Context	configure filter ip-filter <i>string</i> type keyword
Tree	type
Description	This command configures the filter policy type that defines the list of match criteria supported in a filter policy.
Default	normal
Options	normal, src-mac, packet-length, destination-class
Introduced	19.5.R1
Platforms	All

ipv6-exception [[filter-name](#)] *string*

Synopsis	Enter the ipv6-exception list instance
Context	configure filter ipv6-exception <i>string</i>
Tree	ipv6-exception
Introduced	20.10.R1
Platforms	VSR

[filter-name] *string*

Synopsis	Filter name
Context	configure filter ipv6-exception <i>string</i>
Tree	ipv6-exception
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	configure filter ipv6-exception <i>string description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure filter ipv6-exception <i>string entry</i> <i>number</i>
Tree	entry
Introduced	20.10.R1
Platforms	VSR

[entry-id] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	configure filter ipv6-exception <i>string entry</i> <i>number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	20.10.R1

Platforms VSR

description *string*

Synopsis Text description
Context **configure** filter [ipv6-exception](#) *string* entry *number* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 20.10.R1
Platforms VSR

match

Synopsis Enter the **match** context
Context **configure** filter [ipv6-exception](#) *string* entry *number* [match](#)
Tree [match](#)
Introduced 20.10.R1
Platforms VSR

dst-ip

Synopsis Enter the **dst-ip** context
Context **configure** filter [ipv6-exception](#) *string* entry *number* [match](#) [dst-ip](#)
Tree [dst-ip](#)
Introduced 20.10.R1
Platforms VSR

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis IPv6 address used as the match criterion
Context **configure** filter [ipv6-exception](#) *string* entry *number* [match](#) [dst-ip](#) [address](#) (*ipv6-address* | *ipv6-prefix-with-host-bits*)
Tree [address](#)
Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced 20.10.R1

Platforms VSR

ipv6-prefix-list *reference*

Synopsis IPv6 address prefix list used as match criterion
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-ip](#) [ipv6-prefix-list](#) *reference*
 Tree [ipv6-prefix-list](#)
 Reference **configure** filter [match-list](#) [ipv6-prefix-list](#) *string*
 Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
 Introduced 20.10.R1
 Platforms VSR

mask *string*

Synopsis IPv6 address mask used as the match criterion
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-ip](#) [mask](#) *string*
 Tree [mask](#)
 Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
 Introduced 20.10.R1
 Platforms VSR

dst-port

Synopsis Enter the **dst-port** context
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-port](#)
 Tree [dst-port](#)
 Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
 Introduced 20.10.R1
 Platforms VSR

eq *number*

Synopsis Exact match criterion for the port number
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-port](#) [eq](#) *number*
 Tree [eq](#)

Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ipv6-exception string entry number match dst-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

lt number

Synopsis	Less than match criterion for the port number
Context	configure filter ipv6-exception string entry number match dst-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ipv6-exception string entry number match dst-port port-list reference
Tree	port-list
Reference	configure filter match-list port-list string
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

range

Synopsis	Enable the range context
Context	configure filter ipv6-exception <i>string entry number match dst-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ipv6-exception <i>string entry number match dst-port range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ipv6-exception <i>string entry number match dst-port range start number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

icmp

Synopsis	Enter the icmp context
Context	configure filter ipv6-exception <i>string entry number match icmp</i>
Tree	icmp
Introduced	20.10.R1

Platforms VSR

code number

Synopsis ICMPv6 code value to match
 Context **configure filter ipv6-exception string entry number match icmp code number**
 Tree [code](#)
 Range 0 to 255
 Introduced 20.10.R1
 Platforms VSR

type number

Synopsis ICMPv6 type value to match
 Context **configure filter ipv6-exception string entry number match icmp type number**
 Tree [type](#)
 Range 0 to 255
 Introduced 20.10.R1
 Platforms VSR

next-header (*number* | *keyword*)

Synopsis IP protocol to match
 Context **configure filter ipv6-exception string entry number match next-header (*number* | *keyword*)**
 Tree [next-header](#)
 Range 0 to 255
 Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
 Introduced 20.10.R1
 Platforms VSR

port

Synopsis Enter the **port** context

Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match <i>port</i>
Tree	port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	20.10.R1
Platforms	VSR

eq *number*

Synopsis	Exact match criterion for the port number
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match <i>port</i> eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

gt *number*

Synopsis	Greater than match criterion for the port number
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match <i>port</i> gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

lt *number*

Synopsis	Less than match criterion for the port number
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match <i>port</i> lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1

Platforms VSR

port-list *reference*

Synopsis Name of the port list as the match criterion
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [port-list](#) *reference*
 Tree [port-list](#)
 Reference **configure** filter [match-list](#) [port-list](#) *string*
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
 Introduced 20.10.R1
 Platforms VSR

range

Synopsis Enable the **range** context
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [range](#)
 Tree [range](#)
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
 Introduced 20.10.R1
 Platforms VSR

end *number*

Synopsis Upper bound of the port range as port match criterion
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [range](#) [end](#) *number*
 Tree [end](#)
 Range 1 to 65535
 Notes This element is mandatory.
 Introduced 20.10.R1
 Platforms VSR

start *number*

Synopsis Lower bound of the port range as port match criterion
 Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [range](#) [start](#) *number*

Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

src-ip

Synopsis	Enter the src-ip context
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match src-ip
Tree	src-ip
Introduced	20.10.R1
Platforms	VSR

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address used as the match criterion
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match src-ip address (<i>ipv6-address</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.10.R1
Platforms	VSR

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.10.R1
Platforms	VSR

mask string

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-exception string entry number match src-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.10.R1
Platforms	VSR

src-port

Synopsis	Enter the src-port context
Context	configure filter ipv6-exception string entry number match src-port
Tree	src-port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	20.10.R1
Platforms	VSR

eq number

Synopsis	Exact match criterion for the port number
Context	configure filter ipv6-exception string entry number match src-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ipv6-exception string entry number match src-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .

Introduced 20.10.R1
Platforms VSR

lt number

Synopsis Less than match criterion for the port number
Context **configure filter ipv6-exception string entry number match src-port lt number**
Tree **lt**
Range 1 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range**.
Introduced 20.10.R1
Platforms VSR

port-list reference

Synopsis Name of the port list as the match criterion
Context **configure filter ipv6-exception string entry number match src-port port-list reference**
Tree **port-list**
Reference **configure filter match-list port-list string**
Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range**.
Introduced 20.10.R1
Platforms VSR

range

Synopsis Enable the **range** context
Context **configure filter ipv6-exception string entry number match src-port range**
Tree **range**
Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range**.
Introduced 20.10.R1
Platforms VSR

end number

Synopsis Upper bound of the port range as port match criterion

Context	configure filter ipv6-exception <i>string entry number match src-port range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ipv6-exception <i>string entry number match src-port range start number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

filter-id number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Filter ID
Context	configure filter ipv6-exception <i>string filter-id number</i>
Tree	filter-id
Range	1 to 65535
Introduced	20.10.R1
Platforms	VSR

ipv6-filter [*filter-name*] *string*

Synopsis	Enter the ipv6-filter list instance
Context	configure filter ipv6-filter <i>string</i>
Tree	ipv6-filter
Introduced	16.0.R1

Platforms All

[filter-name] *string*

Synopsis Filter name
Context **configure filter ipv6-filter** *string*
Tree [ipv6-filter](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

chain-to-system-filter *boolean*

Synopsis Chain filter policy to the active IPvX system filter policy
Context **configure filter ipv6-filter** *string chain-to-system-filter* *boolean*
Tree [chain-to-system-filter](#)
Default false
Introduced 16.0.R1
Platforms All

default-action *keyword*

Synopsis Action for packets that do not match any entry
Context **configure filter ipv6-filter** *string default-action* *keyword*
Tree [default-action](#)
Default drop
Options drop, accept
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure filter ipv6-filter** *string description* *string*

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

embed

Synopsis	Enter the embed context
Context	configure filter ipv6-filter string embed
Tree	embed
Description	Commands in this context embed a previously defined IPv6 embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

filter [[name](#)] *reference offset number*

Synopsis	Enter the filter list instance
Context	configure filter ipv6-filter string embed filter reference offset number
Tree	filter
Introduced	16.0.R1
Platforms	All

[\[name\]](#) *reference*

Synopsis	IPv6 policy to be embedded in the filter
Context	configure filter ipv6-filter string embed filter reference offset number
Tree	filter
Reference	configure filter ipv6-filter string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

offset *number*

Synopsis	Offset of the inserted entries
Context	configure filter ipv6-filter <i>string</i> embed filter <i>reference</i> offset <i>number</i>
Tree	filter
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the embedded filter
Context	configure filter ipv6-filter <i>string</i> embed filter <i>reference</i> offset <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

flowspec **offset** *number*

Synopsis	Enter the flowspec list instance
Context	configure filter ipv6-filter <i>string</i> embed flowspec offset <i>number</i>
Tree	flowspec
Introduced	16.0.R1
Platforms	All

offset *number*

Synopsis	Offset of the inserted entries
Context	configure filter ipv6-filter <i>string</i> embed flowspec offset <i>number</i>
Tree	flowspec
Range	0 to 2097151
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the embedded filter
Context **configure** filter ipv6-filter string embed flowspec offset number admin-state keyword
Tree admin-state
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

group *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Interface group ID for an external configured set of flowspec rules
Context **configure** filter ipv6-filter string embed flowspec offset number group number
Tree group
Range 0 to 16383
Introduced 16.0.R1
Platforms All

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Virtual router for an external configured set of flowspec rules
Context **configure** filter ipv6-filter string embed flowspec offset number router-instance string
Tree router-instance
Notes This element is mandatory.
Introduced 16.0.R1

Platforms All

openflow [of-switch] *reference offset number*

Synopsis Enter the **openflow** list instance
Context **configure filter ipv6-filter string embed openflow reference offset number**
Tree [openflow](#)
Introduced 16.0.R4
Platforms All

[of-switch] *reference*

Synopsis Referenced Hybrid OpenFlow Switch (OFS) name
Context **configure filter ipv6-filter string embed openflow reference offset number**
Tree [openflow](#)
Reference **configure openflow of-switch string**
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

offset number

Synopsis Offset of the inserted entries
Context **configure filter ipv6-filter string embed openflow reference offset number**
Tree [openflow](#)
Range 0 to 2097150
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

admin-state *keyword*

Synopsis Administrative state of the embedded filter
Context **configure filter ipv6-filter string embed openflow reference offset number admin-state keyword**

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

grt



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Global routing context
Context	configure filter ipv6-filter <i>string</i> embed openflow <i>reference</i> <i>offset</i> <i>number</i> grt
Tree	grt
Notes	The following elements are part of a choice: grt , system , (sap and vpls), or vprn .
Introduced	16.0.R4
Platforms	All

sap reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP context
Context	configure filter ipv6-filter <i>string</i> embed openflow <i>reference</i> <i>offset</i> <i>number</i> sap <i>reference</i>
Tree	sap
Reference	configure service vpls <i>string</i> sap <i>string</i>
Notes	The following elements are part of a choice: grt , system , (sap and vpls), or vprn .
Introduced	16.0.R4
Platforms	All

system



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	System context
Context	configure filter ipv6-filter string embed openflow reference offset number system
Tree	system
Notes	The following elements are part of a choice: grt, system, (sap and vpls), or vprn.
Introduced	16.0.R4
Platforms	All

vpls reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS context
Context	configure filter ipv6-filter string embed openflow reference offset number vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	The following elements are part of a choice: grt, system, (sap and vpls), or vprn.
Introduced	16.0.R4
Platforms	All

vprn reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN context
Context	configure filter ipv6-filter string embed openflow reference offset number vprn reference
Tree	vprn
Reference	configure service vprn string
Notes	The following elements are part of a choice: grt, system, (sap and vpls), or vprn.

Introduced 16.0.R4
Platforms All

entry [**entry-id**] *number*

Synopsis Enter the **entry** list instance
Context **configure filter ipv6-filter string entry number**
Tree **entry**
Introduced 16.0.R1
Platforms All

[entry-id] *number*

Synopsis ID for a match criteria and the corresponding action
Context **configure filter ipv6-filter string entry number**
Tree **entry**
Range 1 to 2097151
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

action

Synopsis Enable the **action** context
Context **configure filter ipv6-filter string entry number action**
Tree **action**
Introduced 16.0.R1
Platforms All

accept

Synopsis Accept regular routing to forward a matching packet
Context **configure filter ipv6-filter string entry number action accept**
Tree **accept**

Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

accept-when

Synopsis	Enable the accept-when context
Context	configure filter ipv6-filter string entry number action accept-when
Tree	accept-when
Introduced	19.5.R1
Platforms	All

pattern

Synopsis	Enable the pattern context
Context	configure filter ipv6-filter string entry number action accept-when pattern
Tree	pattern
Introduced	19.5.R1
Platforms	All

expression *string*

Synopsis	Pattern expression to match
Context	configure filter ipv6-filter string entry number action accept-when pattern expression string
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	configure filter ipv6-filter string entry number action accept-when pattern mask string

Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-type <i>keyword</i>
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

drop

Synopsis	Drop a packet matching this entry
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , or tcp-mss-adjust .

Introduced 16.0.R1
Platforms All

drop-when

Synopsis Enable the **drop-when** context
Context **configure filter ipv6-filter string entry number action drop-when**
Tree [drop-when](#)
Introduced 16.0.R1
Platforms All

extracted-traffic

Synopsis Drop traffic extracted to CPM
Context **configure filter ipv6-filter string entry number action drop-when extracted-traffic**
Tree [extracted-traffic](#)
Introduced 16.0.R1
Platforms All

hop-limit

Synopsis Enable the **hop-limit** context
Context **configure filter ipv6-filter string entry number action drop-when hop-limit**
Tree [hop-limit](#)
Notes The following elements are part of a choice: **hop-limit** or **payload-length**.
Introduced 16.0.R1
Platforms All

eq *number*

Synopsis Equal to condition match value
Context **configure filter ipv6-filter string entry number action drop-when hop-limit eq *number***
Tree [eq](#)
Range 0 to 255
Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1
Platforms All

gt *number*

Synopsis Greater than condition match value
Context **configure filter ipv6-filter** *string entry number action drop-when hop-limit gt number*
Tree [gt](#)
Range 0 to 254
Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

lt *number*

Synopsis Less than condition match value
Context **configure filter ipv6-filter** *string entry number action drop-when hop-limit lt number*
Tree [lt](#)
Range 1 to 255
Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

range

Synopsis Enable the **range** context
Context **configure filter ipv6-filter** *string entry number action drop-when hop-limit range*
Tree [range](#)
Description This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

end number

Synopsis	Upper bound of the range
Context	configure filter ipv6-filter string entry number action drop-when hop-limit range end number
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the range
Context	configure filter ipv6-filter string entry number action drop-when hop-limit range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pattern

Synopsis	Enable the pattern context
Context	configure filter ipv6-filter string entry number action drop-when pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

expression string

Synopsis	Pattern expression to match
Context	configure filter ipv6-filter string entry number action drop-when pattern expression string
Tree	expression
String Length	3 to 18

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask string

Synopsis	Mask for the pattern expression
Context	configure filter ipv6-filter string entry number action drop-when pattern mask string
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-type keyword

Synopsis	Starting point reference for offset value of pattern
Context	configure filter ipv6-filter string entry number action drop-when pattern offset-type keyword
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-value number

Synopsis	Offset value for the pattern expression
Context	configure filter ipv6-filter string entry number action drop-when pattern offset-value number
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

payload-length

Synopsis	Enable the payload-length context
Context	configure filter ipv6-filter string entry number action drop-when payload-length
Tree	payload-length
Notes	The following elements are part of a choice: hop-limit or payload-length .
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Exact match criterion for the length
Context	configure filter ipv6-filter string entry number action drop-when payload-length eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the length
Context	configure filter ipv6-filter string entry number action drop-when payload-length gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the length
Context	configure filter ipv6-filter string entry number action drop-when payload-length lt number

Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>string entry number action drop-when payload-length range</i>
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the length range
Context	configure filter ipv6-filter <i>string entry number action drop-when payload-length range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the length range
Context	configure filter ipv6-filter <i>string entry number action drop-when payload-length range start number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

fc keyword

Synopsis Class name to be forwarded for matching packets
 Context **configure filter ipv6-filter** *string* **entry** *number* **action fc** *keyword*
 Tree **fc**
 Options be, l2, af, l1, h2, ef, h1, nc
 Introduced 16.0.R1
 Platforms All

forward

Synopsis Enter the **forward** context
 Context **configure filter ipv6-filter** *string* **entry** *number* **action forward**
 Tree **forward**
 Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, **ignore-match**, **nat**, or **tcp-mss-adjust**.
 Introduced 16.0.R1
 Platforms All

bonding-connection *number*

Synopsis Connection ID over which packet is forwarded
 Context **configure filter ipv6-filter** *string* **entry** *number* **action forward bonding-connection** *number*
 Tree **bonding-connection**
 Range 1 to 2
 Notes The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, or **vprn-target**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esi-l2

Synopsis	Enable the esi-l2 context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action forward</i> esi-l2
Tree	esi-l2
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

esi-value *string*

Synopsis	ESI of the first ESI-identified appliance
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action forward</i> esi-l2 esi-value <i>string</i>
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS service name
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action forward</i> esi-l2 vpls <i>reference</i>
Tree	vpls
Reference	configure service vpls <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

esi-l3

Synopsis	Enable the esi-l3 context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action forward</i> esi-l3
Tree	esi-l3

Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

esi-value *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESI of the first ESI-identified appliance
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward esi-l3 esi-value <i>string</i>
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sf-ip *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the service function to forward traffic
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward esi-l3 sf-ip <i>string</i>
Tree	sf-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vas-interface *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Egress R-VPLS IP interface name
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward esi-I3 vas-interface <i>reference</i>
Tree	vas-interface
Reference	configure service vprn <i>string</i> interface <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN service name
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward esi-I3 vprn <i>reference</i>
Tree	vprn
Reference	configure service vprn <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

gre-tunnel *reference*

Synopsis	GRE tunnel template ID that sets the location where an encapsulated matching packet is transported
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward gre-tunnel <i>reference</i>
Tree	gre-tunnel
Reference	configure filter gre-tunnel-template <i>string</i>
Notes	The following elements are part of a choice: bonding-connection , esi-I2 , esi-I3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

lsp string

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ipv6-filter string entry number action forward lsp string
Tree	lsp
String Length	1 to 64
Notes	The following elements are part of a choice: bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, or vprn-target.
Introduced	16.0.R1
Platforms	All

mpls-policy

Synopsis	Enable the mpls-policy context
Context	configure filter ipv6-filter string entry number action forward mpls-policy
Tree	mpls-policy
Notes	The following elements are part of a choice: bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, or vprn-target.
Introduced	19.10.R1
Platforms	All

endpoint string

Synopsis	MPLS forwarding policy endpoint IPv6 address
Context	configure filter ipv6-filter string entry number action forward mpls-policy endpoint string
Tree	endpoint
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

next-hop

Synopsis	Enable the next-hop context
Context	configure filter ipv6-filter string entry number action forward next-hop
Tree	next-hop

Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , isp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

nh-ip

Synopsis	Enable the nh-ip context
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip
Tree	nh-ip
Notes	The following elements are part of a mandatory choice: nh-ip or nh-ip-vrf .
Introduced	16.0.R1
Platforms	All

address string

Synopsis	IPv6 address of next hop to forward matching packets
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip address string
Tree	address
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip indirect boolean
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

nh-ip-vrf

Synopsis	Enable the nh-ip-vrf context
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf
Tree	nh-ip-vrf
Notes	The following elements are part of a mandatory choice: nh-ip or nh-ip-vrf .
Introduced	16.0.R1
Platforms	All

address string

Synopsis	IPv6 address of next hop to forward matching packets
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf address string
Tree	address
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf indirect boolean
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

router-instance string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip-vrf router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

redirect-policy *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward redirect-policy <i>reference</i>
Tree	redirect-policy
Reference	configure filter redirect-policy <i>string</i>
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Router name or VPRN service name
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward router-instance <i>string</i>
Tree	router-instance
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter ipv6-filter string entry number action forward sap
Tree	sap
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap-id reference

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	configure filter ipv6-filter string entry number action forward sap sap-id reference
Tree	sap-id
Reference	configure service vpls string sap string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS associated with the SAP
Context	configure filter ipv6-filter string entry number action forward sap vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the sdp context
Context	configure filter ipv6-filter string entry number action forward sdp

Tree	sdp
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

sdp-bind-id *string*

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward sdp sdp-bind-id <i>string</i>
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SDP
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward sdp vpls <i>reference</i>
Tree	vpls
Reference	configure service vpls <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

srte-policy

Synopsis	Enable the srte-policy context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward srte-policy
Tree	srte-policy
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	19.10.R1

Platforms All

color number

Synopsis SR-TE policy color ID

Context **configure filter ipv6-filter string entry number action forward srte-policy color number**

Tree [color](#)

Range 0 to 4294967295

Notes This element is mandatory.

Introduced 19.10.R1

Platforms All

endpoint string

Synopsis SR-TE policy endpoint IPv6 address

Context **configure filter ipv6-filter string entry number action forward srte-policy endpoint string**

Tree [endpoint](#)

Notes This element is mandatory.

Introduced 19.10.R1

Platforms All

vprn-target

Synopsis Enable the **vprn-target** context

Context **configure filter ipv6-filter string entry number action forward vprn-target**

Tree [vprn-target](#)

Notes The following elements are part of a choice: **bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, or vprn-target.**

Introduced 16.0.R1

Platforms All

adv-prefix string

Synopsis Advertised IP prefix for target destination

Context **configure filter ipv6-filter string entry number action forward vprn-target adv-prefix string**

Tree	adv-prefix
Introduced	16.0.R1
Platforms	All

bgp-nh string

Synopsis	Target BGP next hop IP address
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward vprn-target bgp-nh <i>string</i>
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

lsp string

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward vprn-target lsp <i>string</i>
Tree	lsp
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

vprn reference

Synopsis	Routing context used for route lookup
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward vprn-target vprn <i>reference</i>
Tree	vprn
Reference	configure service vprn <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

http-redirect

Synopsis	Enable the http-redirect context
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Context	configure filter ipv6-filter string entry number action http-redirect
Tree	http-redirect
Description	Commands in this context configure the filter entry action for HTTP redirection.
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

allow-override *boolean*

Synopsis	Override the HTTP redirect URL by a RADIUS VSA
Context	configure filter ipv6-filter string entry number action http-redirect allow-override boolean
Tree	allow-override
Description	This command specifies whether the RADIUS VSA can override the configured HTTP redirect URL for this filter entry. When configured to true , the RADIUS VSA can override the HTTP redirect URL. When configured to false , the HTTP redirect URL is not overridden. This does not apply if the CPF option is specified for the URL.
Default	false
Introduced	16.0.R1
Platforms	All

url (*keyword* | *http-redirect-url*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL used for HTTP redirect action
Context	configure filter ipv6-filter string entry number action http-redirect url (keyword http-redirect-url)
Tree	url
Description	This command specifies the URL to use for HTTP redirection for this filter entry. A URL can be specified or the CPF option can be used for BNG CUPS ESM sessions only. The following macro substitutions may be used: \$URL — request-URI in the HTTP GET request received

\$MAC — a string that represents the MAC address of the subscriber host

\$IP — a string that represents the IP address of the subscriber host

\$SUB — a string that represents the subscriber ID

\$SAP — a string that represents a SAP ID

\$SAPDESC — description string configured on the SAP

\$CID — a string that represents the circuit ID or interface ID of the subscriber host (hexadecimal format)

\$RID — a string that represents the remote ID of the subscriber host (hexadecimal format)

String Length	1 to 255
Options	from-cpf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ignore-match

Synopsis	Ignore match criteria for the entry
Context	configure filter ipv6-filter <i>string entry number action ignore-match</i>
Tree	ignore-match
Notes	The following elements are part of a mandatory choice: accept, drop, forward, http-redirect, ignore-match, nat, or tcp-mss-adjust.
Introduced	16.0.R1
Platforms	All

nat

Synopsis	Enable the nat context
Context	configure filter ipv6-filter <i>string entry number action nat</i>
Tree	nat
Notes	The following elements are part of a mandatory choice: accept, drop, forward, http-redirect, ignore-match, nat, or tcp-mss-adjust.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy name when action is NAT
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action nat nat-policy <i>reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-type *keyword*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT type to assign when action is NAT
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action nat nat-type <i>keyword</i>
Tree	nat-type
Options	dslite, nat64
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit

Synopsis	Enable the rate-limit context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action rate-limit
Tree	rate-limit
Introduced	16.0.R1
Platforms	All

extracted-traffic

Synopsis	Limit the rate of traffic extracted to the CPM
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Context	configure filter ipv6-filter string entry number action rate-limit extracted-traffic
Tree	extracted-traffic
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

hop-limit

Synopsis	Enable the hop-limit context
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit
Tree	hop-limit
Notes	The following elements are part of a choice: hop-limit or payload-length .
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Equal to condition match value
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit eq number
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than condition match value
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit gt number
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than condition match value
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit lt number
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: eq, gt, lt, or range.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq, gt, lt, or range.
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the range
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit range end number
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the range
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Context	configure filter ipv6-filter string entry number action rate-limit hop-limit range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pattern

Synopsis	Enable the pattern context
Context	configure filter ipv6-filter string entry number action rate-limit pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

expression *string*

Synopsis	Pattern expression to match
Context	configure filter ipv6-filter string entry number action rate-limit pattern expression string
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	configure filter ipv6-filter string entry number action rate-limit pattern mask string
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action rate-limit pattern offset-type <i>keyword</i>
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action rate-limit pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

payload-length

Synopsis	Enable the payload-length context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action rate-limit payload-length
Tree	payload-length
Notes	The following elements are part of a choice: hop-limit or payload-length .
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the length
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action rate-limit payload-length eq <i>number</i>

Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the length
Context	configure filter ipv6-filter string entry number action rate-limit payload-length gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the length
Context	configure filter ipv6-filter string entry number action rate-limit payload-length lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string entry number action rate-limit payload-length range
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the length range
Context	configure filter ipv6-filter string entry number action rate-limit payload-length range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the length range
Context	configure filter ipv6-filter string entry number action rate-limit payload-length range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pir (number | keyword)

Synopsis	Peak information rate
Context	configure filter ipv6-filter string entry number action rate-limit pir (number keyword)
Tree	pir
Range	0 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a mandatory choice: pir or pps-pir .
Introduced	16.0.R1
Platforms	All

pps-pir (*number* | *keyword*)

Synopsis	Peak information rate
Context	configure filter ipv6-filter <i>string entry number action rate-limit pps-pir</i> (<i>number</i> <i>keyword</i>)
Tree	pps-pir
Range	0 to 100000000
Units	packets per second
Options	max
Notes	The following elements are part of a mandatory choice: pir or pps-pir .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

remark

Synopsis	Enable the remark context
Context	configure filter ipv6-filter <i>string entry number action remark</i>
Tree	remark
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	Destination SAP
Context	configure filter ipv6-filter <i>string entry number action remark dscp keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

secondary

Synopsis	Enable the secondary context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>secondary</i>
Tree	secondary
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the forward context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>secondary</i> <i>forward</i>
Tree	forward
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

next-hop

Synopsis	Enable the next-hop context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>secondary</i> <i>forward</i> <i>next-hop</i>
Tree	next-hop
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

nh-ip-vrf

Synopsis	Enable the nh-ip-vrf context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>secondary</i> <i>forward</i> <i>next-hop</i> <i>nh-ip-vrf</i>
Tree	nh-ip-vrf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

address string

Synopsis	IPv6 address of next hop to forward matching packets
Context	configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf address string
Tree	address
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf indirect boolean
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

router-instance string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf router-instance string
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter ipv6-filter string entry number action secondary forward sap
Tree	sap
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap-id reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	configure filter ipv6-filter string entry number action secondary forward sap sap-id reference
Tree	sap-id
Reference	configure service vpls string sap string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS the sdp-bind-id belongs to
Context	configure filter ipv6-filter string entry number action secondary forward sap vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the sdp context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action secondary forward sdp
Tree	sdp
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

sdp-bind-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action secondary forward sdp sdp-bind-id <i>string</i>
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SDP
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action secondary forward sdp vpls <i>reference</i>
Tree	vpls
Reference	configure service vpls <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn-target

Synopsis	Enable the vprn-target context
Context	configure filter ipv6-filter string entry number action secondary forward vprn-target
Tree	vprn-target
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	21.7.R1
Platforms	All

adv-prefix string

Synopsis	Advertised IP prefix for the target destination
Context	configure filter ipv6-filter string entry number action secondary forward vprn-target adv-prefix string
Tree	adv-prefix
Introduced	21.7.R1
Platforms	All

bgp-nh string

Synopsis	Target BGP next hop IP address
Context	configure filter ipv6-filter string entry number action secondary forward vprn-target bgp-nh string
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

lsp string

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ipv6-filter string entry number action secondary forward vprn-target lsp string
Tree	lsp
String Length	1 to 64
Introduced	21.7.R1

Platforms All

vprn reference

Synopsis Routing context used for route lookup

Context **configure filter ipv6-filter string entry number action secondary forward vprn-target vprn reference**

Tree [vprn](#)

Reference **configure service vprn string**

Notes This element is mandatory.

Introduced 21.7.R1

Platforms All

remark

Synopsis Enable the **remark** context

Context **configure filter ipv6-filter string entry number action secondary remark**

Tree [remark](#)

Introduced 16.0.R1

Platforms All

dscp keyword

Synopsis Destination SAP

Context **configure filter ipv6-filter string entry number action secondary remark dscp keyword**

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

tcp-mss-adjust

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
Context	configure filter ipv6-filter string entry number action tcp-mss-adjust
Tree	tcp-mss-adjust
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure filter ipv6-filter string entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress-pbr keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBR that has an effect when this filter is applied on egress
Context	configure filter ipv6-filter string entry number egress-pbr keyword
Tree	egress-pbr
Options	true, true-with-l4lb
Introduced	16.0.R1
Platforms	All

filter-sample boolean

Synopsis	Sample matching traffic if IP interface is set to cflowd ACL mode
Context	configure filter ipv6-filter string entry number filter-sample boolean

Tree	filter-sample
Default	false
Introduced	16.0.R1
Platforms	All

interface-sample *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd interface mode
Context	configure filter ipv6-filter <i>string</i> entry number interface-sample <i>boolean</i>
Tree	interface-sample
Default	true
Introduced	16.0.R1
Platforms	All

log *reference*

Synopsis	Log that is used for packets matching this entry
Context	configure filter ipv6-filter <i>string</i> entry number log <i>reference</i>
Tree	log
Reference	configure filter log <i>number</i>
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure filter ipv6-filter <i>string</i> entry number match
Tree	match
Description	Commands in this context provide match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class as a match criterion
Context	configure filter ipv6-filter <i>string entry number match destination-class number</i>
Tree	destination-class
Description	This command configures the BGP destination class value as a match criterion. Filtering egress traffic on the destination class requires the destination-class-lookup command (under the ingress context for the service interface) to be enabled (set to true).
Range	1 to 255
Introduced	20.7.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP used as an IP filter match criterion
Context	configure filter ipv6-filter <i>string entry number match dscp keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure filter ipv6-filter <i>string entry number match dst-ip</i>
Tree	dst-ip
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	16.0.R1
Platforms	All

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address used as the match criterion
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Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match dst-ip <i>address</i> (<i>ipv6-address</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match dst-ip <i>ipv6-prefix-list</i> <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list <i>ipv6-prefix-list</i> <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match dst-ip <i>mask</i> <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match <i>dst-port</i>
Tree	dst-port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Exact match criterion for the port number
Context	configure filter ipv6-filter string entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ipv6-filter string entry number match dst-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the port number
Context	configure filter ipv6-filter string entry number match dst-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ipv6-filter string entry number match dst-port port-list reference
Tree	port-list

Reference	configure filter match-list port-list string
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ipv6-filter string entry number match dst-port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ipv6-filter string entry number match dst-port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

extension-header

Synopsis	Enter the extension-header context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match extension-header
Tree	extension-header
Introduced	16.0.R1
Platforms	All

ah *boolean*

Synopsis	Match a packet as per the existence of an AH Extension Header
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match extension-header ah <i>boolean</i>
Tree	ah
Introduced	16.0.R1
Platforms	All

esp *boolean*

Synopsis	Match a packet as per the existence of an Encapsulation security payload extension header
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match extension-header esp <i>boolean</i>
Tree	esp
Introduced	16.0.R1
Platforms	All

hop-by-hop *boolean*

Synopsis	Match on Hop-by-Hop Options Extension Header existence
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match extension-header hop-by-hop <i>boolean</i>
Tree	hop-by-hop
Introduced	16.0.R2
Platforms	All

routing-type0 *boolean*

Synopsis	Match a packet as per the existence of a routing Extension Header
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Context	configure filter ipv6-filter string entry number match extension-header routing-type0 boolean
Tree	routing-type0
Introduced	16.0.R1
Platforms	All

flow-label

Synopsis	Enable the flow-label context
Context	configure filter ipv6-filter string entry number match flow-label
Tree	flow-label
Introduced	16.0.R1
Platforms	All

mask number

Synopsis	Flow label mask for this policy IP filter entry
Context	configure filter ipv6-filter string entry number match flow-label mask number
Tree	mask
Range	1 to 1048575
Default	1048575
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Flow label as match criterion
Context	configure filter ipv6-filter string entry number match flow-label value number
Tree	value
Range	0 to 1048575
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Match criterion for fragmented packages
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

hop-limit

Synopsis	Enable the hop-limit context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match hop-limit
Tree	hop-limit
Introduced	21.10.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match hop-limit eq <i>number</i>
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match hop-limit gt <i>number</i>
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1

Platforms All

lt number

Synopsis Less than condition match value
 Context **configure filter ipv6-filter string entry number match hop-limit lt number**
 Tree **lt**
 Range 1 to 255
 Notes The following elements are part of a mandatory choice: **eq, gt, lt, or range**.
 Introduced 21.10.R1
 Platforms All

range

Synopsis Enable the **range** context
 Context **configure filter ipv6-filter string entry number match hop-limit range**
 Tree **range**
 Description This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
 Notes The following elements are part of a mandatory choice: **eq, gt, lt, or range**.
 Introduced 21.10.R1
 Platforms All

end number

Synopsis Upper bound of the range
 Context **configure filter ipv6-filter string entry number match hop-limit range end number**
 Tree **end**
 Range 1 to 255
 Notes This element is mandatory.
 Introduced 21.10.R1
 Platforms All

start number

Synopsis	Lower bound of the range
Context	configure filter ipv6-filter string entry number match hop-limit range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

icmp

Synopsis	Enter the icmp context
Context	configure filter ipv6-filter string entry number match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	All

code number

Synopsis	ICMPv6 code value to match
Context	configure filter ipv6-filter string entry number match icmp code number
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	All

type number

Synopsis	ICMPv6 type value to match
Context	configure filter ipv6-filter string entry number match icmp type number
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	All

ip

Synopsis	Enter the ip context
Context	configure filter ipv6-filter string entry number match ip
Tree	ip
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	21.10.R1
Platforms	All

address (*ipv6-address | ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address used as the match criterion
Context	configure filter ipv6-filter string entry number match ip address (<i>ipv6-address ipv6-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	21.10.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-filter string entry number match ip ipv6-prefix-list reference
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list string
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	21.10.R1
Platforms	All

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-filter string entry number match ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .

Introduced 21.10.R1
Platforms All

next-header (*number* | *keyword*)

Synopsis IP protocol to match
Context **configure filter ipv6-filter** *string* **entry** *number* **match next-header** (*number* | *keyword*)
Tree [next-header](#)
Range 0 to 255
Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes The following elements are part of a choice: **next-header** or **next-header-list**.
Introduced 16.0.R1
Platforms All

next-header-list *reference*

Synopsis Name of the protocol list as a match criterion
Context **configure filter ipv6-filter** *string* **entry** *number* **match next-header-list** *reference*
Tree [next-header-list](#)
Reference **configure filter match-list protocol-list** *string*
Notes The following elements are part of a choice: **next-header** or **next-header-list**.
Introduced 20.7.R1
Platforms All

packet-length

Synopsis Enable the **packet-length** context
Context **configure filter ipv6-filter** *string* **entry** *number* **match packet-length**
Tree [packet-length](#)
Introduced 19.5.R1
Platforms All

eq number

Synopsis	Exact match criterion for the length
Context	configure filter ipv6-filter string entry number match packet-length eq number
Tree	eq
Range	40 to 65575
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the length
Context	configure filter ipv6-filter string entry number match packet-length gt number
Tree	gt
Range	40 to 65574
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the length
Context	configure filter ipv6-filter string entry number match packet-length lt number
Tree	lt
Range	41 to 65575
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string entry number match packet-length range
Tree	range

Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

end number

Synopsis	Upper bound of packet length range as match criterion
Context	configure filter ipv6-filter string entry number match packet-length range end number
Tree	end
Range	41 to 65575
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

start number

Synopsis	Lower bound of packet length range as match criterion
Context	configure filter ipv6-filter string entry number match packet-length range start number
Tree	start
Range	40 to 65574
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

port

Synopsis	Enter the port context
Context	configure filter ipv6-filter string entry number match port
Tree	port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Exact match criterion for the port number
Context	configure filter ipv6-filter string entry number match port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ipv6-filter string entry number match port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the port number
Context	configure filter ipv6-filter string entry number match port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ipv6-filter string entry number match port port-list reference
Tree	port-list

Reference	configure filter match-list port-list string
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string entry number match port range
Tree	range
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ipv6-filter string entry number match port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ipv6-filter string entry number match port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure filter ipv6-filter string entry number match src-ip
Tree	src-ip
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	16.0.R1
Platforms	All

address (*ipv6-address | ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address used as the match criterion
Context	configure filter ipv6-filter string entry number match src-ip address (<i>ipv6-address ipv6-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-filter string entry number match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list string
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-filter string entry number match src-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1

Platforms All

src-mac

Synopsis Enable the **src-mac** context
 Context **configure filter ipv6-filter string entry number match src-mac**
 Tree [src-mac](#)
 Introduced 19.5.R1
 Platforms All

address string

Synopsis MAC address used as the match criterion
 Context **configure filter ipv6-filter string entry number match src-mac address string**
 Tree [address](#)
 Notes This element is mandatory.
 Introduced 19.5.R1
 Platforms All

mask string

Synopsis MAC address mask as the match criterion
 Context **configure filter ipv6-filter string entry number match src-mac mask string**
 Tree [mask](#)
 Default ff:ff:ff:ff:ff:ff
 Introduced 19.5.R1
 Platforms All

src-port

Synopsis Enter the **src-port** context
 Context **configure filter ipv6-filter string entry number match src-port**
 Tree [src-port](#)
 Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
 Introduced 16.0.R1

Platforms All

eq *number*

Synopsis Exact match criterion for the port number
Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [match](#) [src-port](#) **eq** *number*
Tree [eq](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced 16.0.R1
Platforms All

gt *number*

Synopsis Greater than match criterion for the port number
Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [match](#) [src-port](#) **gt** *number*
Tree [gt](#)
Range 0 to 65534
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced 16.0.R1
Platforms All

lt *number*

Synopsis Less than match criterion for the port number
Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [match](#) [src-port](#) **lt** *number*
Tree [lt](#)
Range 1 to 65535
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced 16.0.R1
Platforms All

port-list *reference*

Synopsis Name of the port list as the match criterion

Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match src-port port-list <i>reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match src-port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match src-port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

tcp-established

Synopsis Match packets containing the TCP flag as ACK or RST
Context **configure filter ipv6-filter string entry number match tcp-established**
Tree [tcp-established](#)
Notes The following elements are part of a choice: **tcp-established** or **tcp-flags**.
Introduced 22.10.R1
Platforms All

tcp-flags

Synopsis Enter the **tcp-flags** context
Context **configure filter ipv6-filter string entry number match tcp-flags**
Tree [tcp-flags](#)
Notes The following elements are part of a choice: **tcp-established** or **tcp-flags**.
Introduced 16.0.R1
Platforms All

ack boolean

Synopsis Match TCP ACK as per value of the ACK TCP flag bit
Context **configure filter ipv6-filter string entry number match tcp-flags ack boolean**
Tree [ack](#)
Introduced 16.0.R1
Platforms All

cwr boolean

Synopsis Match TCP CWR as per value of the CWR TCP flag bit
Context **configure filter ipv6-filter string entry number match tcp-flags cwr boolean**
Tree [cwr](#)
Introduced 16.0.R1
Platforms All

ece boolean

Synopsis	Match TCP ECE as per value of the ECE TCP flag bit
Context	configure filter ipv6-filter string entry number match tcp-flags ece boolean
Tree	ece
Introduced	16.0.R1
Platforms	All

fin boolean

Synopsis	Match TCP FIN as per value of the FIN TCP flag bit
Context	configure filter ipv6-filter string entry number match tcp-flags fin boolean
Tree	fin
Introduced	16.0.R1
Platforms	All

ns boolean

Synopsis	Match TCP NS as per value of the NS TCP flag bit
Context	configure filter ipv6-filter string entry number match tcp-flags ns boolean
Tree	ns
Introduced	16.0.R1
Platforms	All

psh boolean

Synopsis	Match TCP PSH as per value of the PSH TCP flag bit
Context	configure filter ipv6-filter string entry number match tcp-flags psh boolean
Tree	psh
Introduced	16.0.R1
Platforms	All

rst boolean

Synopsis	Match TCP RST as per value of the RST TCP flag bit
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Context	configure filter ipv6-filter <i>string entry number match tcp-flags rst boolean</i>
Tree	rst
Introduced	16.0.R1
Platforms	All

syn *boolean*

Synopsis	Match TCP SYN as per value of the SYN TCP flag bit
Context	configure filter ipv6-filter <i>string entry number match tcp-flags syn boolean</i>
Tree	syn
Introduced	16.0.R1
Platforms	All

urg *boolean*

Synopsis	Match TCP URG as per value of the URG TCP flag bit
Context	configure filter ipv6-filter <i>string entry number match tcp-flags urg boolean</i>
Tree	urg
Introduced	16.0.R1
Platforms	All

pbr-down-action-override *keyword*

Synopsis	Action when PBR or PBF target for this entry is not available
Context	configure filter ipv6-filter <i>string entry number pbr-down-action-override keyword</i>
Tree	pbr-down-action-override
Options	drop, forward, filter-default-action
Introduced	16.0.R1
Platforms	All

sample-profile *reference*

Synopsis	Cflowd sample profile ID to match packets
Context	configure filter ipv6-filter <i>string entry number sample-profile reference</i>
Tree	sample-profile

Description	This command allows traffic matching an IPv4 or IPv6 filter to be sampled for cflowd processing using a specific sample profile ID. This option is only compatible if the associated interface is configured for interface-based sampling and is only supported for ingress sampling. An IP filter can only specify a single alternate sample profile ID for cflowd sampling, but the ID can be used in multiple entries.
Reference	configure cflowd sample-profile <i>number</i>
Introduced	20.10.R1
Platforms	All

sticky-dest (*number* | *keyword*)

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> sticky-dest (<i>number</i> <i>keyword</i>)
Tree	sticky-dest
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

filter-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv6 filter identifier
Context	configure filter ipv6-filter <i>string</i> filter-id <i>number</i>
Tree	filter-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Scope of this filter definition
Context	configure filter ipv6-filter <i>string</i> scope <i>keyword</i>

Tree	scope
Default	template
Options	exclusive, template, embedded, system
Introduced	16.0.R1
Platforms	All

shared-policer *boolean*

Synopsis	Share policer among active ports in the LAG
Context	configure filter ipv6-filter <i>string</i> shared-policer <i>boolean</i>
Tree	shared-policer
Description	When configured to true , and when the filter policy is configured on a LAG endpoint, the system programs the policer rates in the filter policy per line card FP of the LAG based on the number of active ports in the LAG for each FP. When configured to false , and when the filter policy is configured on a LAG endpoint, the system programs the same policer rate on each line card FP of the LAG.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure filter ipv6-filter <i>string</i> subscriber-mgmt
Tree	subscriber-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-specific-entry

Synopsis	Enter the host-specific-entry context
Context	configure filter ipv6-filter <i>string</i> subscriber-mgmt host-specific-entry
Tree	host-specific-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-control

Synopsis	Enter the credit-control context
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control
Tree	credit-control
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of range for credit control filter entries
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range end number
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of range for credit control filter entries
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range start number
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis Enter the **filter-rule** context
Context **configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule**
Tree [filter-rule](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis Enable the **range** context
Context **configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule range**
Tree [range](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis Upper bound of range for inserting filter rule entries
Context **configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule range end number**
Tree [end](#)
Range 1 to 2097151
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis Lower bound of range for inserting filter rule entries
Context **configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule range start number**
Tree [start](#)

Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis	Enter the watermark context
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry watermark
Tree	watermark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark for host-specific entries, to raise a table full alarm
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry watermark high number
Tree	high
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark for host-specific entries, to clear a table full alarm
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry watermark low number
Tree	low
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shared-entry

Synopsis	Enter the shared-entry context
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry
Tree	shared-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis	Enter the filter-rule context
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule
Tree	filter-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of range for inserting shared host rules
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule range end number
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of range for inserting shared host rules
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule range start number
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule

Synopsis	Enter the pcc-rule context
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule
Tree	pcc-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the range for PCC rule filter entries
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule range end number
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis Lower bound of the range for PCC rule filter entries
Context **configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule range start number**
Tree [start](#)
Range 1 to 2097151
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis Enable the **watermark** context
Context **configure filter ipv6-filter string subscriber-mgmt shared-entry watermark**
Tree [watermark](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis Limit of RADIUS shared filters before generating high watermark notification
Context **configure filter ipv6-filter string subscriber-mgmt shared-entry watermark high number**
Tree [high](#)
Range 1 to 8000
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis Limit of RADIUS or Diameter shared filters before clearing high watermark notification
Context **configure filter ipv6-filter string subscriber-mgmt shared-entry watermark low number**

Tree	low
Range	0 to 7999
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Set of match criteria for the filter policy
Context	configure filter ipv6-filter <i>string</i> type <i>keyword</i>
Tree	type
Description	This command configures the filter policy type that defines the list of match criteria supported in a filter policy.
Default	normal
Options	normal, src-mac, packet-length, destination-class
Introduced	19.5.R1
Platforms	All

log [[log-id](#)] *number*

Synopsis	Enter the log list instance
Context	configure filter log <i>number</i>
Tree	log
Introduced	16.0.R1
Platforms	All

[log-id] *number*

Synopsis	Filter log identifier
Context	configure filter log <i>number</i>
Tree	log
Range	101 to 199
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of filter logging
Context	configure filter log number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter log number description string
Tree	description
String Length	0 to 80
Introduced	16.0.R1
Platforms	All

destination

Synopsis	Enter the destination context
Context	configure filter log number destination
Tree	destination
Introduced	16.0.R1
Platforms	All

memory

Synopsis	Enter the memory context
Context	configure filter log number destination memory
Tree	memory
Notes	The following elements are part of a choice: memory or syslog .
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of memory entries that the log can store
Context	configure filter log number destination memory max-entries number
Tree	max-entries
Range	1 to 50000
Default	1000
Introduced	16.0.R1
Platforms	All

stop-on-full *boolean*

Synopsis	Stop logging when maximum number of memory entries is reached or wrap-around is used
Context	configure filter log number destination memory stop-on-full boolean
Tree	stop-on-full
Default	false
Introduced	16.0.R1
Platforms	All

syslog

Synopsis	Enter the syslog context
Context	configure filter log number destination syslog
Tree	syslog
Notes	The following elements are part of a choice: memory or syslog .
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Syslog server definition ID
Context	configure filter log number destination syslog name reference
Tree	name
Reference	configure log syslog string

Introduced 21.2.R1
Platforms All

summary

Synopsis Enter the **summary** context
Context **configure filter log number destination syslog summary**
Tree [summary](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of filter log summarization
Context **configure filter log number destination syslog summary admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

summary-crit *keyword*

Synopsis Summary for filter log entries
Context **configure filter log number destination syslog summary summary-crit keyword**
Tree [summary-crit](#)
Default src-addr
Options src-addr, dst-addr
Introduced 16.0.R1
Platforms All

mac-filter [[filter-name](#)] *string*

Synopsis Enter the **mac-filter** list instance
Context **configure filter mac-filter string**

Tree [mac-filter](#)
Introduced 16.0.R1
Platforms All

[filter-name] *string*

Synopsis Filter name
Context **configure** [filter](#) [mac-filter](#) *string*
Tree [mac-filter](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

default-action *keyword*

Synopsis Action for packets that do not match any entry
Context **configure** [filter](#) [mac-filter](#) *string* **default-action** *keyword*
Tree [default-action](#)
Default drop
Options drop, accept
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [filter](#) [mac-filter](#) *string* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

embed

Synopsis	Enter the embed context
Context	configure filter mac-filter string embed
Tree	embed
Description	<p>Commands in this context embed a previously defined MAC embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.</p> <p>For MAC filters, embedding is supported for VSD filters or filter entries only.</p>
Introduced	16.0.R1
Platforms	All

entry [entry-id] number

Synopsis	Enter the entry list instance
Context	configure filter mac-filter string entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] number

Synopsis	ID for a match criteria and the corresponding action
Context	configure filter mac-filter string entry number
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the action context
Context	configure filter mac-filter string entry number action
Tree	action
Introduced	16.0.R1

Platforms All

accept

Synopsis Accept regular routing to forward a matching packet
 Context **configure filter mac-filter string entry number action accept**
 Tree [accept](#)
 Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.
 Introduced 16.0.R1
 Platforms All

drop

Synopsis Drop a packet matching this entry
 Context **configure filter mac-filter string entry number action drop**
 Tree [drop](#)
 Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.
 Introduced 16.0.R1
 Platforms All

forward

Synopsis Enter the **forward** context
 Context **configure filter mac-filter string entry number action forward**
 Tree [forward](#)
 Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.
 Introduced 16.0.R1
 Platforms All

esi-l2

Synopsis Enable the **esi-l2** context
 Context **configure filter mac-filter string entry number action forward esi-l2**

Tree	esi-l2
Notes	The following elements are part of a choice: esi-l2 , sap , or sdp .
Introduced	16.0.R1
Platforms	All

esi-value string

Synopsis	ESI of the first ESI-identified appliance
Context	configure filter mac-filter string entry number action forward esi-l2 esi-value string
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS service name
Context	configure filter mac-filter string entry number action forward esi-l2 vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter mac-filter string entry number action forward sap
Tree	sap
Notes	The following elements are part of a choice: esi-l2 , sap , or sdp .
Introduced	16.0.R1
Platforms	All

sap-id *reference*

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	configure filter mac-filter <i>string</i> entry <i>number</i> action forward sap sap-id <i>reference</i>
Tree	sap-id
Reference	configure service vpls <i>string</i> sap <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SAP
Context	configure filter mac-filter <i>string</i> entry <i>number</i> action forward sap vpls <i>reference</i>
Tree	vpls
Reference	configure service vpls <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the sdp context
Context	configure filter mac-filter <i>string</i> entry <i>number</i> action forward sdp
Tree	sdp
Notes	The following elements are part of a choice: esi-l2 , sap , or sdp .
Introduced	16.0.R1
Platforms	All

sdp-bind-id *string*

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	configure filter mac-filter <i>string</i> entry <i>number</i> action forward sdp sdp-bind-id <i>string</i>
Tree	sdp-bind-id
String Length	3 to 16

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS associated with the SDP
Context	configure filter mac-filter string entry number action forward sdp vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

http-redirect

Synopsis	Enable the http-redirect context
Context	configure filter mac-filter string entry number action http-redirect
Tree	http-redirect
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , or ignore-match .
Introduced	16.0.R1
Platforms	All

url string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL that is used for redirecting
Context	configure filter mac-filter string entry number action http-redirect url string
Tree	url
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

ignore-match

Synopsis Ignore match criteria for the entry

Context **configure** filter mac-filter string entry number action ignore-match

Tree ignore-match

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.

Introduced 16.0.R1

Platforms All

rate-limit

Synopsis Enable the **rate-limit** context

Context **configure** filter mac-filter string entry number action rate-limit

Tree rate-limit

Introduced 16.0.R1

Platforms All

pir (*number* | *keyword*)

Synopsis Peak information rate

Context **configure** filter mac-filter string entry number action rate-limit pir (*number* | *keyword*)

Tree pir

Range 0 to 2000000000

Units kilobps

Options max

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

secondary

Synopsis Enable the **secondary** context

Context	configure filter mac-filter string entry number action secondary
Tree	secondary
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the forward context
Context	configure filter mac-filter string entry number action secondary forward
Tree	forward
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter mac-filter string entry number action secondary forward sap
Tree	sap
Notes	The following elements are part of a choice: sap or sdp .
Introduced	16.0.R1
Platforms	All

sap-id reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	configure filter mac-filter string entry number action secondary forward sap sap-id reference
Tree	sap-id
Reference	configure service vpls string sap string
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

vpls *reference*

Synopsis VPLS the sdp-bind-id belongs to
Context **configure** filter mac-filter *string* entry *number* action secondary forward sap vpls *reference*
Tree [vpls](#)
Reference **configure** service vpls *string*
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

sdp

Synopsis Enable the **sdp** context
Context **configure** filter mac-filter *string* entry *number* action secondary forward sdp
Tree [sdp](#)
Notes The following elements are part of a choice: **sap** or **sdp**.
Introduced 16.0.R1
Platforms All

sdp-bind-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPLS SDP bind ID used to forward matching packets
Context **configure** filter mac-filter *string* entry *number* action secondary forward sdp sdp-bind-id *string*
Tree [sdp-bind-id](#)
String Length 3 to 16
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

vpls reference

Synopsis	VPLS associated with the SDP
Context	configure filter mac-filter string entry number action secondary forward sdp vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure filter mac-filter string entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

log reference

Synopsis	Log that is used for packets matching this entry
Context	configure filter mac-filter string entry number log reference
Tree	log
Reference	configure filter log number
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure filter mac-filter string entry number match
Tree	match
Introduced	16.0.R1

Platforms All

dot1p

Synopsis Enable the **dot1p** context
Context **configure filter mac-filter string entry number match dot1p**
Tree [dot1p](#)
Introduced 16.0.R1
Platforms All

mask number

Synopsis 802.1p mask value used as a MAC filter match criterion
Context **configure filter mac-filter string entry number match dot1p mask number**
Tree [mask](#)
Range 1 to 7
Default 7
Introduced 16.0.R1
Platforms All

priority number

Synopsis IEEE 802.1p value used as a MAC filter match criterion
Context **configure filter mac-filter string entry number match dot1p priority number**
Tree [priority](#)
Range 0 to 7
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

dst-mac

Synopsis Enable the **dst-mac** context
Context **configure filter mac-filter string entry number match dst-mac**
Tree [dst-mac](#)

Introduced 16.0.R1
Platforms All

address string

Synopsis MAC address used as the match criterion
Context **configure filter mac-filter string entry number match dst-mac address string**
Tree [address](#)
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

mask string

Synopsis MAC address mask as the match criterion
Context **configure filter mac-filter string entry number match dst-mac mask string**
Tree [mask](#)
Default ff:ff:ff:ff:ff:ff
Introduced 16.0.R1
Platforms All

etype string

Synopsis Ethernet type
Context **configure filter mac-filter string entry number match etype string**
Tree [etype](#)
String Length 5 to 6
Introduced 16.0.R1
Platforms All

frame-type keyword

Synopsis MAC frame as match criteria
Context **configure filter mac-filter string entry number match frame-type keyword**
Tree [frame-type](#)

Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Introduced	16.0.R1
Platforms	All

inner-tag

Synopsis	Enable the inner-tag context
Context	configure filter mac-filter string entry number match inner-tag
Tree	inner-tag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	configure filter mac-filter string entry number match inner-tag mask number
Tree	mask
Range	1 to 4095
Default	4095
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tag number

Synopsis	Matching value against VID of the second or first VLAN tag in the packet carried transparently
Context	configure filter mac-filter string entry number match inner-tag tag number
Tree	tag
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

isid

Synopsis	Enter the isid context
Context	configure filter mac-filter string entry number match isid
Tree	isid
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter mac-filter string entry number match isid range
Tree	range
Notes	The following elements are part of a choice: range or value .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the ISID range
Context	configure filter mac-filter string entry number match isid range end number
Tree	end
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the ISID range
Context	configure filter mac-filter string entry number match isid range start number
Tree	start
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

value number

Synopsis Lowest value of 24-bit service instance identifier for the service matching this entry
 Context **configure filter mac-filter string entry number match isid value number**
 Tree [value](#)
 Range 0 to 16777215
 Notes The following elements are part of a choice: **range** or **value**.
 Introduced 16.0.R1
 Platforms All

llc-dsap

Synopsis Enable the **llc-dsap** context
 Context **configure filter mac-filter string entry number match llc-dsap**
 Tree [llc-dsap](#)
 Introduced 16.0.R1
 Platforms All

dsap number

Synopsis DSAP value
 Context **configure filter mac-filter string entry number match llc-dsap dsap number**
 Tree [dsap](#)
 Range 0 to 255
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

mask number

Synopsis Destination SAP mask
 Context **configure filter mac-filter string entry number match llc-dsap mask number**
 Tree [mask](#)

Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

llc-ssap

Synopsis	Enable the llc-ssap context
Context	configure filter mac-filter string entry number match llc-ssap
Tree	llc-ssap
Introduced	16.0.R1
Platforms	All

mask number

Synopsis	Source SAP mask
Context	configure filter mac-filter string entry number match llc-ssap mask number
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

ssap number

Synopsis	Source or destination SAP value
Context	configure filter mac-filter string entry number match llc-ssap ssap number
Tree	ssap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

outer-tag

Synopsis	Enable the outer-tag context
Context	configure filter mac-filter string entry number match outer-tag
Tree	outer-tag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	configure filter mac-filter string entry number match outer-tag mask number
Tree	mask
Range	1 to 4095
Default	4095
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tag number

Synopsis	Matching value against VID of the second or first VLAN tag in the packet carried transparently
Context	configure filter mac-filter string entry number match outer-tag tag number
Tree	tag
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

snap-oui keyword

Synopsis	Parameter snap-oui as a MAC filter match criteria
Context	configure filter mac-filter string entry number match snap-oui keyword
Tree	snap-oui
Options	zero, non-zero

Introduced 16.0.R1
Platforms All

snap-pid *number*

Synopsis Parameter snap-pid as a MAC filter match criteria
Context **configure** filter mac-filter *string* entry *number* match snap-pid *number*
Tree [snap-pid](#)
Range 0 to 65535
Introduced 16.0.R1
Platforms All

src-mac

Synopsis Enable the **src-mac** context
Context **configure** filter mac-filter *string* entry *number* match src-mac
Tree [src-mac](#)
Introduced 16.0.R1
Platforms All

address *string*

Synopsis MAC address used as the match criterion
Context **configure** filter mac-filter *string* entry *number* match src-mac address *string*
Tree [address](#)
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

mask *string*

Synopsis MAC address mask as the match criterion
Context **configure** filter mac-filter *string* entry *number* match src-mac mask *string*
Tree [mask](#)
Default ff:ff:ff:ff:ff:ff

Introduced 16.0.R1
Platforms All

pbr-down-action-override *keyword*

Synopsis Action when PBR or PBF target for this entry is not available
Context **configure filter mac-filter** *string entry number pbr-down-action-override keyword*
Tree [pbr-down-action-override](#)
Options drop, forward, filter-default-action
Introduced 16.0.R1
Platforms All

sticky-dest (*number | keyword*)

Synopsis Time before action with available PBR or PBF destination and highest priority
Context **configure filter mac-filter** *string entry number sticky-dest (number | keyword)*
Tree [sticky-dest](#)
Range 0 to 65535
Units seconds
Options no-hold-time-up
Introduced 16.0.R1
Platforms All

filter-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis MAC filter ID
Context **configure filter mac-filter** *string filter-id number*
Tree [filter-id](#)
Range 1 to 65535
Introduced 16.0.R1
Platforms All

scope keyword

Synopsis	Scope of this filter definition
Context	configure filter mac-filter <i>string scope keyword</i>
Tree	scope
Default	template
Options	exclusive, template, embedded, system
Introduced	16.0.R1
Platforms	All

type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC filter policy
Context	configure filter mac-filter <i>string type keyword</i>
Tree	type
Default	normal
Options	normal, isid, vid
Introduced	16.0.R1
Platforms	All

match-list

Synopsis	Enter the match-list context
Context	configure filter match-list
Tree	match-list
Introduced	16.0.R1
Platforms	All

ip-prefix-list [[prefix-list-name](#)] *string*

Synopsis	Enter the ip-prefix-list list instance
Context	configure filter match-list ip-prefix-list <i>string</i>

Tree	ip-prefix-list
Introduced	16.0.R1
Platforms	All

[prefix-list-name] *string*

Synopsis	IP prefix list name
Context	configure filter match-list ip-prefix-list <i>string</i>
Tree	ip-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

apply-path

Synopsis	Enter the apply-path context
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path
Tree	apply-path
Introduced	16.0.R1
Platforms	All

bgp-peers [[criterion-index](#)] *number*

Synopsis	Enter the bgp-peers list instance
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i>
Tree	bgp-peers
Introduced	16.0.R1
Platforms	All

[criterion-index] *number*

Synopsis	BGP peers auto-generation configuration index
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i>
Tree	bgp-peers

Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance group configuration
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> group <i>string</i>
Tree	group
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

neighbor *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance neighbor configuration
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> neighbor <i>string</i>
Tree	neighbor
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Target routing instance
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter match-list ip-prefix-list <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

prefix [*ip-prefix*] *string*

Synopsis	Add a list entry for prefix
Context	configure filter match-list ip-prefix-list <i>string</i> prefix <i>string</i>
Tree	prefix
Description	<p>Commands in this context add IPv4 prefixes to the prefix match list. Prefixes can overlap IPv4 address space.</p> <p>An IPv4 prefix addition is blocked if resource exhaustion is detected anywhere in the system due to filter policies that use the prefix list.</p>
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

[ip-prefix] string

Synopsis	IPv4 prefix to be added to the prefix list
Context	configure filter match-list ip-prefix-list string prefix string
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

prefix-exclude [ip-prefix] string

Synopsis	Add a list entry for prefix-exclude
Context	configure filter match-list ip-prefix-list string prefix-exclude string
Tree	prefix-exclude
Description	Commands in this context exclude IPv4 prefixes from the prefix match list. This command is mutually exclusive with the apply-path command.
Max. Instances	512
Introduced	16.0.R4
Platforms	All

[ip-prefix] string

Synopsis	IPv4 prefix to be added to the prefix list
Context	configure filter match-list ip-prefix-list string prefix-exclude string
Tree	prefix-exclude
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

ipv6-prefix-list [prefix-list-name] string

Synopsis	Enter the ipv6-prefix-list list instance
Context	configure filter match-list ipv6-prefix-list string
Tree	ipv6-prefix-list
Introduced	16.0.R1

Platforms All

[prefix-list-name] *string*

Synopsis IP prefix list name
Context **configure** filter match-list ipv6-prefix-list *string*
Tree [ipv6-prefix-list](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

apply-path

Synopsis Enter the **apply-path** context
Context **configure** filter match-list ipv6-prefix-list *string* apply-path
Tree [apply-path](#)
Introduced 16.0.R1
Platforms All

bgp-peers [[criterion-index](#)] *number*

Synopsis Enter the **bgp-peers** list instance
Context **configure** filter match-list ipv6-prefix-list *string* apply-path bgp-peers *number*
Tree [bgp-peers](#)
Introduced 16.0.R1
Platforms All

[criterion-index] *number*

Synopsis BGP peers auto-generation configuration index
Context **configure** filter match-list ipv6-prefix-list *string* apply-path bgp-peers *number*
Tree [bgp-peers](#)
Range 1 to 255
Notes This element is part of a list key.

Introduced 16.0.R1
Platforms All

group *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Regular expression to match against the base router BGP instance group configuration
Context **configure** filter match-list ipv6-prefix-list *string* apply-path bgp-peers number group *string*
Tree [group](#)
String Length 1 to 255
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

neighbor *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Regular expression to match against the base router BGP instance neighbor configuration
Context **configure** filter match-list ipv6-prefix-list *string* apply-path bgp-peers number neighbor *string*
Tree [neighbor](#)
String Length 1 to 255
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Target routing instance
Context	configure filter match-list ipv6-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter match-list ipv6-prefix-list <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

prefix [*ipv6-prefix*] *string*

Synopsis	Add a list entry for prefix
Context	configure filter match-list ipv6-prefix-list <i>string</i> prefix <i>string</i>
Tree	prefix
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

[*ipv6-prefix*] *string*

Synopsis	IPv6 prefix to be added to the prefix list
Context	configure filter match-list ipv6-prefix-list <i>string</i> prefix <i>string</i>

Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

prefix-exclude [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for prefix-exclude
Context	configure filter match-list ipv6-prefix-list <i>string</i> prefix-exclude <i>string</i>
Tree	prefix-exclude
Description	Commands in this context exclude IPv6 prefixes from the prefix match list. This command is mutually exclusive with the apply-path command.
Max. Instances	512
Introduced	16.0.R4
Platforms	All

[ipv6-prefix] *string*

Synopsis	IPv6 prefix to be added to the prefix list
Context	configure filter match-list ipv6-prefix-list <i>string</i> prefix-exclude <i>string</i>
Tree	prefix-exclude
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port-list [[port-list-name](#)] *string*

Synopsis	Enter the port-list list instance
Context	configure filter match-list port-list <i>string</i>
Tree	port-list
Max. Instances	5120
Introduced	16.0.R1
Platforms	All

[port-list-name] *string*

Synopsis	Port list name
Context	configure filter match-list port-list string
Tree	port-list
Description	This command specifies the port list name. If special characters are used (#, \$, spaces, and so on), the string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter match-list port-list string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

port [[value](#)] *number*

Synopsis	Add a list entry for port
Context	configure filter match-list port-list string port number
Tree	port
Introduced	16.0.R1
Platforms	All

[value] *number*

Synopsis	Port value
Context	configure filter match-list port-list string port number
Tree	port
Range	0 to 65535

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

range *start number end number*

Synopsis	Add a list entry for range
Context	configure filter match-list port-list <i>string</i> range <i>start number end number</i>
Tree	range
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port list range
Context	configure filter match-list port-list <i>string</i> range <i>start number end number</i>
Tree	range
Range	0 to 65534
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port list range
Context	configure filter match-list port-list <i>string</i> range <i>start number end number</i>
Tree	range
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

protocol-list [[protocol-list-name](#)] *string*

Synopsis	Enter the protocol-list list instance
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Context	configure filter match-list protocol-list string
Tree	protocol-list
Max. Instances	512
Introduced	20.7.R1
Platforms	All

[protocol-list-name] string

Synopsis	Protocol list name
Context	configure filter match-list protocol-list string
Tree	protocol-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

description string

Synopsis	Text description
Context	configure filter match-list protocol-list string description string
Tree	description
String Length	1 to 80
Introduced	20.7.R1
Platforms	All

protocol [protocol-id] (number | keyword)

Synopsis	Add a list entry for protocol
Context	configure filter match-list protocol-list string protocol (number keyword)
Tree	protocol
Max. Instances	32
Introduced	20.7.R1
Platforms	All

[**protocol-id**] (*number* | *keyword*)

Synopsis	IP protocol identifier
Context	configure filter match-list protocol-list string protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	icmp, igmp, ip, tcp, egg, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

md-auto-id

Synopsis	Enter the md-auto-id context
Context	configure filter md-auto-id
Tree	md-auto-id
Introduced	16.0.R1
Platforms	All

filter-id-range

Synopsis	Enable the filter-id-range context
Context	configure filter md-auto-id filter-id-range
Tree	filter-id-range
Introduced	16.0.R1
Platforms	All

end number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
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Context	configure filter md-auto-id filter-id-range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	configure filter md-auto-id filter-id-range start <i>number</i>
Tree	start
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

redirect-policy [[redirect-policy-name](#)] *string*

Synopsis	Enter the redirect-policy list instance
Context	configure filter redirect-policy <i>string</i>
Tree	redirect-policy
Introduced	16.0.R1
Platforms	All

[redirect-policy-name] *string*

Synopsis	Redirect policy name
Context	configure filter redirect-policy <i>string</i>
Tree	redirect-policy

Description	This command specifies the redirect policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the redirect policy
Context	configure filter redirect-policy <i>string admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter redirect-policy <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination [[destination-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Enter the destination list instance
Context	configure filter redirect-policy <i>string destination (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	destination
Introduced	16.0.R1
Platforms	All

[**destination-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address and type of destination
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	destination
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the destination
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ping-test

Synopsis	Enable the ping-test context
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test

Tree	ping-test
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Number of consecutive requests that fail before destination is declared unreachable
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test drop-count <i>number</i>
Tree	drop-count
Range	1 to 60
Default	3
Introduced	16.0.R1
Platforms	All

hold-down *number*

Synopsis	Time for the system to be held down if this test has marked it unreachable
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test hold-down <i>number</i>
Tree	hold-down
Range	0 to 86400
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time between consecutive requests which are sent to the far end host
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test interval <i>number</i>
Tree	interval
Range	1 to 60
Default	1
Units	seconds

Introduced 16.0.R1
Platforms All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address to use in the IP packet of the ping test
Context **configure filter redirect-policy** *string destination* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **ping-test source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [source-address](#)
Introduced 16.0.R4
Platforms All

timeout *number*

Synopsis Time required to receive a response from the far end host
Context **configure filter redirect-policy** *string destination* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **ping-test timeout** *number*
Tree [timeout](#)
Range 1 to 60
Default 1
Units seconds
Introduced 16.0.R1
Platforms All

priority *number*

Synopsis Priority for this destination
Context **configure filter redirect-policy** *string destination* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **priority** *number*
Tree [priority](#)
Range 1 to 255
Default 100
Introduced 16.0.R1
Platforms All

unicast-rt-test

Synopsis	Enable the unicast-rt-test context
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) unicast-rt-test
Tree	unicast-rt-test
Introduced	16.0.R1
Platforms	All

notify-dest-change *boolean*

Synopsis	Send notifications when the active destination changes
Context	configure filter redirect-policy <i>string notify-dest-change</i> <i>boolean</i>
Tree	notify-dest-change
Description	When configured to true , notifications (such as Log and SNMP) are sent when the active destination of a redirect policy changes. No notification is sent when there are no more active destinations (as this scenario is covered by another notification). When configured to false , the notification generation is disabled.
Default	false
Introduced	16.0.R4
Platforms	All

router-instance *string*

Synopsis	Routing context to use for route lookup
Context	configure filter redirect-policy <i>string router-instance</i> <i>string</i>
Tree	router-instance
Introduced	16.0.R1
Platforms	All

sticky-dest (*number* | *keyword*)

Synopsis	Time required by system before applying the current best destination as active destination
Context	configure filter redirect-policy <i>string sticky-dest</i> (<i>number</i> <i>keyword</i>)
Tree	sticky-dest
Range	0 to 65535

Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

redirect-policy-binding [[binding-name](#)] *string*

Synopsis	Enter the redirect-policy-binding list instance
Context	configure filter redirect-policy-binding <i>string</i>
Tree	redirect-policy-binding
Max. Instances	16
Introduced	16.0.R4
Platforms	All

[binding-name] *string*

Synopsis	Binding name
Context	configure filter redirect-policy-binding <i>string</i>
Tree	redirect-policy-binding
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

binding-operator *keyword*

Synopsis	Logical operator used to obtain the master test result
Context	configure filter redirect-policy-binding <i>string</i> binding-operator <i>keyword</i>
Tree	binding-operator
Description	This command configures the logical operator to use with the destinations' test results to obtain the master test result (the redirect policy binding test result).
Default	and
Options	and, or
Introduced	16.0.R4

Platforms All

redirect-policy [[redirect-policy-name](#)] *reference*

Synopsis Enter the **redirect-policy** list instance
Context **configure filter redirect-policy-binding** *string* [redirect-policy](#) *reference*
Tree [redirect-policy](#)
Introduced 16.0.R4
Platforms All

[redirect-policy-name] *reference*

Synopsis Redirect policy name
Context **configure filter redirect-policy-binding** *string* [redirect-policy](#) *reference*
Tree [redirect-policy](#)
Reference **configure filter redirect-policy** *string*
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

destination [[destination-address](#)] *reference*

Synopsis Add a list entry for **destination**
Context **configure filter redirect-policy-binding** *string* [redirect-policy](#) *reference* [destination](#) *reference*
Tree [destination](#)
Min. 1
Instances
Introduced 16.0.R4
Platforms All

[destination-address] *reference*

Synopsis IP address of redirect policy destination to binding
Context **configure filter redirect-policy-binding** *string* [redirect-policy](#) *reference* [destination](#) *reference*

Tree	destination
Reference	configure filter redirect-policy <i>string destination (ipv4-address-no-zone ipv6-address-no-zone)</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

system-filter

Synopsis	Enter the system-filter context
Context	configure filter system-filter
Tree	system-filter
Introduced	16.0.R1
Platforms	All

ip [[ip-filter](#)] *reference*

Synopsis	Add a list entry for ip
Context	configure filter system-filter ip <i>reference</i>
Tree	ip
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[[ip-filter](#)] *reference*

Synopsis	Active IPv4 system filter policy
Context	configure filter system-filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

ipv6 [[ipv6-filter](#)] *reference*

Synopsis	Add a list entry for ipv6
Context	configure filter system-filter ipv6 <i>reference</i>
Tree	ipv6
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[ipv6-filter] *reference*

Synopsis	Active IPv6 system filter policy
Context	configure filter system-filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

3.17 fwd-path-ext commands

```
configure
- fwd-path-ext
- apply-groups reference
- apply-groups-exclude reference
- fpe number
- application
- pw-port-extension
- interface-a
- qos
- network-policy reference
- interface-b
- qos
- network-policy reference
- srv6
- interface-a
- qos
- network-policy reference
- interface-b
- mtu number
- qos
- network-policy reference
- type keyword
- sub-mgmt-extension boolean
- vxlan
- router-instance string
- apply-groups reference
- apply-groups-exclude reference
- description string
- multi-path
- path number
- apply-groups reference
- apply-groups-exclude reference
- pxc reference
- xc-lag-a reference
- xc-lag-b reference
- path
- pxc reference
- xc-lag-a reference
- xc-lag-b reference
- sdp-id-range
- apply-groups reference
- apply-groups-exclude reference
- end number
- start number
```

3.17.1 fwd-path-ext command descriptions

fwd-path-ext

Synopsis	Enter the fwd-path-ext context
Context	configure fwd-path-ext
Tree	fwd-path-ext
Description	Commands in this context configure a Forwarding Path Extension (FPE). Some applications that rely on PXC functionality utilize FPE to simplify the configuration of these applications.
Introduced	16.0.R1
Platforms	All

fpe [fpe-id] number

Synopsis	Enter the fpe list instance
Context	configure fwd-path-ext fpe number
Tree	fpe
Description	Commands in this context configure the Forwarding Path Extension (FPE), which associates an application with a PXC (a paired set of PXC sub-ports or a paired set of PXC-based LAGs).
Introduced	16.0.R1
Platforms	All

[fpe-id] number

Synopsis	FPE ID
Context	configure fwd-path-ext fpe number
Tree	fpe
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

application

Synopsis	Enter the application context
Context	configure fwd-path-ext fpe number application
Tree	application
Description	Commands in this context configure the attributes of the FPE application.
Introduced	16.0.R1
Platforms	All

pw-port-extension

Synopsis	Enable the pw-port-extension context
Context	configure fwd-path-ext fpe number application pw-port-extension
Tree	pw-port-extension
Description	Commands in this context configure the type of the cross-connect required to terminate an external tunnel to an anchored PW port. The system automatically builds the internal infrastructure required to perform the tunnel termination on a PW port. PW ports support the following types of tunnels: <ul style="list-style-type: none">• GRE/MPLS PW with SDP of type MPLS or GRE• L2oGRE bridged Ethernet over GRE, where GRE protocol number is 0x6558
Introduced	22.2.R1
Platforms	All

interface-a

Synopsis	Enter the interface-a context
Context	configure fwd-path-ext fpe number application pw-port-extension interface-a
Tree	interface-a
Description	Commands in this context configure the command options for network interface-a of the PW port extension FPE.
Introduced	22.10.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure fwd-path-ext fpe number application pw-port-extension interface-a qos

Tree	qos
Introduced	22.10.R1
Platforms	All

network-policy *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	configure fwd-path-ext fpe number application pw-port-extension interface-a qos network-policy reference
Tree	network-policy
Reference	configure qos network string
Introduced	22.10.R1
Platforms	All

interface-b

Synopsis	Enter the interface-b context
Context	configure fwd-path-ext fpe number application pw-port-extension interface-b
Tree	interface-b
Description	Commands in this context configure command options for network interface-b of the PW port extension FPE.
Introduced	22.10.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure fwd-path-ext fpe number application pw-port-extension interface-b qos
Tree	qos
Introduced	22.10.R1
Platforms	All

network-policy *reference*

Synopsis	Network QoS policy applied to the FPE interface
----------	---

Context	configure fwd-path-ext fpe number application pw-port-extension interface-b qos network-policy reference
Tree	network-policy
Reference	configure qos network string
Introduced	22.10.R1
Platforms	All

srv6

Synopsis	Enable the srv6 context
Context	configure fwd-path-ext fpe number application srv6
Tree	srv6
Description	Commands in this context configure the SRv6 FPE application used for origination or termination of SRv6 tunnels.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-a

Synopsis	Enter the interface-a context
Context	configure fwd-path-ext fpe number application srv6 interface-a
Tree	interface-a
Description	Commands in this context configure the parameters of network interface-a of the SRv6 FPE.
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

qos

Synopsis	Enter the qos context
Context	configure fwd-path-ext fpe number application srv6 interface-a qos
Tree	qos
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

network-policy *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	configure fwd-path-ext fpe number application srv6 interface-a qos network-policy reference
Tree	network-policy
Reference	configure qos network string
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-b

Synopsis	Enter the interface-b context
Context	configure fwd-path-ext fpe number application srv6 interface-b
Tree	interface-b
Description	Commands in this context configure the parameters of network interface-b of the SRv6 FPE.
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mtu *number*

Synopsis	MTU size of SRv6 origination FPE interface-b
Context	configure fwd-path-ext fpe number application srv6 interface-b mtu number
Tree	mtu
Description	<p>This command configures the Maximum Transfer Unit (MTU) of interface-b of the SRv6 origination FPE.</p> <p>The MTU is used to check if an IPv4 service packet should be fragmented and if an IPv6 service packet should be dropped when tunneled over SRv6.</p> <p>The minimum value is the IPv6 minimum MTU value. The maximum value is set to the maximum Ethernet port MTU (9800) minus 14 bytes for Null Ethernet encapsulation.</p>
Range	0 1280 to 9786
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

qos

Synopsis	Enter the qos context
Context	configure fwd-path-ext fpe number application srv6 interface-b qos
Tree	qos
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

network-policy *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	configure fwd-path-ext fpe number application srv6 interface-b qos network-policy reference
Tree	network-policy
Reference	configure qos network string
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

type *keyword*

Synopsis	SRv6 FPE application type
Context	configure fwd-path-ext fpe number application srv6 type keyword
Tree	type
Description	<p>This command specifies if the SRv6 FPE application is used for origination or termination of SRv6 tunnels.</p> <p>A dedicated SRv6 FPE is required for origination and termination of SRv6 tunnels on services and they cannot share the same FPE.</p> <p>A single FPE can be configured for SRv6 origination. One or more FPEs can be configured for SRv6 termination, where a termination SRv6 FPE is assigned one or more configured locators.</p> <p>Transit SRv6 routers do not require SRv6 FPEs.</p>
Options	origination, termination
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

sub-mgmt-extension *boolean*

Synopsis	Enable FPE for subscriber management extensions
Context	configure fwd-path-ext fpe number application sub-mgmt-extension boolean
Tree	sub-mgmt-extension
Description	When configured to true , the FPE is used for subscriber management extensions. The FPE can be used for multiple subscriber management applications, but it cannot be used for other applications. When configured to false , the FPE is not used for subscriber management extensions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan

Synopsis	Enable the vxlan context
Context	configure fwd-path-ext fpe number application vxlan
Tree	vxlan
Introduced	22.2.R1
Platforms	All

router-instance *string*

Synopsis	Router instance for VXLAN termination
Context	configure fwd-path-ext fpe number application vxlan router-instance string
Tree	router-instance
Default	Base
Introduced	22.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure fwd-path-ext fpe number description string
Tree	description
String Length	1 to 80

Introduced 16.0.R1
Platforms All

multi-path

Synopsis Enable the **multi-path** context
Context **configure fwd-path-ext fpe number multi-path**
Tree [multi-path](#)
Description Commands in this context configure a multipath FPE that can contain multiple PXC ports or LAGs of PXC ports.
Notes The following elements are part of a choice: **multi-path** or **path**.
Introduced 21.10.R1
Platforms All

path [path-id] number

Synopsis Enter the **path** list instance
Context **configure fwd-path-ext fpe number multi-path path number**
Tree [path](#)
Description Commands in this context configure a multipath FPE forwarding path. A single path in a multipath FPE can contain a single PXC port or a LAG of PXC ports.
Introduced 21.10.R1
Platforms All

[path-id] number

Synopsis Multipath FPE forwarding path ID
Context **configure fwd-path-ext fpe number multi-path path number**
Tree [path](#)
Range 1 to 64
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms All

pxc reference

Synopsis	Dedicated PXC ID used by the FPE path
Context	configure fwd-path-ext fpe number multi-path path number pxc reference
Tree	pxc
Reference	configure port-xc pxc number
Notes	The following elements are part of a choice: pxc or (xc-lag-a and xc-lag-b).
Introduced	21.10.R1
Platforms	All

xc-lag-a reference

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	configure fwd-path-ext fpe number multi-path path number xc-lag-a reference
Tree	xc-lag-a
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate xc-lag-a with the LAG containing either supports.a or supports.b. The system does not enforce a match between xc-lag-a and the LAG ID containing supports.a.
Reference	configure lag string
Notes	The following elements are part of a choice: pxc or (xc-lag-a and xc-lag-b).
Introduced	21.10.R1
Platforms	All

xc-lag-b reference

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	configure fwd-path-ext fpe number multi-path path number xc-lag-b reference
Tree	xc-lag-b
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate xc-lag-b with the LAG containing either supports.a or supports.b. The system does not enforce a match between xc-lag-b and the LAG ID containing supports.b.
Reference	configure lag string
Notes	The following elements are part of a choice: pxc or (xc-lag-a and xc-lag-b).
Introduced	21.10.R1

Platforms All

path

Synopsis Enter the **path** context

Context **configure fwd-path-ext fpe number path**

Tree [path](#)

Notes The following elements are part of a choice: **multi-path** or **path**.

Introduced 16.0.R1

Platforms All

pxc reference

Synopsis Dedicated PXC ID used by the FPE path

Context **configure fwd-path-ext fpe number path pxc reference**

Tree [pxc](#)

Reference **configure port-xc pxc number**

Notes The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).

Introduced 16.0.R1

Platforms All

xc-lag-a reference

Synopsis PXC LAG identifier dedicated to the FPE path

Context **configure fwd-path-ext fpe number path xc-lag-a reference**

Tree [xc-lag-a](#)

Description This command specifies the LAG identifier associated with one side of the PXC. The operator can associate **xc-lag-a** with the LAG containing either supports.a or supports.b. The system does not enforce a match between **xc-lag-a** and the LAG ID containing supports.a.

Reference **configure lag string**

Notes The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).

Introduced 16.0.R4

Platforms All

xc-lag-b reference

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	configure fwd-path-ext fpe number path xc-lag-b reference
Tree	xc-lag-b
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate xc-lag-b with the LAG containing either supports.a or supports.b. The system does not enforce a match between xc-lag-b and the LAG ID containing supports.b.
Reference	configure lag string
Notes	The following elements are part of a choice: pxc or (xc-lag-a and xc-lag-b).
Introduced	16.0.R4
Platforms	All

sdp-id-range

Synopsis	Enable the sdp-id-range context
Context	configure fwd-path-ext sdp-id-range
Tree	sdp-id-range
Description	<p>Commands in this context configure the SDP ID range used by the FPE based PW port and VXLAN termination applications.</p> <p>Each configured FPE-based PW port is associated with two internal SDPs (one in each direction) whose IDs are allocated from the configured SDP ID range. When the FPE is associated with VXLAN termination, an internal SDP is allocated from the configured SDP ID range and is used for R-VPLS services that terminate VXLAN IPv6. A spoke SDP per VXLAN IPv6 R-VPLS service is created on that SDP for egress processing of the packets. The SDP ID range cannot be modified if any of its IDs are currently in use.</p>
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the SDP ID range
Context	configure fwd-path-ext sdp-id-range end number
Tree	end
Range	1 to 32767
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

start number

Synopsis Lower bound of the SDP ID range
Context **configure fwd-path-ext sdp-id-range start number**
Tree [start](#)
Range 1 to 32767
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

3.18 group-encryption commands

```
configure
- group-encryption
- apply-groups reference
- apply-groups-exclude reference
- encryption-keygroup number
- active-outbound-security-association reference
- apply-groups reference
- apply-groups-exclude reference
- authentication-algorithm keyword
- description string
- encryption-algorithm keyword
- keygroup-name string
- security-association number
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- encryption-key string
- group-encryption-label number
```

3.18.1 group-encryption command descriptions

group-encryption

Synopsis	Enter the group-encryption context
Context	configure group-encryption
Tree	group-encryption
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-keygroup [*id*] *number*

Synopsis	Enter the encryption-keygroup list instance
Context	configure group-encryption encryption-keygroup <i>number</i>
Tree	encryption-keygroup
Max. Instances	127
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*id*] *number*

Synopsis	Encryption key group ID
Context	configure group-encryption encryption-keygroup <i>number</i>
Tree	encryption-keygroup
Range	1 to 127
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-outbound-security-association *reference*

Synopsis	SPI to use for egressing packets for the key group
Context	configure group-encryption encryption-keygroup <i>number</i> active-outbound-security-association <i>reference</i>

Tree	active-outbound-security-association
Reference	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-algorithm *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Hashing algorithm used for the authentication function
Context	configure group-encryption encryption-keygroup <i>number</i> authentication-algorithm <i>keyword</i>
Tree	authentication-algorithm
Default	sha256
Options	sha256, sha512
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure group-encryption encryption-keygroup <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-algorithm *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm for encryption on ESP
Context	configure group-encryption encryption-keygroup <i>number</i> encryption-algorithm <i>keyword</i>

Tree	encryption-algorithm
Default	aes128
Options	aes128, aes256
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keygroup-name *string*

Synopsis	Key group name
Context	configure group-encryption encryption-keygroup <i>number</i> keygroup-name <i>string</i>
Tree	keygroup-name
String Length	0 to 64
Default	
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

security-association [[security-parameter-index](#)] *number*

Synopsis	Enter the security-association list instance
Context	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i>
Tree	security-association
Max. Instances	4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[security-parameter-index](#)] *number*

Synopsis	Security Parameter Index (SPI)
Context	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i>
Tree	security-association
Range	1 to 1023
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-key *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	configure group-encryption encryption-keygroup number security-association number authentication-key string
Tree	authentication-key
String Length	1 to 115
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-key *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	configure group-encryption encryption-keygroup number security-association number encryption-key string
Tree	encryption-key
String Length	1 to 71
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

group-encryption-label *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Network-wide unique MPLS label for group encryption
Context	configure group-encryption group-encryption-label number

Tree	group-encryption-label
Range	32 to 2047
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.19 ipsec commands

```

configure
- ipsec
  - apply-groups reference
  - apply-groups-exclude reference
  - cert-profile string
    - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - entry number
    - apply-groups reference
    - apply-groups-exclude reference
    - cert string
    - key string
    - rsa-signature keyword
    - send-chain
      - ca-profile reference
  - client-db string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - client number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - client-name string
      - credential
      - pre-shared-key string
    - identification
      - idi
        - any boolean
        - fqdn string
        - fqdn-suffix string
        - ipv4-prefix string
        - ipv4-prefix-any boolean
        - ipv6-prefix string
        - ipv6-prefix-any boolean
        - rfc822 string
        - rfc822-suffix string
      - peer-ip-prefix
        - ip-prefix (ipv4-prefix | ipv6-prefix)
        - ipv4-only boolean
        - ipv6-only boolean
    - private-interface string
    - private-service-name string
    - ts-list string
    - tunnel-template number
  - description string
  - match-list
    - idi boolean
    - peer-ip-prefix boolean
  - ike-policy number
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - dpd
    - interval number
    - max-retries number
    - reply-only boolean
  - ike-transform reference

```

configure ipsec ike-policy ike-version-1

- **ike-version-1**
 - **auth-method** *keyword*
 - **ike-mode** *keyword*
 - **own-auth-method** *keyword*
 - **ph1-responder-delete-notify** *boolean*
- **ike-version-2**
 - **auth-method** *keyword*
 - **auto-eap-method** *keyword*
 - **ikev2-fragment**
 - **mtu** *number*
 - **reassemble-timeout** *number*
 - **own-auth-method** *keyword*
 - **own-auto-eap-method** *keyword*
 - **send-idr-after-eap-success** *boolean*
- **ipsec-lifetime** *number*
- **limit-init-exchange**
 - **admin-state** *keyword*
 - **reduced-max-exchange-timeout** (*number* | *keyword*)
- **lockout**
 - **block** (*number* | *keyword*)
 - **duration** *number*
 - **failed-attempts** *number*
 - **max-port-per-ip** *number*
- **match-peer-id-to-cert** *boolean*
- **nat-traversal**
 - **force** *boolean*
 - **force-keep-alive** *boolean*
 - **keep-alive-interval** *number*
- **pfs**
 - **dh-group** *keyword*
- **relay-unsolicited-cfg-attribute**
 - **internal-ip4-address** *boolean*
 - **internal-ip4-dns** *boolean*
 - **internal-ip4-netmask** *boolean*
 - **internal-ip6-address** *boolean*
 - **internal-ip6-dns** *boolean*
- **ike-transform** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dh-group** *keyword*
 - **ike-auth-algorithm** *keyword*
 - **ike-encryption-algorithm** *keyword*
 - **ike-prf-algorithm** *keyword*
 - **isakmp-lifetime** *number*
- **ipsec-transform** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **esp-auth-algorithm** *keyword*
 - **esp-encryption-algorithm** *keyword*
 - **extended-sequence-number** *boolean*
 - **ipsec-lifetime** *number*
 - **pfs-dh-group** *keyword*
- **ipsec-transport-mode-profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **key-exchange**
 - **dynamic**
 - **auto-establish** *boolean*
 - **cert**
 - **cert-profile** *reference*
 - **status-verify**
 - **default-result** *keyword*
 - **primary** *keyword*

configure ipsec ipsec-transport-mode-profile key-exchange dynamic cert status-verify secondary

```

    - secondary keyword
    - trust-anchor-profile reference
  - id
    - fqdn string
    - ipv4 string
    - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
    - ike-policy reference
    - ipsec-transform reference
    - pre-shared-key string
  - max-history-key-records
    - esp number
    - ike number
  - replay-window number
- radius
  - accounting-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - include-radius-attribute
    - acct-stats boolean
    - called-station-id boolean
    - calling-station-id boolean
    - framed-ip-addr boolean
    - framed-ipv6-prefix boolean
    - nas-identifier boolean
    - nas-ip-addr boolean
    - nas-port-id boolean
  - radius-server-policy reference
  - update-interval
    - jitter number
    - value number
  - authentication-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - include-radius-attribute
    - called-station-id boolean
    - calling-station-id boolean
    - client-cert-subject-key-id boolean
    - nas-identifier boolean
    - nas-ip-addr boolean
    - nas-port-id boolean
  - password string
  - radius-server-policy reference
- show-ipsec-keys boolean
- static-sa string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - algorithm keyword
    - key string
  - description string
  - direction keyword
  - protocol keyword
  - spi number
- trust-anchor-profile string
  - apply-groups reference
  - apply-groups-exclude reference
  - trust-anchor reference
- ts-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - local
    - entry number
    - address
      - prefix (ipv4-prefix | ipv6-prefix)

```

configure ipsec ts-list local entry address range

```

- range
  - begin (ipv4-address-no-zone | ipv6-address-no-zone)
  - end (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- protocol
  - any
  - id
    - icmp
      - opaque
      - port-range
        - begin-icmp-code number
        - begin-icmp-type number
        - end-icmp-code number
        - end-icmp-type number
    - icmp6
      - opaque
      - port-range
        - begin-icmp-code number
        - begin-icmp-type number
        - end-icmp-code number
        - end-icmp-type number
    - mipv6
      - opaque
      - port-range
        - begin number
        - end number
    - protocol-id-with-any-port (keyword | number)
  - sctp
    - opaque
    - port-range
      - begin number
      - end number
  - tcp
    - opaque
    - port-range
      - begin number
      - end number
  - udp
    - opaque
    - port-range
      - begin number
      - end number
- remote
  - entry number
    - address
      - prefix (ipv4-prefix | ipv6-prefix)
      - range
        - begin (ipv4-address-no-zone | ipv6-address-no-zone)
        - end (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - protocol
      - any
      - id
        - icmp
          - opaque
          - port-range
            - begin-icmp-code number
            - begin-icmp-type number
            - end-icmp-code number
            - end-icmp-type number
        - icmp6
          - opaque

```

configure ipsec ts-list remote entry protocol id icmp6 port-range

- **port-range**
 - **begin-icmp-code** *number*
 - **begin-icmp-type** *number*
 - **end-icmp-code** *number*
 - **end-icmp-type** *number*
- **mipv6**
 - **opaque**
 - **port-range**
 - **begin** *number*
 - **end** *number*
- **protocol-id-with-any-port** (*keyword* | *number*)
- **sctp**
 - **opaque**
 - **port-range**
 - **begin** *number*
 - **end** *number*
- **tcp**
 - **opaque**
 - **port-range**
 - **begin** *number*
 - **end** *number*
- **udp**
 - **opaque**
 - **port-range**
 - **begin** *number*
 - **end** *number*
- **tunnel-template** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-df-bit** *boolean*
 - **copy-traffic-class-upon-decapsulation** *boolean*
 - **description** *string*
 - **encapsulated-ip-mtu** *number*
 - **icmp-generation**
 - **frag-required**
 - **admin-state** *keyword*
 - **interval** *number*
 - **message-count** *number*
 - **icmp6-generation**
 - **pkt-too-big**
 - **admin-state** *keyword*
 - **interval** *number*
 - **message-count** *number*
 - **ignore-default-route** *boolean*
 - **ip-mtu** *number*
 - **ipsec-transform** *reference*
 - **pmtu-discovery-aging** *number*
 - **private-tcp-mss-adjust** *number*
 - **propagate-pmtu-v4** *boolean*
 - **propagate-pmtu-v6** *boolean*
 - **public-tcp-mss-adjust** (*number* | *keyword*)
 - **replay-window** *number*
 - **sp-reverse-route** *keyword*

3.19.1 ipsec command descriptions

ipsec

Synopsis	Enter the ipsec context
Context	configure ipsec
Tree	ipsec
Description	Commands in this context configure Internet Protocol Security (IPsec) commands.
Introduced	16.0.R4
Platforms	All

cert-profile [[name](#)] *string*

Synopsis	Enter the cert-profile list instance
Context	configure ipsec cert-profile <i>string</i>
Tree	cert-profile
Description	Commands in this context configure the certificate profile.
Max. Instances	10200
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[name\]](#) *string*

Synopsis	Certificate profile name
Context	configure ipsec cert-profile <i>string</i>
Tree	cert-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the certificate profile
----------	---

Context	configure ipsec cert-profile <i>string admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure ipsec cert-profile <i>string entry number</i>
Tree	entry
Description	Commands in this context configure the certificate profile entry.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	Certificate profile entry ID
Context	configure ipsec cert-profile <i>string entry number</i>
Tree	entry
Range	1 to 8
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert *string*

Synopsis	File name of the imported certificate for the entry
Context	configure ipsec cert-profile <i>string entry number cert string</i>
Tree	cert
String Length	1 to 95
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key string

Synopsis File name of the imported key used for authentication
 Context **configure ipsec cert-profile string entry number key string**
 Tree [key](#)
 String Length 1 to 95
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rsa-signature keyword

Synopsis Signature scheme for the RSA key
 Context **configure ipsec cert-profile string entry number rsa-signature keyword**
 Tree [rsa-signature](#)
 Default pkcs1
 Options pkcs1, pss
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-chain

Synopsis Enter the **send-chain** context
 Context **configure ipsec cert-profile string entry number send-chain**
 Tree [send-chain](#)
 Description Commands in this context allow the system to send additional CA certificates to the peer. These additional CA certificates must be in the certificate chain of the certificate specified by the **cert** command in the same entry.
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ca-profile reference

Synopsis CA certificate to send to the peer
 Context **configure ipsec cert-profile string entry number send-chain ca-profile reference**

Tree	ca-profile
Reference	configure system security pki ca-profile <i>string</i>
Max. Instances	7
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-db [[name](#)] *string*

Synopsis	Enter the client-db list instance
Context	configure ipsec client-db <i>string</i>
Tree	client-db
Max. Instances	1000
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	IPsec client database name
Context	configure ipsec client-db <i>string</i>
Tree	client-db
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the client database
Context	configure ipsec client-db <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client [id] *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **client** list instance

Context **configure ipsec client-db** *string client number*

Tree [client](#)

Description Commands in this context configure the IPsec client entry in the client database.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis Client ID

Context **configure ipsec client-db** *string client number*

Tree [client](#)

Range 1 to 8000

Notes This element is part of a list key.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Administrative state of the database client

Context **configure ipsec client-db** *string client number admin-state keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Client name
Context **configure ipsec client-db** *string client number client-name string*
Tree [client-name](#)
String Length 1 to 32
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

credential



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **credential** context
Context **configure ipsec client-db** *string client number credential*
Tree [credential](#)
Description Commands in this context authenticate peers.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pre-shared-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Pre-shared key used to authenticate peers
Context **configure ipsec client-db** *string client number credential pre-shared-key string*

Tree	pre-shared-key
String Length	1 to 115
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

identification



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the identification context
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification
Tree	identification
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

idi



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the idi context
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification idi
Tree	idi
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any IDi value as a match
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification idi any <i>boolean</i>
Tree	any

Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the match criteria for the IDi
Context	configure ipsec client-db string client number identification idi fqdn string
Tree	fqdn
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn-suffix string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN suffix used as the match criteria for the IDi
Context	configure ipsec client-db string client number identification idi fqdn-suffix string
Tree	fqdn-suffix
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-prefix string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 prefix used as the match criteria for the IDi
Context	configure ipsec client-db string client number identification idi ipv4-prefix string
Tree	ipv4-prefix
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-prefix-any boolean

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv4 prefix as a match for the IDi
Context	configure ipsec client-db string client number identification idi ipv4-prefix-any boolean
Tree	ipv4-prefix-any
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-prefix string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 prefix used as the match criteria for the IDi
Context	configure ipsec client-db string client number identification idi ipv6-prefix string
Tree	ipv6-prefix
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-prefix-any *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Accept any valid IPv6 prefix as a match for the IDi
Context **configure** [ipsec client-db](#) *string* [client](#) *number* [identification](#) [idi](#) [ipv6-prefix-any](#) *boolean*
Tree [ipv6-prefix-any](#)
Notes The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rfc822 *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Email address (RFC 822) used as match criteria for IDi
Context **configure** [ipsec client-db](#) *string* [client](#) *number* [identification](#) [idi](#) [rfc822](#) *string*
Tree [rfc822](#)
String Length 0 to 255
Notes The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rfc822-suffix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Email address domain (RFC 822) as IDi match criteria
Context	configure ipsec client-db <i>string client number identification idi rfc822-suffix string</i>
Tree	rfc822-suffix
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-ip-prefix



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the peer-ip-prefix context
Context	configure ipsec client-db <i>string client number identification peer-ip-prefix</i>
Tree	peer-ip-prefix
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP prefix used as the match criteria
Context	configure ipsec client-db <i>string client number identification peer-ip-prefix ip-prefix (ipv4-prefix ipv6-prefix)</i>
Tree	ip-prefix
Notes	The following elements are part of a mandatory choice: ip-prefix , ipv4-only , or ipv6-only .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv4 address as a match
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification peer-ip-prefix ipv4-only <i>boolean</i>
Tree	ipv4-only
Notes	The following elements are part of a mandatory choice: ip-prefix , ipv4-only , or ipv6-only .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv6 address as a match
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification peer-ip-prefix ipv6-only <i>boolean</i>
Tree	ipv6-only
Notes	The following elements are part of a mandatory choice: ip-prefix , ipv4-only , or ipv6-only .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-interface *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private interface name used for tunnel setup
Context	configure ipsec client-db <i>string</i> client <i>number</i> private-interface <i>string</i>
Tree	private-interface

String Length 1 to 32
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the private service used for tunnel setup
Context **configure ipsec client-db** *string* **client** *number* **private-service-name** *string*
Tree **private-service-name**
String Length 1 to 64
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ts-list *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Traffic selector list used by the tunnel
Context **configure ipsec client-db** *string* **client** *number* **ts-list** *string*
Tree **ts-list**
String Length 1 to 32
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-template *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Tunnel template ID
Context **configure ipsec client-db** *string* **client** *number* **tunnel-template** *number*

Tree	tunnel-template
Range	1 to 2048
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure ipsec client-db <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match-list



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the match-list context
Context	configure ipsec client-db <i>string</i> match-list
Tree	match-list
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

idi *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use IDi type in the IPsec client matching process
Context	configure ipsec client-db <i>string</i> match-list idi <i>boolean</i>
Tree	idi
Default	false
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-ip-prefix *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Use the peer tunnel IP address in the matching process
Context **configure ipsec client-db** *string match-list peer-ip-prefix boolean*
Tree [peer-ip-prefix](#)
Default false
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-policy [*id*] *number*

Synopsis Enter the **ike-policy** list instance
Context **configure ipsec ike-policy** *number*
Tree [ike-policy](#)
Description Commands in this context configure an Internet Key Exchange (IKE) policy.
Max. Instances 2048
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis IKE policy ID
Context **configure ipsec ike-policy** *number*
Tree [ike-policy](#)
Range 1 to 2048
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure ipsec ike-policy <i>number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dpd

Synopsis	Enable the dpd context
Context	configure ipsec ike-policy <i>number dpd</i>
Tree	dpd
Description	Commands in this context configure the dead peer detection mechanism.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	DPD interval
Context	configure ipsec ike-policy <i>number dpd interval number</i>
Tree	interval
Description	This command specifies the DPD interval. Because more time is necessary to determine if there is incoming traffic, the actual time needed to bring down the tunnel is larger than the DPD interval multiplied by the value configured for maximum retry attempts.
Range	10 to 300
Default	30
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-retries *number*

Synopsis	Maximum number of retries before the tunnel is removed
Context	configure ipsec ike-policy <i>number</i> dpd max-retries <i>number</i>
Tree	max-retries
Range	2 to 5
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reply-only *boolean*

Synopsis	Initiate DPD request for incoming ESP or IKE packets
Context	configure ipsec ike-policy <i>number</i> dpd reply-only <i>boolean</i>
Tree	reply-only
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-transform *reference*

Synopsis	IKE transform instance associated with the IKE policy
Context	configure ipsec ike-policy <i>number</i> ike-transform <i>reference</i>
Tree	ike-transform
Description	This command specifies the IKE transform instance associated with the IKE policy. If multiple IDs are specified, the system selects an IKE transform based on the proposal of the peer. If the system is a tunnel initiator, it uses the configured IKE transform to generate the SA payload.
Reference	configure ipsec ike-transform <i>number</i>
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-version-1

Synopsis	Enter the ike-version-1 context
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Context	configure ipsec ike-policy <i>number ike-version-1</i>
Tree	ike-version-1
Description	Commands in this context configure the IKE version 1 mode of operation that the IKE policy uses.
Notes	The following elements are part of a choice: ike-version-1 or ike-version-2 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auth-method *keyword*

Synopsis	Authentication method used with the IKE policy
Context	configure ipsec ike-policy <i>number ike-version-1 auth-method keyword</i>
Tree	auth-method
Default	psk
Options	psk, plain-psk-xauth
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-mode *keyword*

Synopsis	Mode of operation
Context	configure ipsec ike-policy <i>number ike-version-1 ike-mode keyword</i>
Tree	ike-mode
Default	main
Options	main, aggressive
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

own-auth-method *keyword*

Synopsis	Authentication method used with policy on its own side
Context	configure ipsec ike-policy <i>number ike-version-1 own-auth-method keyword</i>
Tree	own-auth-method
Default	symmetric
Options	symmetric

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ph1-responder-delete-notify *boolean*

Synopsis	Send delete notification for IKEv1 phase 1 removal
Context	configure ipsec ike-policy number ike-version-1 ph1-responder-delete-notify <i>boolean</i>
Tree	ph1-responder-delete-notify
Description	When configured to true , a delete notification is sent to the peer when deleting an IKEv1 phase 1 SA for which it was the responder. When configured to false , no notification is sent.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-version-2

Synopsis	Enable the ike-version-2 context
Context	configure ipsec ike-policy number ike-version-2
Tree	ike-version-2
Description	Commands in this context configure the IKE version 2 mode of operation that the IKE policy uses.
Notes	The following elements are part of a choice: ike-version-1 or ike-version-2 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auth-method *keyword*

Synopsis	Authentication method used with the IKE policy
Context	configure ipsec ike-policy number ike-version-2 auth-method <i>keyword</i>
Tree	auth-method
Default	psk
Options	psk, cert, psk-radius, cert-radius, eap, auto-eap-radius, auto-eap
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-eap-method *keyword*

Synopsis	Authentication method used for the remote peer
Context	configure ipsec ike-policy <i>number ike-version-2 auto-eap-method keyword</i>
Tree	auto-eap-method
Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the remote peer.
Default	cert
Options	psk, cert, psk-or-cert
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ikev2-fragment

Synopsis	Enable the ikev2-fragment context
Context	configure ipsec ike-policy <i>number ike-version-2 ikev2-fragment</i>
Tree	ikev2-fragment
Description	Commands in this context configure IKEv2 protocol level fragmentation (RFC 7383).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	Maximum size of the IKEv2 packet
Context	configure ipsec ike-policy <i>number ike-version-2 ikev2-fragment mtu number</i>
Tree	mtu
Range	512 to 9000
Default	1500
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassemble-timeout *number*

Synopsis	Timeout for reassembly of IKEv2 message fragments
Context	configure ipsec ike-policy <i>number</i> ike-version-2 ikev2-fragment reassemble-timeout <i>number</i>
Tree	reassemble-timeout
Range	1 to 5
Default	2
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

own-auth-method *keyword*

Synopsis	Authentication method used with IKE policy on own side
Context	configure ipsec ike-policy <i>number</i> ike-version-2 own-auth-method <i>keyword</i>
Tree	own-auth-method
Default	symmetric
Options	symmetric, psk, cert, eap-only
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

own-auto-eap-method *keyword*

Synopsis	Authentication method used on its own side
Context	configure ipsec ike-policy <i>number</i> ike-version-2 own-auto-eap-method <i>keyword</i>
Tree	own-auto-eap-method
Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the peer.
Default	cert
Options	psk, cert
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-idr-after-eap-success *boolean*

Synopsis	Send IDr payload in last IKE authentication response
Context	configure ipsec ike-policy <i>number ike-version-2 send-idr-after-eap-success boolean</i>
Tree	send-idr-after-eap-success
Description	When configured to true , the Identification Responder (IDr) payload is added in the last IKE authentication response after an Extensible Authentication Protocol (EAP) Success packet is received. When configured to false , the IDr payload is not included in the last IKE.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-lifetime *number*

Synopsis	Lifetime of the Phase 2 IKE key
Context	configure ipsec ike-policy <i>number ipsec-lifetime number</i>
Tree	ipsec-lifetime
Range	1200 to 31536000
Default	3600
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

limit-init-exchange

Synopsis	Enter the limit-init-exchange context
Context	configure ipsec ike-policy <i>number limit-init-exchange</i>
Tree	limit-init-exchange
Description	Commands in this context limit the number of ongoing IKEv2 initial exchanges per tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of limiting initial IKE exchanges
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Context	configure ipsec ike-policy number limit-init-exchange admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reduced-max-exchange-timeout (*number* | *keyword*)

Synopsis	Maximum timeout for in-progress initial IKE exchange
Context	configure ipsec ike-policy number limit-init-exchange reduced-max-exchange-timeout (<i>number</i> <i>keyword</i>)
Tree	reduced-max-exchange-timeout
Description	This command configures the maximum timeout for the in-progress initial IKE exchange. If a new IKEv2 IKE_SA_INIT request is received when there is an ongoing IKEv2 initial exchange from the same peer, the timeout value of the existing exchange is set to this specified value. If the none option is configured for this command, the timeout value remains unchanged.
Range	2 to 60
Default	2
Units	seconds
Options	none
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lockout

Synopsis	Enable the lockout context
Context	configure ipsec ike-policy number lockout
Tree	lockout
Description	Commands in this context specify the lockout mechanism for the IPsec tunnel. These commands apply only when the system acts as a tunnel responder.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block (*number* | *keyword*)

Synopsis	Time a client is blocked for failed authentications
Context	configure ipsec ike-policy <i>number</i> lockout block (<i>number</i> <i>keyword</i>)
Tree	block
Description	This command configures the time the client is blocked if the number of failed authentications exceeds the configured value within the specified duration.
Range	1 to 1440
Default	10
Units	minutes
Options	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	Time interval for failed attempts threshold
Context	configure ipsec ike-policy <i>number</i> lockout duration <i>number</i>
Tree	duration
Description	This command specifies the time interval in which the configured failed authentication count must be exceeded to trigger a lockout.
Range	1 to 60
Default	5
Units	minutes
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

failed-attempts *number*

Synopsis	Maximum failed authentications allowed in the duration
Context	configure ipsec ike-policy <i>number</i> lockout failed-attempts <i>number</i>
Tree	failed-attempts
Range	1 to 64
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-port-per-ip *number*

Synopsis	Maximum number of ports allowed under same IP address
Context	configure ipsec ike-policy <i>number</i> lockout max-port-per-ip <i>number</i>
Tree	max-port-per-ip
Description	This command configures the maximum number of ports allowed under the same IP address. When the threshold is exceeded and the client is locked out, all ports behind the IP address are blocked.
Range	1 to 32000
Default	16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match-peer-id-to-cert *boolean*

Synopsis	Check IKE peer ID during certificate authentication
Context	configure ipsec ike-policy <i>number</i> match-peer-id-to-cert <i>boolean</i>
Tree	match-peer-id-to-cert
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-traversal

Synopsis	Enable the nat-traversal context
Context	configure ipsec ike-policy <i>number</i> nat-traversal
Tree	nat-traversal
Description	Commands in this context configure the Network Address Translation Traversal (NAT-T) functionality.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

force *boolean*

Synopsis	Enable NAT-T in forced mode
Context	configure ipsec ike-policy <i>number</i> nat-traversal force <i>boolean</i>

Tree	force
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

force-keep-alive *boolean*

Synopsis	Continue sending keepalive packets (no expiry)
Context	configure ipsec ike-policy <i>number</i> nat-traversal force-keep-alive <i>boolean</i>
Tree	force-keep-alive
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keep-alive-interval *number*

Synopsis	Keepalive interval for NAT-T
Context	configure ipsec ike-policy <i>number</i> nat-traversal keep-alive-interval <i>number</i>
Tree	keep-alive-interval
Range	120 to 600
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pfs

Synopsis	Enable the pfs context
Context	configure ipsec ike-policy <i>number</i> pfs
Tree	pfs
Description	Commands in this context configure perfect forward secrecy on the IPsec tunnel using the policy. PFS provides for a new Diffie-Hellman (DH) key exchange each time the Security Association (SA) key is renegotiated. When the SA key expires, another key is generated (if the SA remains up).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dh-group *keyword*

Synopsis	Diffie-Helman group used to calculate session keys
Context	configure ipsec ike-policy <i>number</i> pfs dh-group <i>keyword</i>
Tree	dh-group
Description	This command specifies which DH group to use for calculating session keys. More bits provide a higher level of security, but require more processing.
Default	group-2
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

relay-unsolicited-cfg-attribute

Synopsis	Enter the relay-unsolicited-cfg-attribute context
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute
Tree	relay-unsolicited-cfg-attribute
Description	Commands in this context configure attributes returned from the source (such as a RADIUS server) that are returned to the IKEv2 remote-access tunnel client regardless if the client has requested the attribute in the CFG_REQUEST payload.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip4-address *boolean*

Synopsis	Return the IPv4 address from the source to the client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip4-address <i>boolean</i>
Tree	internal-ip4-address
Description	When configured to true , the system returns the IPv4 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip4-dns *boolean*

Synopsis	Return IPv4 DNS server address from source to client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip4-dns <i>boolean</i>
Tree	internal-ip4-dns
Description	When configured to true , the system returns the IPv4 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip4-netmask *boolean*

Synopsis	Return the IPv4 netmask from the source to the client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip4-netmask <i>boolean</i>
Tree	internal-ip4-netmask
Description	When configured to true , the system returns the IPv4 netmask from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the netmask in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip6-address *boolean*

Synopsis	Return the IPv6 address from the source to the client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip6-address <i>boolean</i>
Tree	internal-ip6-address
Description	When configured to true , the system returns the IPv6 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip6-dns *boolean*

Synopsis	Return IPv6 DNS server address from source to client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip6-dns <i>boolean</i>
Tree	internal-ip6-dns
Description	When configured to true , the system returns the IPv6 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-transform [*id*] *number*

Synopsis	Enter the ike-transform list instance
Context	configure ipsec ike-transform <i>number</i>
Tree	ike-transform
Max. Instances	4096
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	IKE transform instance ID
Context	configure ipsec ike-transform <i>number</i>
Tree	ike-transform
Range	1 to 4096
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dh-group *keyword*

Synopsis	Diffie-Helman group used to calculate session keys
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Context	configure ipsec ike-transform <i>number dh-group keyword</i>
Tree	dh-group
Default	group-2
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-auth-algorithm *keyword*

Synopsis	IKE authentication algorithm for IKE transform instance
Context	configure ipsec ike-transform <i>number ike-auth-algorithm keyword</i>
Tree	ike-auth-algorithm
Default	sha-1
Options	md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-encryption-algorithm *keyword*

Synopsis	IKE encryption algorithm for the IKE transform instance
Context	configure ipsec ike-transform <i>number ike-encryption-algorithm keyword</i>
Tree	ike-encryption-algorithm
Default	aes-128
Options	des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm16, aes256-gcm8, aes256-gcm16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-prf-algorithm *keyword*

Synopsis	PRF algorithm for the IKE transform instance
Context	configure ipsec ike-transform <i>number ike-prf-algorithm keyword</i>
Tree	ike-prf-algorithm
Description	This command specifies the pseudo-random function algorithm used for IKE security association.

If an encrypted algorithm such as AES-GCM is used for the IKE encryption algorithm, **same-as-auth** cannot be used for the IKE PRF algorithm.

Default	same-as-auth
Options	md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, same-as-auth
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isakmp-lifetime *number*

Synopsis	Phase 1 lifetime for the IKE transform instance
Context	configure ipsec ike-transform <i>number</i> isakmp-lifetime <i>number</i>
Tree	isakmp-lifetime
Range	1200 to 31536000
Default	86400
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform [*id*] *number*

Synopsis	Enter the ipsec-transform list instance
Context	configure ipsec ipsec-transform <i>number</i>
Tree	ipsec-transform
Description	<p>Commands in this context create an IPsec transform policy. IPsec transform policies can be shared. A change to the IPsec transform is allowed at any time. The change does not impact tunnels that have been established until they are renegotiated. If the change is required immediately, the tunnel must be cleared (reset) for force renegotiation.</p> <p>IPsec transform policy assignments to a tunnel require the tunnel to be shut down.</p>
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	IPsec transform policy ID
Context	configure ipsec ipsec-transform <i>number</i>

Tree	ipsec-transform
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp-auth-algorithm *keyword*

Synopsis	Encapsulating Security Payload (ESP) authentication
Context	configure ipsec ipsec-transform <i>number</i> esp-auth-algorithm <i>keyword</i>
Tree	esp-auth-algorithm
Description	This command specifies the hashing algorithm used for the authentication function. Both ends of a manually configured tunnel must share the same configuration for the IPsec tunnel to enter the operational state.
Default	sha-1
Options	null, md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp-encryption-algorithm *keyword*

Synopsis	Encryption algorithm for the IPsec transform session
Context	configure ipsec ipsec-transform <i>number</i> esp-encryption-algorithm <i>keyword</i>
Tree	esp-encryption-algorithm
Description	<p>This command specifies the encryption algorithm used for the IPsec session. Encryption applies only to ESP configurations. If encryption is not defined, ESP is not used.</p> <p>Both ends of a manually configured tunnel must share the same encryption algorithm for the IPsec tunnel to enter the operational state.</p> <p>When AES-GCM or AES-GMAC is configured:</p> <ul style="list-style-type: none"> • the authentication encryption must be set to auth-encryption • the system does not include the authentication algorithm in the ESP proposal of the SA payload • IPsec transform cannot be used for manual keying
Default	aes-128
Options	null, des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm12, aes128-gcm16, aes192-gcm8, aes192-gcm12, aes192-gcm16, aes256-gcm8,

	aes256-gcm12, aes256-gcm16, null-aes128-gmac, null-aes192-gmac, null-aes256-gmac
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

extended-sequence-number *boolean*

Synopsis	Enable extended sequence numbering support
Context	configure ipsec ipsec-transform <i>number</i> extended-sequence-number <i>boolean</i>
Tree	extended-sequence-number
Description	When configured to true , this command enables 64-bit extended sequence numbering support. This numbering is used for high throughput CHILD_SA to avoid frequent re-keying caused by sequence numbering wrap around. When configured to false , only 32-bit sequence numbering is supported.
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-lifetime *number*

Synopsis	Phase 2 lifetime for the IPsec transform session
Context	configure ipsec ipsec-transform <i>number</i> ipsec-lifetime <i>number</i>
Tree	ipsec-lifetime
Description	This command configures the lifetime of the Phase 2 IKE key. When unconfigured, the value is inherited from the IPsec lifetime configured in the corresponding IKE policy configured for the same IPsec gateway or IPsec tunnel.
Range	1200 to 31536000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pfs-dh-group *keyword*

Synopsis	Diffie-Hellman group used for PFS compilation
Context	configure ipsec ipsec-transform <i>number</i> pfs-dh-group <i>keyword</i>
Tree	pfs-dh-group

Description	This command specifies the DH group used for Perfect Forward Secrecy (PFS) compilation during CHILD_SA rekeying. When unconfigured, the value is inherited from the DH group value from the IPsec gateway or IPsec tunnel.
Options	none, group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transport-mode-profile [*name*] *string*

Synopsis	Enter the ipsec-transport-mode-profile list instance
Context	configure ipsec ipsec-transport-mode-profile <i>string</i>
Tree	ipsec-transport-mode-profile
Description	Commands in this context configure IPsec-specific attributes that allow an IP tunnel (for example, GRE) to be protected by using IPsec transport mode.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	IPsec transport mode profile name string
Context	configure ipsec ipsec-transport-mode-profile <i>string</i>
Tree	ipsec-transport-mode-profile
Description	This command specifies the name of the IPsec transport mode profile.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure ipsec ipsec-transport-mode-profile <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key-exchange

Synopsis Enter the **key-exchange** context

Context **configure ipsec ipsec-transport-mode-profile** *string* **key-exchange**

Tree [key-exchange](#)

Description Commands in this context configure the key exchange used each time the Security Association (SA) key is renegotiated.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic

Synopsis Enter the **dynamic** context

Context **configure ipsec ipsec-transport-mode-profile** *string* **key-exchange dynamic**

Tree [dynamic](#)

Description Commands in this context configure dynamic keying for the transport mode profile.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-establish *boolean*

Synopsis Attempt to establish a phase 1 exchange automatically

Context **configure ipsec ipsec-transport-mode-profile** *string* **key-exchange dynamic auto-establish** *boolean*

Tree [auto-establish](#)

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert

Synopsis Enter the **cert** context

Context **configure ipsec ipsec-transport-mode-profile** *string* **key-exchange dynamic cert**

Tree [cert](#)

Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

status-verify

Synopsis	Enter the status-verify context
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Default	revoked
Options	revoked, good
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert status-verify primary <i>keyword</i>
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Default	crl
Options	crl, ocsf
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert status-verify secondary <i>keyword</i>
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Default	none
Options	none, crl, ocsf
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure ipsec trust-anchor-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enter the id context
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: <ul style="list-style-type: none">• Psk: local tunnel IP address• Cert-auth: subject of the local certificate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn string

Synopsis	FQDN used as the local ID IKE type
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic id fqdn <i>string</i>
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 string

Synopsis	IPv4 as the local ID type
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic id ipv4 <i>string</i>
Tree	ipv4
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IPv6 used as the local IKE ID type
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Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic id ipv6 (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-policy *reference*

Synopsis	IKE policy ID
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic ike-policy <i>reference</i>
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The ipsec-transport-mode-profile configuration only supports IKEv2.
Reference	configure ipsec ike-policy <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform *reference*

Synopsis	IPsec transform IDs used by the dynamic key
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic ipsec-transform <i>reference</i>
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>
Max. Instances	4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pre-shared-key *string*

Synopsis	Pre-shared key for IKE authentication
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Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic pre-shared-key <i>string</i>
Tree	pre-shared-key
String Length	1 to 115
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-history-key-records

Synopsis	Enter the max-history-key-records context
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp *number*

Synopsis	Maximum number of recent records
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> max-history-key-records esp <i>number</i>
Tree	esp
Range	1 to 48
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike *number*

Synopsis	Maximum number of historical IKE key records
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> max-history-key-records ike <i>number</i>
Tree	ike
Range	1 to 3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

replay-window *number*

Synopsis	Anti-replay window size
Context	configure ipsec ipsec-transport-mode-profile <i>string replay-window number</i>
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 64 128 256 512
Units	packets
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the radius context
Context	configure ipsec radius
Tree	radius
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy [*name*] *string*

Synopsis	Enter the accounting-policy list instance
Context	configure ipsec radius accounting-policy <i>string</i>
Tree	accounting-policy
Description	Commands in this context configure RADIUS accounting policies to collect accounting statistics.
Max. Instances	100
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis	RADIUS accounting policy name
Context	configure ipsec radius accounting-policy <i>string</i>
Tree	accounting-policy

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis	Enter the include-radius-attribute context
Context	configure ipsec radius accounting-policy string include-radius-attribute
Tree	include-radius-attribute
Description	Commands in this context specify the RADIUS attributes that are to be included in the RADIUS Authentication-Request messages.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

acct-stats *boolean*

Synopsis	Include accounting attributes in RADIUS packets
Context	configure ipsec radius accounting-policy string include-radius-attribute acct-stats boolean
Tree	acct-stats
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	configure ipsec radius accounting-policy string include-radius-attribute called-station-id boolean
Tree	called-station-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	configure ipsec radius accounting-policy <i>string</i> include-radius-attribute calling-station-id <i>boolean</i>
Tree	calling-station-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-addr *boolean*

Synopsis	Include the Framed-IP-Address attribute
Context	configure ipsec radius accounting-policy <i>string</i> include-radius-attribute framed-ip-addr <i>boolean</i>
Tree	framed-ip-addr
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ipv6-prefix *boolean*

Synopsis	Include the Framed-IPv6-Prefix attribute
Context	configure ipsec radius accounting-policy <i>string</i> include-radius-attribute framed-ipv6-prefix <i>boolean</i>
Tree	framed-ipv6-prefix
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	configure ipsec radius accounting-policy <i>string</i> include-radius-attribute nas-identifier <i>boolean</i>
Tree	nas-identifier
Default	false

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-addr *boolean*

Synopsis Include the NAS-IP-Address attribute
Context **configure** [ipsec radius accounting-policy](#) *string* [include-radius-attribute nas-ip-addr](#) *boolean*
Tree [nas-ip-addr](#)
Default false
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis Include the NAS-Port-Id attribute
Context **configure** [ipsec radius accounting-policy](#) *string* [include-radius-attribute nas-port-id](#) *boolean*
Tree [nas-port-id](#)
Default false
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis Referenced RADIUS server policy
Context **configure** [ipsec radius accounting-policy](#) *string* [radius-server-policy reference](#)
Tree [radius-server-policy](#)
Reference **configure** [aaa radius server-policy](#) *string*
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

update-interval

Synopsis Enter the **update-interval** context
Context **configure** [ipsec radius accounting-policy](#) *string* [update-interval](#)

Tree	update-interval
Description	Commands in this context determine how RADIUS interim-update packets are sent for IKEv2 remote-access tunnels.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

jitter number

Synopsis	Jitter interval for sending each interim-update packet
Context	configure ipsec radius accounting-policy <i>string</i> update-interval jitter number
Tree	jitter
Description	This command specifies the jitter interval for the RADIUS interim-update packets. When unconfigured, the system uses 10% of the update interval value.
Range	0 to 3600
Units	seconds
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis	Update interval of the RADIUS accounting data
Context	configure ipsec radius accounting-policy <i>string</i> update-interval value number
Tree	value
Description	This command configures the update interval of the RADIUS accounting data. If a value of 0 is configured, no intermediate updates are sent.
Range	0 5 to 259200
Default	10
Units	minutes
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy [name] string

Synopsis	Enter the authentication-policy list instance
Context	configure ipsec radius authentication-policy <i>string</i>

Tree	authentication-policy
Description	Commands in this context configure the RADIUS authentication policy associated with the IPsec gateway.
Max. Instances	100
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	RADIUS authentication policy name
Context	configure ipsec radius authentication-policy <i>string</i>
Tree	authentication-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis	Enter the include-radius-attribute context
Context	configure ipsec radius authentication-policy <i>string</i> include-radius-attribute
Tree	include-radius-attribute
Description	Commands in this context specify the RADIUS attributes to be included in the RADIUS Authentication-Request messages.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	configure ipsec radius authentication-policy <i>string</i> include-radius-attribute called-station-id <i>boolean</i>
Tree	called-station-id
Default	false
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis Include the Calling-Station-Id attribute

Context **configure ipsec radius authentication-policy** *string* **include-radius-attribute calling-station-id** *boolean*

Tree [calling-station-id](#)

Default false

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-cert-subject-key-id *boolean*

Synopsis Include the Subject Key Identifier

Context **configure ipsec radius authentication-policy** *string* **include-radius-attribute client-cert-subject-key-id** *boolean*

Tree [client-cert-subject-key-id](#)

Description When configured to **true**, the Subject Key Identifier of the certificate of the peer is included in the RADIUS Access-Request packet as VSA: Alc-Subject-Key-Identifier.
See the *7450 ESS, 7750 SR, 7950 XRS, and VSR RADIUS Attributes Reference Guide* for more information.

Default false

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis Include the NAS-Identifier attribute

Context **configure ipsec radius authentication-policy** *string* **include-radius-attribute nas-identifier** *boolean*

Tree [nas-identifier](#)

Default false

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-addr *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	configure ipsec radius authentication-policy <i>string</i> include-radius-attribute nas-ip-addr <i>boolean</i>
Tree	nas-ip-addr
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	configure ipsec radius authentication-policy <i>string</i> include-radius-attribute nas-port-id <i>boolean</i>
Tree	nas-port-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password used in RADIUS access requests
Context	configure ipsec radius authentication-policy <i>string</i> password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis	Referenced RADIUS server policy
Context	configure ipsec radius authentication-policy <i>string</i> radius-server-policy <i>reference</i>
Tree	radius-server-policy
Reference	configure aaa radius server-policy <i>string</i>
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

show-ipsec-keys *boolean*

Synopsis Show IPsec IKE and ESP keys in the output
Context **configure ipsec show-ipsec-keys** *boolean*
Tree [show-ipsec-keys](#)
Description When configured to **true**, this command allows IPsec keys to be (optionally) included in the display output of certain **debug** and **admin** commands.
When configured to **false**, the key display is disabled.
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-sa [*name*] *string*

Synopsis Enter the **static-sa** list instance
Context **configure ipsec static-sa** *string*
Tree [static-sa](#)
Max. Instances 1000
Introduced 16.0.R6
Platforms All

[*name*] *string*

Synopsis Static SA name
Context **configure ipsec static-sa** *string*
Tree [static-sa](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R6
Platforms All

authentication

Synopsis	Enable the authentication context
Context	configure ipsec static-sa string authentication
Tree	authentication
Introduced	16.0.R6
Platforms	All

algorithm *keyword*

Synopsis	Authentication algorithm used for an IPsec manual SA
Context	configure ipsec static-sa string authentication algorithm keyword
Tree	algorithm
Options	md5, sha1
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

key *string*

Synopsis	Key used for the authentication algorithm
Context	configure ipsec static-sa string authentication key string
Tree	key
String Length	1 to 54
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

description *string*

Synopsis	Text description
Context	configure ipsec static-sa string description string
Tree	description
String Length	1 to 32
Introduced	16.0.R6

Platforms All

direction *keyword*

Synopsis Direction to which the static SA entry can be applied

Context **configure ipsec static-sa** *string direction keyword*

Tree [direction](#)

Default bidirectional

Options inbound, outbound, bidirectional

Introduced 16.0.R6

Platforms All

protocol *keyword*

Synopsis IPsec protocol used with the static SA

Context **configure ipsec static-sa** *string protocol keyword*

Tree [protocol](#)

Default esp

Options ah, esp

Introduced 16.0.R6

Platforms All

spi *number*

Synopsis Security Parameter Index (SPI) for the static SA

Context **configure ipsec static-sa** *string spi number*

Tree [spi](#)

Description This command specifies the SPI for the static SA.

When the **direction** command is set to **inbound**, the SPI is used to look up the instruction to verify and decrypt the incoming IPsec packets. When the **direction** command is set to **outbound**, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.

When unconfigured, the static SA cannot be used.

Range 256 to 16383

Introduced 16.0.R6

Platforms All

trust-anchor-profile [[name](#)] *string*

Synopsis Enter the **trust-anchor-profile** list instance
 Context **configure ipsec trust-anchor-profile** *string*
 Tree [trust-anchor-profile](#)
 Max. Instances 10128
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Trust anchor profile name for IPsec tunnel or gateway
 Context **configure ipsec trust-anchor-profile** *string*
 Tree [trust-anchor-profile](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor [[ca-profile](#)] *reference*

Synopsis Add a list entry for **trust-anchor**
 Context **configure ipsec trust-anchor-profile** *string trust-anchor reference*
 Tree [trust-anchor](#)
 Description Commands in this context configure a CA profile as a trust anchor CA.
 Max. Instances 8
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ca-profile] *reference*

Synopsis Name of the CA profile as a trust anchor profile

Context	configure ipsec trust-anchor-profile <i>string</i> trust-anchor <i>reference</i>
Tree	trust-anchor
Reference	configure system security pki ca-profile <i>string</i>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ts-list [**name**] *string*

Synopsis	Enter the ts-list list instance
Context	configure ipsec ts-list <i>string</i>
Tree	ts-list
Description	Commands in this context configure Traffic Selector (TS) settings.
Max. Instances	32768
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Traffic Selector (TS) list name
Context	configure ipsec ts-list <i>string</i>
Tree	ts-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis	Enter the local context
Context	configure ipsec ts-list <i>string</i> local
Tree	local
Description	Commands in this context configure a local TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure ipsec ts-list string local entry number**
Tree **entry**
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis TS list entry ID
Context **configure ipsec ts-list string local entry number**
Tree **entry**
Range 1 to 32
Notes This element is part of a list key.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis Enable the **address** context
Context **configure ipsec ts-list string local entry number address**
Tree **address**
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix for address range in IKEv2 traffic selector
Context **configure ipsec ts-list string local entry number address prefix (*ipv4-prefix* | *ipv6-prefix*)**
Tree **prefix**
Notes The following elements are part of a mandatory choice: **prefix** or **range**.

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure ipsec ts-list string local entry number address range
Tree	range
Notes	The following elements are part of a mandatory choice: prefix or range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Lower bound of the IP address range for the entry
Context	configure ipsec ts-list string local entry number address range begin (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	begin
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Upper bound of the IP address range
Context	configure ipsec ts-list string local entry number address range end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	end
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol

Synopsis	Enable the protocol context
Context	configure ipsec ts-list string local entry number protocol

Tree	protocol
Description	Commands in this context specify the protocol settings for the IKEv2 traffic selector.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any

Synopsis	Match any protocol ID
Context	configure ipsec ts-list <i>string local entry number</i> protocol any
Tree	any
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enable the id context
Context	configure ipsec ts-list <i>string local entry number</i> protocol id
Tree	id
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the icmp context
Context	configure ipsec ts-list <i>string local entry number</i> protocol id icmp
Tree	icmp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string local entry number protocol id icmp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string local entry number protocol id icmp port-range</i>
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	configure ipsec ts-list <i>string local entry number protocol id icmp port-range begin-icmp-code number</i>
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range
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Context	configure ipsec ts-list <i>string local entry number protocol id icmp port-range begin-icmp-type number</i>
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	configure ipsec ts-list <i>string local entry number protocol id icmp port-range end-icmp-code number</i>
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	configure ipsec ts-list <i>string local entry number protocol id icmp port-range end-icmp-type number</i>
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6

Synopsis	Enter the icmp6 context
Context	configure ipsec ts-list <i>string local entry number protocol id icmp6</i>
Tree	icmp6

Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string local entry number protocol id icmp6 opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string local entry number protocol id icmp6 port-range</i>
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	configure ipsec ts-list <i>string local entry number protocol id icmp6 port-range begin-icmp-code number</i>
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type *number*

Synopsis Lower bound of the ICMP type range

Context **configure ipsec ts-list** *string local entry number protocol id icmp6 port-range begin-icmp-type number*

Tree [begin-icmp-type](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-code *number*

Synopsis Upper bound of the ICMP code range

Context **configure ipsec ts-list** *string local entry number protocol id icmp6 port-range end-icmp-code number*

Tree [end-icmp-code](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis Upper bound of the ICMP type range

Context **configure ipsec ts-list** *string local entry number protocol id icmp6 port-range end-icmp-type number*

Tree [end-icmp-type](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mipv6

Synopsis	Enter the mipv6 context
Context	configure ipsec ts-list <i>string local entry number protocol id mipv6</i>
Tree	mipv6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string local entry number protocol id mipv6 opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string local entry number protocol id mipv6 port-range</i>
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string local entry number protocol id mipv6 port-range begin number</i>
Tree	begin

Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string</i> local entry <i>number</i> protocol id mipv6 port-range end <i>number</i>
Tree	end
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol-id-with-any-port (*keyword* | *number*)

Synopsis	Protocol ID that accepts any port value
Context	configure ipsec ts-list <i>string</i> local entry <i>number</i> protocol id protocol-id-with-any-port (<i>keyword</i> <i>number</i>)
Tree	protocol-id-with-any-port
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp

Synopsis	Enter the sctp context
Context	configure ipsec ts-list <i>string</i> local entry <i>number</i> protocol id sctp
Tree	sctp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string local entry number protocol id sctp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string local entry number protocol id sctp port-range</i>
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string local entry number protocol id sctp port-range begin number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string local entry number protocol id sctp port-range end number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the tcp context
Context	configure ipsec ts-list <i>string local entry number protocol id tcp</i>
Tree	tcp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string local entry number protocol id tcp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string local entry number protocol id tcp port-range</i>
Tree	port-range

Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string local entry number protocol id tcp port-range begin number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string local entry number protocol id tcp port-range end number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	configure ipsec ts-list <i>string local entry number protocol id udp</i>
Tree	udp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string local entry number protocol id udp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string local entry number protocol id udp port-range</i>
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string local entry number protocol id udp port-range begin number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string local entry number protocol id udp port-range end number</i>
Tree	end
Range	0 to 65535

Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote

Synopsis	Enter the remote context
Context	configure ipsec ts-list string remote
Tree	remote
Description	Commands in this context configure a remote TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [id] number

Synopsis	Enter the entry list instance
Context	configure ipsec ts-list string remote entry number
Tree	entry
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] number

Synopsis	TS list entry ID
Context	configure ipsec ts-list string remote entry number
Tree	entry
Range	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis	Enable the address context
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Context	configure ipsec ts-list <i>string remote entry number address</i>
Tree	address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP prefix for address range in IKEv2 traffic selector
Context	configure ipsec ts-list <i>string remote entry number address prefix (ipv4-prefix ipv6-prefix)</i>
Tree	prefix
Notes	The following elements are part of a mandatory choice: prefix or range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure ipsec ts-list <i>string remote entry number address range</i>
Tree	range
Notes	The following elements are part of a mandatory choice: prefix or range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Lower bound of the IP address range for the entry
Context	configure ipsec ts-list <i>string remote entry number address range begin (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	begin
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Upper bound of the IP address range
Context	configure ipsec ts-list <i>string</i> <i>remote entry number address range end</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	end
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol

Synopsis	Enable the protocol context
Context	configure ipsec ts-list <i>string</i> <i>remote entry number protocol</i>
Tree	protocol
Description	Commands in this context specify the protocol settings for the IKEv2 traffic selector.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any

Synopsis	Match any protocol ID
Context	configure ipsec ts-list <i>string</i> <i>remote entry number protocol any</i>
Tree	any
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enable the id context
Context	configure ipsec ts-list <i>string</i> <i>remote entry number protocol id</i>
Tree	id
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the icmp context
Context	configure ipsec ts-list <i>string remote entry number protocol id icmp</i>
Tree	icmp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string remote entry number protocol id icmp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string remote entry number protocol id icmp port-range</i>
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
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Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id icmp port-range begin-icmp-code <i>number</i>
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id icmp port-range begin-icmp-type <i>number</i>
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id icmp port-range end-icmp-code <i>number</i>
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id icmp port-range end-icmp-type <i>number</i>
Tree	end-icmp-type

Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6

Synopsis	Enter the icmp6 context
Context	configure ipsec ts-list string remote entry number protocol id icmp6
Tree	icmp6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list string remote entry number protocol id icmp6 opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list string remote entry number protocol id icmp6 port-range
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id icmp6 port-range begin-icmp-code <i>number</i>
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id icmp6 port-range begin-icmp-type <i>number</i>
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id icmp6 port-range end-icmp-code <i>number</i>
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
----------	------------------------------------

Context	configure ipsec ts-list <i>string remote entry number protocol id icmp6 port-range end-icmp-type number</i>
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mipv6

Synopsis	Enter the mipv6 context
Context	configure ipsec ts-list <i>string remote entry number protocol id mipv6</i>
Tree	mipv6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string remote entry number protocol id mipv6 opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string remote entry number protocol id mipv6 port-range</i>
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id mipv6 port-range begin <i>number</i>
Tree	begin
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id mipv6 port-range end <i>number</i>
Tree	end
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol-id-with-any-port (*keyword* | *number*)

Synopsis	Protocol ID that accepts any port value
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id protocol-id-with-any-port (<i>keyword</i> <i>number</i>)
Tree	protocol-id-with-any-port
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp

Synopsis Enter the **sctp** context

Context **configure ipsec ts-list** *string* *remote entry number* *protocol id* **sctp**

Tree **sctp**

Notes The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mip6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis Support OPAQUE ports

Context **configure ipsec ts-list** *string* *remote entry number* *protocol id* **sctp opaque**

Tree **opaque**

Description This command allows the protocol ID to be accepted even when the port information is not available.

Notes The following elements are part of a choice: **opaque** or **port-range**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis Enable the **port-range** context

Context **configure ipsec ts-list** *string* *remote entry number* *protocol id* **sctp port-range**

Tree **port-range**

Notes The following elements are part of a choice: **opaque** or **port-range**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis Lower bound of the port range

Context	configure ipsec ts-list <i>string remote entry number protocol id sctp port-range begin number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string remote entry number protocol id sctp port-range end number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the tcp context
Context	configure ipsec ts-list <i>string remote entry number protocol id tcp</i>
Tree	tcp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string remote entry number protocol id tcp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.

Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list string remote entry number protocol id tcp port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin number

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list string remote entry number protocol id tcp port-range begin number
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list string remote entry number protocol id tcp port-range end number
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	configure ipsec ts-list <i>string remote entry number protocol id udp</i>
Tree	udp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string remote entry number protocol id udp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string remote entry number protocol id udp port-range</i>
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string remote entry number protocol id udp port-range begin number</i>
Tree	begin

Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list string remote entry number protocol id udp port-range end number
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-template [id] number

Synopsis	Enter the tunnel-template list instance
Context	configure ipsec tunnel-template number
Tree	tunnel-template
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] number

Synopsis	Tunnel template ID
Context	configure ipsec tunnel-template number
Tree	tunnel-template
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

clear-df-bit *boolean*

Synopsis	Clear the Do-not-Fragment (DF) bit
Context	configure <i>ipsec tunnel-template number clear-df-bit boolean</i>
Tree	<i>clear-df-bit</i>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

copy-traffic-class-upon-decapsulation *boolean*

Synopsis	Enable traffic class copy upon decapsulation
Context	configure <i>ipsec tunnel-template number copy-traffic-class-upon-decapsulation boolean</i>
Tree	<i>copy-traffic-class-upon-decapsulation</i>
Description	When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private). When configured to false , the system does not copy the traffic class from the outer IP packet to the payload IP packet header upon decapsulation.
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure <i>ipsec tunnel-template number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulated-ip-mtu *number*

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure <i>ipsec tunnel-template number encapsulated-ip-mtu number</i>

Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-generation

Synopsis	Enter the icmp-generation context
Context	configure ipsec tunnel-template <i>number</i> icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frag-required

Synopsis	Enter the frag-required context
Context	configure ipsec tunnel-template <i>number</i> icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending ICMP messages
Context	configure ipsec tunnel-template <i>number</i> icmp-generation frag-required admin-state <i>keyword</i>
Tree	admin-state

Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Default	enable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval for sending ICMP messages
Context	configure ipsec tunnel-template <i>number</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Default	10
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count *number*

Synopsis	Maximum number of ICMP messages that can be sent
Context	configure ipsec tunnel-template <i>number</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6-generation

Synopsis	Enter the icmp6-generation context
Context	configure ipsec tunnel-template number icmp6-generation
Tree	icmp6-generation
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pkt-too-big

Synopsis	Enter the pkt-too-big context
Context	configure ipsec tunnel-template number icmp6-generation pkt-too-big
Tree	pkt-too-big
Description	Commands in this context configure values for the ICMPv6 Packet Too Big (PTB) messages. The system sends PTB messages if an IPv6 packet is received on the private side that is larger than 1280 bytes and also exceeds the private MTU of the tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	configure ipsec tunnel-template number icmp6-generation pkt-too-big admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Maximum interval during which PTB messages can be sent
Context	configure ipsec tunnel-template number icmp6-generation pkt-too-big interval number
Tree	interval
Range	1 to 60

Default	10
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count *number*

Synopsis	Max ICMPv6 messages that can be sent during interval
Context	configure ipsec tunnel-template <i>number</i> icmp6-generation pkt-too-big message-count <i>number</i>
Tree	message-count
Range	10 to 1000
Default	100
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ignore-default-route *boolean*

Synopsis	Ignore any full range traffic selector in TSi
Context	configure ipsec tunnel-template <i>number</i> ignore-default-route <i>boolean</i>
Tree	ignore-default-route
Description	When configured to true , any full range traffic selector is ignored when creating a reverse route. When configured to false , no CHILD_SA is created if any full range traffic selector is included in TSi.
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	Maximum size of the IP MTU for the payload packets
Context	configure ipsec tunnel-template <i>number</i> ip-mtu <i>number</i>
Tree	ip-mtu
Range	512 to 9000
Units	octets

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform *reference*

Synopsis	IPsec transform ID for the tunnel template
Context	configure ipsec tunnel-template <i>number</i> ipsec-transform <i>reference</i>
Tree	ipsec-transform
Reference	configure ipsec ipsec-transform <i>number</i>
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pmtu-discovery-aging *number*

Synopsis	Aging out time of the learned path MTU
Context	configure ipsec tunnel-template <i>number</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Default	900
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*

Synopsis	New TCP MSS value on the private side
Context	configure ipsec tunnel-template <i>number</i> private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Description	This command specifies the new (adjusted) TCP MSS value of TCP SYN packets on the private side. When unconfigured, the MSS value is derived from the received TCP SYN packet on the private side.

Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v4 *boolean*

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure ipsec tunnel-template <i>number</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v6 *boolean*

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	configure ipsec tunnel-template <i>number</i> propagate-pmtu-v6 <i>boolean</i>
Tree	propagate-pmtu-v6
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust (*number* | *keyword*)

Synopsis	New TCP MSS value on the public side
Context	configure ipsec tunnel-template <i>number</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	This command specifies the new (adjusted) TCP MSS value for the TCP traffic in an IPsec tunnel which is sent from the public network to the private network. The system can use this value to adjust or insert the MSS option in the TCP SYN packet. When unconfigured, the MSS value is derived from the public MTU and IPsec overhead.

Range	512 to 9000
Units	octets
Options	auto
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

replay-window *number*

Synopsis	Anti-replay window size for the tunnel template
Context	configure ipsec tunnel-template <i>number</i> replay-window <i>number</i>
Tree	replay-window
Range	32 64 128 256 512
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sp-reverse-route *keyword*

Synopsis	Reverse route creation method in private service
Context	configure ipsec tunnel-template <i>number</i> sp-reverse-route <i>keyword</i>
Tree	sp-reverse-route
Description	This command allows the system to automatically create a reverse route based on dynamic LAN-to-LAN tunnel's TSi in private service.
Default	none
Options	none, use-security-policy
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.20 isa commands

```

configure
- isa
  - application-assurance-group number
  - aa-sub-scale keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup
    - esa number vm number
    - isa string
  - description string
  - divert-fc keyword
  - failure-mode keyword
  - flow-attribute string
  - http-enrich-max-packet-size number
  - isa-capacity-cost-high-threshold number
  - isa-capacity-cost-low-threshold number
  - minimum-isa-generation number
  - overload-cut-through boolean
  - overload-sub-quarantine
    - admin-state keyword
  - primary
    - esa number vm number
    - isa string
  - qos
    - egress
      - from-subscriber
        - buffer-pool
          - name string
          - resv-cbs number
          - slope-policy reference
        - port-scheduler-policy reference
        - queue-policy reference
        - wa-shared-high-wmark (number | keyword)
        - wa-shared-low-wmark number
      - to-subscriber
        - buffer-pool
          - name string
          - resv-cbs number
          - slope-policy reference
        - port-scheduler-policy reference
        - queue-policy reference
        - wa-shared-high-wmark (number | keyword)
        - wa-shared-low-wmark number
    - shared-resources
      - gtp-tunnel-database number
      - tcp-advanced-functions number
      - url-filter-web-service-cache number
    - statistics
      - stats-type keyword
      - accounting-policy reference
      - apply-groups reference
      - apply-groups-exclude reference
      - collect-stats boolean
  - transit-prefix-limits
    - ipv4-entries number
    - ipv4-remote-entries number
    - ipv6-entries number
    - ipv6-remote-entries number

```

configure isa application-assurance-group vm-traffic-distribute-by-ip

- **vm-traffic-distribute-by-ip** *boolean*
- **vm-traffic-distribute-by-teid** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **lns-group** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **esa** *reference* **vm** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drain** *boolean*
 - **mda** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drain** *boolean*
 - **port-policy** *reference*
- **nat-group** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **esa** *reference* **vm** *reference*
 - **log**
 - **suppress-lsn-events** *boolean*
 - **suppress-lsn-sub-blocks-free** *boolean*
 - **mda** *string*
 - **radius-accounting-policy** *reference*
 - **redundancy**
 - **active-mda-limit** *number*
 - **inter-chassis**
 - **flow-timeout-on-switchover** *number*
 - **ip-mtu** *number*
 - **keepalive**
 - **dropcount** *number*
 - **interval** *number*
 - **local-ip-range-start** *string*
 - **monitor-oper-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **health-drop** *number*
 - **monitor-port** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **health-drop** *number*
 - **preferred** *boolean*
 - **remote-ip-range-start** *string*
 - **replication-threshold** *number*
 - **router-instance** *string*
 - **sync** *boolean*
 - **intra-chassis**
 - **active-active**
 - **failed-mda-limit** *number*
 - **active-standby**
 - **l2aware-bypass**
 - **scaling-profile** *keyword*
 - **session-limits**
 - **reserved** *number*
 - **upnp-mappings** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
 - **tunnel-group** *number*

configure isa tunnel-group admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **backup** *string*
- **description** *string*
- **ipsec-responder-only** *boolean*
- **isa-scale-mode** *keyword*
- **multi-active**
 - **active-isa-number** *number*
 - **esa** *reference* **vm** *reference*
 - **isa** *string*
 - **member-pool** *reference*
- **primary** *string*
- **reassembly**
 - **max-wait-time** *number*
- **stats-collection**
 - **isa-dp-cpu-usage** *boolean*
 - **strict-esp-sequence-number-ordering** *boolean*
- **tunnel-member-pool** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **esa** *reference* **vm** *reference*
 - **isa** *string*
- **video-group** *number*
 - **ad-insert** *boolean*
 - **admin-state** *keyword*
 - **analyzer** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **fcc-server** *boolean*
 - **local-rt-server** *boolean*
 - **mda** *string*
 - **resv-ret** *number*
 - **rt-client** *boolean*
 - **stream-selection** *boolean*
 - **vapp** *reference* **vapp-id** *reference*
 - **watermark**
 - **bandwidth**
 - **fcc** *number*
 - **ret** *number*
 - **total** *number*
 - **session**
 - **fcc** *number*
 - **ret** *number*
 - **total** *number*
- **wlan-gw-group** *number*
 - **active-iom-limit** *number*
 - **active-mda-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **distributed-sub-mgmt**
 - **isa-aa-group** *reference*
 - **isa-aa-oversubscription-factor** *number*
 - **esa** *reference* **vm** *reference*
 - **iom** *reference*
 - **mda** *string*
 - **nat**
 - **log**
 - **suppress-lsn-events** *boolean*
 - **suppress-lsn-sub-blocks-free** *boolean*

configure isa wlan-gw-group nat lsn

- **lsn** *boolean*
- **radius-accounting-policy** *reference*
- **session-limits**
 - **reserved** *number*
 - **upnp-mappings** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
- **port-policy** *reference*
- **redundancy** *keyword*
- **scaling-profile** *keyword*
- **tunnel-port-policy** *reference*
- **watermarks**
 - **mark** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high** *number*
 - **low** *number*

3.20.1 isa command descriptions

isa

Synopsis	Enter the isa context
Context	configure isa
Tree	isa
Description	Commands in this context configure the Integrated Services Adapter (ISA).
Introduced	16.0.R1
Platforms	All

application-assurance-group [[aa-group-id](#)] *number*

Synopsis	Enter the application-assurance-group list instance
Context	configure isa application-assurance-group number
Tree	application-assurance-group
Max. Instances	7
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[aa-group-id\]](#) *number*

Synopsis	AA group ID
Context	configure isa application-assurance-group number
Tree	application-assurance-group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-scale *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AA group sub-scale
Context	configure isa application-assurance-group <i>number aa-sub-scale keyword</i>
Tree	aa-sub-scale
Default	residential
Options	residential, vpn, mobile-gateway, lightweight-internet, residential-8k, residential-16k, residential-32k, residential-64k, vpn-1k, vpn-2k, vpn-4k, vpn-8k, mobile-gateway-1m, mobile-gateway-2m, lightweight-internet-512k
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this AA group
Context	configure isa application-assurance-group <i>number admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

backup

Synopsis	Enter the backup context
Context	configure isa application-assurance-group <i>number backup</i>
Tree	backup
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [[esa-id](#)] *number vm number*

Synopsis	Add a list entry for esa
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Context	configure isa application-assurance-group number backup esa number vm number
Tree	esa
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[esa-id] number

Synopsis	ESA ID
Context	configure isa application-assurance-group number backup esa number vm number
Tree	esa
Range	1 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm number

Synopsis	VM ID within the ESA
Context	configure isa application-assurance-group number backup esa number vm number
Tree	esa
Range	1 to 4
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa [mda-id] string

Synopsis	Add a list entry for isa
Context	configure isa application-assurance-group number backup isa string
Tree	isa
Max. Instances	1
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[mda-id] *string*

Synopsis MDA/ISA ID
Context **configure** isa application-assurance-group number backup isa string
Tree isa
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** isa application-assurance-group number description string
Tree description
String Length 1 to 80
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

divert-fc *keyword*

Synopsis Diverted traffic forwarding class
Context **configure** isa application-assurance-group number divert-fc keyword
Tree divert-fc
Options be, l2, af, l1, h2, ef, h1, nc
Max. 8
Instances
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

failure-mode *keyword*

Synopsis Mode of operation when no ISA-AA cards are available
Context **configure** isa application-assurance-group number failure-mode keyword

Tree	failure-mode
Options	fail-to-open
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-attribute [\[flow-attribute-name\]](#) *string*

Synopsis	Add a list entry for flow-attribute
Context	configure isa application-assurance-group <i>number</i> flow-attribute <i>string</i>
Tree	flow-attribute
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[flow-attribute-name] *string*

Synopsis	Flow attribute name
Context	configure isa application-assurance-group <i>number</i> flow-attribute <i>string</i>
Tree	flow-attribute
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich-max-packet-size *number*

Synopsis	Maximum HTTP enriched packet size
Context	configure isa application-assurance-group <i>number</i> http-enrich-max-packet-size <i>number</i>
Tree	http-enrich-max-packet-size
Range	576 to 9212
Default	1500
Units	octets
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-capacity-cost-high-threshold *number*

Synopsis	Capacity cost high threshold for the ISA-AA group
Context	configure isa application-assurance-group <i>number</i> isa-capacity-cost-high-threshold <i>number</i>
Tree	isa-capacity-cost-high-threshold
Range	0 to 4294967294
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-capacity-cost-low-threshold *number*

Synopsis	Capacity cost low threshold for the ISA-AA group
Context	configure isa application-assurance-group <i>number</i> isa-capacity-cost-low-threshold <i>number</i>
Tree	isa-capacity-cost-low-threshold
Range	1 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

minimum-isa-generation *number*

Synopsis	Minimum ISA generation for this AA group
Context	configure isa application-assurance-group <i>number</i> minimum-isa-generation <i>number</i>
Tree	minimum-isa-generation
Range	1 to 2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overload-cut-through *boolean*

Synopsis	Enable cut-through of traffic if ISA is in overload
Context	configure isa application-assurance-group <i>number</i> overload-cut-through <i>boolean</i>
Tree	overload-cut-through
Default	false
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overload-sub-quarantine

Synopsis Enter the **overload-sub-quarantine** context
Context **configure isa application-assurance-group number overload-sub-quarantine**
Tree [overload-sub-quarantine](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of overload subscriber quarantine
Context **configure isa application-assurance-group number overload-sub-quarantine admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis Enter the **primary** context
Context **configure isa application-assurance-group number primary**
Tree [primary](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [*esa-id*] *number vm number*

Synopsis Add a list entry for **esa**
Context **configure isa application-assurance-group number primary esa number vm number**
Tree [esa](#)
Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[esa-id] *number*

Synopsis ESA ID
Context **configure** isa application-assurance-group number primary esa number vm number
Tree esa
Range 1 to 16
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm *number*

Synopsis VM ID within the ESA
Context **configure** isa application-assurance-group number primary esa number vm number
Tree esa
Range 1 to 4
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa [mda-id] *string*

Synopsis Add a list entry for **isa**
Context **configure** isa application-assurance-group number primary isa string
Tree isa
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[mda-id] *string*

Synopsis MDA/ISA ID
Context **configure** isa application-assurance-group number primary isa string
Tree isa

Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure isa application-assurance-group number qos
Tree	qos
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure isa application-assurance-group number qos egress
Tree	egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

from-subscriber

Synopsis	Enter the from-subscriber context
Context	configure isa application-assurance-group number qos egress from-subscriber
Tree	from-subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

buffer-pool

Synopsis	Enter the buffer-pool context
Context	configure isa application-assurance-group number qos egress from-subscriber buffer-pool
Tree	buffer-pool
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Name of the buffer pool used for this ISA group

Context **configure isa application-assurance-group number qos egress from-subscriber buffer-pool name string**

Tree **name**

String Length 1 to 32

Default default

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

resv-cbs number

Synopsis Reserved CBS for this ISA group

Context **configure isa application-assurance-group number qos egress from-subscriber buffer-pool resv-cbs number**

Tree **resv-cbs**

Range 0 to 100

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

slope-policy reference

Synopsis Slope policy name

Context **configure isa application-assurance-group number qos egress from-subscriber buffer-pool slope-policy reference**

Tree **slope-policy**

Reference **configure qos slope-policy string**

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-scheduler-policy *reference*

Synopsis	Port scheduler policy name
Context	configure isa application-assurance-group <i>number</i> qos egress from-subscriber port-scheduler-policy <i>reference</i>
Tree	port-scheduler-policy
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue-policy *reference*

Synopsis	Queue policy name
Context	configure isa application-assurance-group <i>number</i> qos egress from-subscriber queue-policy <i>reference</i>
Tree	queue-policy
Reference	configure qos network-queue <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wa-shared-high-wmark (*number* | *keyword*)

Synopsis	High watermark for weighted average utilization
Context	configure isa application-assurance-group <i>number</i> qos egress from-subscriber wa-shared-high-wmark (<i>number</i> <i>keyword</i>)
Tree	wa-shared-high-wmark
Range	1 to 100
Default	max
Units	percent
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wa-shared-low-wmark *number*

Synopsis	Low watermark for the weighted average utilization
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Context	configure isa application-assurance-group number qos egress from-subscriber wa-shared-low-wmark number
Tree	wa-shared-low-wmark
Range	0 to 99
Default	0
Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to-subscriber

Synopsis	Enter the to-subscriber context
Context	configure isa application-assurance-group number qos egress to-subscriber
Tree	to-subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

buffer-pool

Synopsis	Enter the buffer-pool context
Context	configure isa application-assurance-group number qos egress to-subscriber buffer-pool
Tree	buffer-pool
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the buffer pool used for this ISA group
Context	configure isa application-assurance-group number qos egress to-subscriber buffer-pool name <i>string</i>
Tree	name
String Length	1 to 32

Default	default
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

resv-cbs *number*

Synopsis	Reserved CBS for this ISA group
Context	configure isa application-assurance-group <i>number</i> qos egress to-subscriber buffer-pool resv-cbs <i>number</i>
Tree	resv-cbs
Range	0 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

slope-policy *reference*

Synopsis	Slope policy name
Context	configure isa application-assurance-group <i>number</i> qos egress to-subscriber buffer-pool slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-scheduler-policy *reference*

Synopsis	Port scheduler policy name
Context	configure isa application-assurance-group <i>number</i> qos egress to-subscriber port-scheduler-policy reference
Tree	port-scheduler-policy
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue-policy *reference*

Synopsis	Queue policy name
Context	configure isa application-assurance-group <i>number</i> qos egress to-subscriber queue-policy <i>reference</i>
Tree	queue-policy
Reference	configure qos network-queue <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wa-shared-high-wmark (*number* | *keyword*)

Synopsis	High watermark for weighted average utilization
Context	configure isa application-assurance-group <i>number</i> qos egress to-subscriber wa-shared-high-wmark (<i>number</i> <i>keyword</i>)
Tree	wa-shared-high-wmark
Range	1 to 100
Default	max
Units	percent
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wa-shared-low-wmark *number*

Synopsis	Low watermark for the weighted average utilization
Context	configure isa application-assurance-group <i>number</i> qos egress to-subscriber wa-shared-low-wmark <i>number</i>
Tree	wa-shared-low-wmark
Range	0 to 99
Default	0
Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

shared-resources

Synopsis	Enter the shared-resources context
Context	configure isa application-assurance-group number shared-resources
Tree	shared-resources
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-tunnel-database *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Percentage of allocated memory resources
Context	configure isa application-assurance-group number shared-resources gtp-tunnel-database number
Tree	gtp-tunnel-database
Range	1 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-advanced-functions *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allocation of resources for TCP advanced functions
Context	configure isa application-assurance-group number shared-resources tcp-advanced-functions number
Tree	tcp-advanced-functions
Range	1 to 100
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-filter-web-service-cache *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of shared memory as a percentage
Context	configure isa application-assurance-group <i>number</i> shared-resources url-filter-web-service-cache <i>number</i>
Tree	url-filter-web-service-cache
Range	1 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

statistics

Synopsis	Enter the statistics context
Context	configure isa application-assurance-group <i>number</i> statistics
Tree	statistics
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

stats-type [[isa-aa-group-stats-type](#)] *keyword*

Synopsis	Enter the stats-type list instance
Context	configure isa application-assurance-group <i>number</i> statistics stats-type <i>keyword</i>
Tree	stats-type
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[isa-aa-group-stats-type](#)] *keyword*

Synopsis	Group performance statistics type
Context	configure isa application-assurance-group <i>number</i> statistics stats-type <i>keyword</i>
Tree	stats-type
Options	aa-performance
Notes	This element is part of a list key.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy ID used by AA
Context **configure isa application-assurance-group number statistics stats-type keyword**
accounting-policy reference
Tree **accounting-policy**
Reference **configure log accounting-policy number**
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis Enable the collection of statistics
Context **configure isa application-assurance-group number statistics stats-type keyword**
collect-stats boolean
Tree **collect-stats**
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-prefix-limits

Synopsis Enter the **transit-prefix-limits** context
Context **configure isa application-assurance-group number transit-prefix-limits**
Tree **transit-prefix-limits**
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-entries *number*

Synopsis Limit of transit prefix IPv4 entries per AA group
Context **configure isa application-assurance-group number transit-prefix-limits ipv4-entries**
number

Tree	ipv4-entries
Range	1 to 16383
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-remote-entries *number*

Synopsis	Limit of transit prefix IPv4 remote entries per group
Context	configure isa application-assurance-group <i>number</i> transit-prefix-limits ipv4-remote-entries <i>number</i>
Tree	ipv4-remote-entries
Range	1 to 2047
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-entries *number*

Synopsis	Limit of transit prefix IPv6 entries per AA group
Context	configure isa application-assurance-group <i>number</i> transit-prefix-limits ipv6-entries <i>number</i>
Tree	ipv6-entries
Range	1 to 8191
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-remote-entries *number*

Synopsis	Limit of transit prefix IPv6 remote entries per group
Context	configure isa application-assurance-group <i>number</i> transit-prefix-limits ipv6-remote-entries <i>number</i>
Tree	ipv6-remote-entries
Range	1 to 1023
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm-traffic-distribute-by-ip *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow packet distribution by IP address for virtual AA
Context	configure isa application-assurance-group number vm-traffic-distribute-by-ip boolean
Tree	vm-traffic-distribute-by-ip
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm-traffic-distribute-by-teid *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable load balancing of the traffic using TEID
Context	configure isa application-assurance-group number vm-traffic-distribute-by-teid boolean
Tree	vm-traffic-distribute-by-teid
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

Ins-group [*id*] *number*

Synopsis	Enter the Ins-group list instance
Context	configure isa Ins-group number
Tree	Ins-group
Description	Commands in this context configure the ISA L2TP Network Server (LNS) group.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] number

Synopsis	LNS group ID
Context	configure isa lns-group number
Tree	lns-group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the ISA LNS group
Context	configure isa lns-group number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure isa lns-group number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [esa-id] reference vm reference

Synopsis	Enter the esa list instance
Context	configure isa lns-group number esa reference vm reference
Tree	esa
Max. Instances	6

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[**esa-id**] *reference*

Synopsis ESA ID
Context **configure isa lns-group number esa reference vm reference**
Tree [esa](#)
Reference **configure esa number**
Notes This element is part of a list key.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm *reference*

Synopsis VM ID
Context **configure isa lns-group number esa reference vm reference**
Tree [esa](#)
Reference **configure esa number vm number**
Notes This element is part of a list key.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

drain *boolean*

Synopsis Redirect subscribers to other ESA VMs
Context **configure isa lns-group number esa reference vm reference drain boolean**
Tree [drain](#)
Description When configured to **true**, the ESA VM redirects new subscribers to use other ESA VMs.
The drain function gracefully redirects subscribers to other ESA VMs and does not allow new subscribers to use the ESA VM. As the existing subscribers terminate their sessions, the ESA VM no longer services any subscribers and can be decommissioned gracefully.
When configured to **false**, the ESA VM is set to the normal working operational state and accepts new LNS subscribers.
Default false

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mda [*mda-id*] *string*

Synopsis Enter the **mda** list instance
Context **configure isa lns-group** *number mda string*
Tree **mda**
Description Commands in this context configure an ISA LNS group MDA.
Max. Instances 6
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[mda-id] *string*

Synopsis MDA ID for the ISA LNS group
Context **configure isa lns-group** *number mda string*
Tree **mda**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis Prevent new L2TP sessions from associating with ISA
Context **configure isa lns-group** *number mda string drain boolean*
Tree **drain**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Port policy for the ISA LNS group
Context	configure isa lns-group number port-policy <i>reference</i>
Tree	port-policy
Reference	configure port-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group [*id*] *number*

Synopsis	Enter the nat-group list instance
Context	configure isa nat-group <i>number</i>
Tree	nat-group
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*id*] *number*

Synopsis	NAT group ID
Context	configure isa nat-group <i>number</i>
Tree	nat-group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the NAT group
Context	configure isa nat-group number admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure isa nat-group <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [[esa-id](#)] *reference* [vm](#) *reference*

Synopsis	Add a list entry for esa
Context	configure isa nat-group <i>number</i> esa <i>reference</i> vm <i>reference</i>
Tree	esa
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[esa-id] *reference*

Synopsis	Provisioned ESA ID
Context	configure isa nat-group <i>number</i> esa <i>reference</i> vm <i>reference</i>
Tree	esa
Reference	configure esa <i>number</i>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm reference

Synopsis	VM ID for the provisioned BB ISA
Context	configure isa nat-group number esa reference vm reference
Tree	esa
Reference	configure esa number vm number
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

log

Synopsis	Enter the log context
Context	configure isa nat-group number log
Tree	log
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-events boolean

Synopsis	Suppress LSN events when RADIUS accounting is enabled
Context	configure isa nat-group number log suppress-lsn-events boolean
Tree	suppress-lsn-events
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-sub-blocks-free boolean

Synopsis	Suppress LSN Free block and NAT pool block notification
Context	configure isa nat-group number log suppress-lsn-sub-blocks-free boolean
Tree	suppress-lsn-sub-blocks-free
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mda [[mda-id](#)] *string*

Synopsis	Add a list entry for mda
Context	configure isa nat-group <i>number</i> mda <i>string</i>
Tree	mda
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[mda-id] *string*

Synopsis	MDA ID for ISA NAT group
Context	configure isa nat-group <i>number</i> mda <i>string</i>
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy for ISA group
Context	configure isa nat-group <i>number</i> radius-accounting-policy <i>reference</i>
Tree	radius-accounting-policy
Reference	configure aaa radius isa-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the redundancy context
Context	configure isa nat-group <i>number</i> redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-mda-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of active MS-ISAs in the NAT group
Context	configure isa nat-group number redundancy active-mda-limit number
Tree	active-mda-limit
Range	1 to 14
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inter-chassis

Synopsis	Enable the inter-chassis context
Context	configure isa nat-group number redundancy inter-chassis
Tree	inter-chassis
Notes	The following elements are part of a choice: inter-chassis or intra-chassis .
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-timeout-on-switchover *number*

Synopsis	Flow timeout immediately following a switchover
Context	configure isa nat-group number redundancy inter-chassis flow-timeout-on-switchover number
Tree	flow-timeout-on-switchover
Description	<p>This command configures the initial flow timeout on the newly active node for the NAT group after a switchover. The timeout is in effect only if there is no traffic present over the flow; otherwise, the first packet over the flow resets the flow timeout to the originally configured value (under the NAT policy configuration).</p> <p>This command configuration restricts the flow timeout to a portion of the originally configured value.</p>
Range	1 to 50

Default	50
Units	percent
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	IP MTU for ISA-to-ISA communication
Context	configure isa nat-group number redundancy inter-chassis ip-mtu number
Tree	ip-mtu
Description	This command configures the IP MTU size used to transport flow synchronization records between the ISAs. Multiple flow synchronization events can be packed into a single frame up to the IP MTU size.
Range	512 to 9000
Default	1500
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the keepalive context
Context	configure isa nat-group number redundancy inter-chassis keepalive
Tree	keepalive
Description	Commands in this context configure keepalive messages between the CPMs residing on different chassis and are used to detect the presence of the peering node. If the redundant peer connectivity is lost beyond the limit defined by the keepalive messages, each node in the redundant pair transitions to standalone mode. Keepalive messages use UDP transport.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dropcount *number*

Synopsis	Threshold for lost consecutive keepalive messages
Context	configure isa nat-group number redundancy inter-chassis keepalive dropcount number
Tree	dropcount

Description	This command configures the threshold for the number of consecutive keepalive messages that are lost between the redundant nodes before the connection is declared down. When the peer is considered unreachable, each node transitions to standalone mode.
Range	2 to 20
Default	2
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval between two consecutive keepalive messages
Context	configure isa nat-group <i>number</i> redundancy inter-chassis keepalive interval <i>number</i>
Tree	interval
Description	This command configures the interval at which the keepalive messages are periodically sent between the redundant nodes (CPMs) to verify the presence of the peer. If peer connectivity is lost, each node transitions to standalone mode.
Range	2 to 250
Default	30
Units	deciseconds
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-ip-range-start *string*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Starting IP address for ISAs in the NAT group
Context	configure isa nat-group <i>number</i> redundancy inter-chassis local-ip-range-start <i>string</i>
Tree	local-ip-range-start
Description	This command configures the initial IP address for the ISAs in the NAT group. Consecutive IP addresses are automatically assigned for the remaining ISAs. The IP addresses are used to communicate between the ISAs on redundant nodes for the

purpose of flow synchronization. Traffic from the member ISA with the initial IP address is sent to the initial IP address from the remote IP range.

Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group [[oper-group](#)] *reference*

Synopsis	Enter the monitor-oper-group list instance
Context	configure isa nat-group number redundancy inter-chassis monitor-oper-group reference
Tree	monitor-oper-group
Description	Commands in this context specify monitoring settings for objects in an operational group, such as SAPs, BFD sessions, or VRRP sessions, in order to adjust the overall health of the node in a redundant inter-chassis NAT system. A state change of the objects in the operational group influences the health of a NAT node in a redundant configuration.
Max. Instances	4
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[oper-group] *reference*

Synopsis	Operational group name
Context	configure isa nat-group number redundancy inter-chassis monitor-oper-group reference
Tree	monitor-oper-group
Reference	configure service oper-group string
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

health-drop *number*

Synopsis	Overall health drop of the NAT group on a state change
Context	configure isa nat-group number redundancy inter-chassis monitor-oper-group reference health-drop number
Tree	health-drop
Range	1 to 255

Default	1
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-port [*port-id*] *string*

Synopsis	Enter the monitor-port list instance
Context	configure isa nat-group number redundancy inter-chassis monitor-port <i>string</i>
Tree	monitor-port
Description	Commands in this context specify monitoring settings for a port carrying NAT traffic, in order to adjust the overall health of the node in a redundant inter-chassis NAT system. A state change of a monitored port influences the health of a NAT node in a redundant configuration.
Max. Instances	16
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[port-id] *string*

Synopsis	Port ID
Context	configure isa nat-group number redundancy inter-chassis monitor-port <i>string</i>
Tree	monitor-port
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

health-drop *number*

Synopsis	Overall health drop of the NAT group on a state change
Context	configure isa nat-group number redundancy inter-chassis monitor-port <i>string</i> health-drop <i>number</i>
Tree	health-drop
Range	1 to 255
Default	1
Introduced	20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred *boolean*

Synopsis Set the preferred activity status for the node

Context **configure isa nat-group number redundancy inter-chassis preferred boolean**

Tree **preferred**

Description When configured to **true**, the system designates the node in a redundant NAT system with the preferred activity status. The preferred status comes into consideration only when both redundant nodes have equal health values. If the peer traffic-serving node has an equal health value but does not have the preferred designation, a switch of activity occurs to route traffic to the preferred node. The switchover could cause a brief interruption in traffic flow.

When configured to **false**, the preferred designation is not set for the node.

Default false

Introduced 20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ip-range-start *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Starting IP address for ISAs on the remote node

Context **configure isa nat-group number redundancy inter-chassis remote-ip-range-start string**

Tree **remote-ip-range-start**

Description This command configures the initial IP address for the ISAs in the NAT group on the remote node. Consecutive IP addresses are automatically assigned for the remaining ISAs. The IP addresses are used to communicate between the ISAs on redundant nodes for the purpose of flow synchronization. Traffic from the member ISA with the initial local IP address is sent to the initial IP address from the remote IP range.

Introduced 20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

replication-threshold *number*

Synopsis	Minimum time to wait before a NAT flow is synchronized
Context	configure isa nat-group <i>number</i> redundancy inter-chassis replication-threshold <i>number</i>
Tree	replication-threshold
Description	This command configures the minimum time to wait before a NAT flow is replicated (synchronized) to the standby node.
Range	0 to 300
Default	20
Units	seconds
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Router instance for the ISA-to-ISA communication
Context	configure isa nat-group <i>number</i> redundancy inter-chassis router-instance <i>string</i>
Tree	router-instance
Description	This command specifies the routing instance through which ISAs on redundant nodes communicate with each other and synchronize their flow state.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sync *boolean*

Synopsis	Synchronize NAT flows between nodes
Context	configure isa nat-group <i>number</i> redundancy inter-chassis sync <i>boolean</i>
Tree	sync
Default	true
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intra-chassis

Synopsis Enter the **intra-chassis** context

Context **configure isa nat-group number redundancy intra-chassis**

Tree [intra-chassis](#)

Notes The following elements are part of a choice: **inter-chassis** or **intra-chassis**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-active

Synopsis Enter the **active-active** context

Context **configure isa nat-group number redundancy intra-chassis active-active**

Tree [active-active](#)

Notes The following elements are part of a choice: **active-active**, **active-standby**, or **I2aware-bypass**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

failed-mda-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Maximum failed MDAs allowed in ICR for the NAT group

Context **configure isa nat-group number redundancy intra-chassis active-active failed-mda-limit number**

Tree [failed-mda-limit](#)

Range 1 to 2

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-standby



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Active-standby intra-chassis NAT redundancy model
Context	configure isa nat-group number redundancy intra-chassis active-standby
Tree	active-standby
Notes	The following elements are part of a choice: active-active , active-standby , or l2aware-bypass .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2aware-bypass



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	L2-aware-bypass NAT redundancy model
Context	configure isa nat-group number redundancy intra-chassis l2aware-bypass
Tree	l2aware-bypass
Notes	The following elements are part of a choice: active-active , active-standby , or l2aware-bypass .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scaling-profile *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Scaling profile for the NAT group
Context	configure isa nat-group number scaling-profile keyword
Tree	scaling-profile
Description	This command determines profiles for NAT scaling. Lower profile numbers allocate less resources, thus supporting lower scaling. Contact your Nokia representative for more information about NAT scaling figures in each profile.
Default	profile1
Options	profile1, profile2, profile3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the session-limits context
Context	configure isa nat-group number session-limits
Tree	session-limits
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved *number*

Synopsis	Number of sessions reserved for prioritized sessions
Context	configure isa nat-group number session-limits reserved number
Tree	reserved
Range	1 to 6291456
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upnp-mappings *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of UPnP mappings per member
Context	configure isa nat-group number session-limits upnp-mappings number
Tree	upnp-mappings
Description	This command specifies the maximum number of Universal Plug and Play (UPnP) mappings per member.
Range	1 to 524288
Default	524288
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure isa nat-group number session-limits watermarks
Tree	watermarks
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	Session limit high watermark for each MDA in the group
Context	configure isa nat-group number session-limits watermarks high number
Tree	high
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis Session limit low watermark for each MDA in the group
 Context **configure isa nat-group** *number* **session-limits watermarks low** *number*
 Tree [low](#)
 Range 0 to 100
 Units percent
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-group [*id*] *number*

Synopsis Enter the **tunnel-group** list instance
 Context **configure isa tunnel-group** *number*
 Tree [tunnel-group](#)
 Description Commands in this context create or edit a tunnel group. A tunnel group is a set of one or more MS-ISAs that support the origination and termination of IPsec and IP/GRE tunnels. On a VSR, the **isa-scale-mode** command must be specified, which defines the maximum number of tunnels on each ISA.
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*id*] *number*

Synopsis Tunnel group ID
 Context **configure isa tunnel-group** *number*
 Tree [tunnel-group](#)
 Range 1 to 64
 Notes This element is part of a list key.
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the ISA tunnel group
Context	configure isa tunnel-group number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

backup *string*

Synopsis	IPsec module configured in the slot to the IPsec group
Context	configure isa tunnel-group number backup string
Tree	backup
Notes	The following elements are part of a choice: multi-active or (backup and primary).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure isa tunnel-group number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-responder-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Act as an IKE responder except upon MC-IPsec switchover
Context	configure isa tunnel-group number ipsec-responder-only boolean
Tree	ipsec-responder-only

Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-scale-mode *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel limit on each ISA for the tunnel group
Context	configure isa tunnel-group number isa-scale-mode keyword
Tree	isa-scale-mode
Options	tunnel-limit-2k, tunnel-limit-32k, tunnel-limit-64k, tunnel-limit-8, tunnel-limit-32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-active

Synopsis	Enable the multi-active context
Context	configure isa tunnel-group number multi-active
Tree	multi-active
Notes	The following elements are part of a choice: multi-active or (backup and primary).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-isa-number *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of active MS-ISAs in the tunnel group
Context	configure isa tunnel-group number multi-active active-isa-number number
Tree	active-isa-number

Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [esa-id] *reference* **vm** *reference*

Synopsis	Add a list entry for esa
Context	configure isa tunnel-group number multi-active esa <i>reference</i> vm <i>reference</i>
Tree	esa
Notes	The following elements are part of a choice: esa , isa , or member-pool .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[esa-id] *reference*

Synopsis	ESA ID
Context	configure isa tunnel-group number multi-active esa <i>reference</i> vm <i>reference</i>
Tree	esa
Reference	configure esa number
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm *reference*

Synopsis	ESM-VM ID
Context	configure isa tunnel-group number multi-active esa <i>reference</i> vm <i>reference</i>
Tree	esa
Reference	configure esa number vm number
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

isa [*isa-id*] *string*

Synopsis	Add a list entry for isa
Context	configure isa tunnel-group <i>number</i> multi-active isa <i>string</i>
Tree	isa
Notes	The following elements are part of a choice: esa , isa , or member-pool .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[isa-id] *string*

Synopsis	ISA ID associated with the tunnel member pool
Context	configure isa tunnel-group <i>number</i> multi-active isa <i>string</i>
Tree	isa
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

member-pool *reference*

Synopsis	Tunnel-member pool name
Context	configure isa tunnel-group <i>number</i> multi-active member-pool <i>reference</i>
Tree	member-pool
Reference	configure isa tunnel-member-pool <i>string</i>
Notes	The following elements are part of a choice: esa , isa , or member-pool .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *string*

Synopsis	Primary ISA IPsec module assigned for the tunnel group
Context	configure isa tunnel-group <i>number</i> primary <i>string</i>
Tree	primary
Notes	The following elements are part of a choice: multi-active or (backup and primary).
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassemble

Synopsis Enter the **reassemble** context
Context **configure isa tunnel-group number reassemble**
Tree [reassemble](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-wait-time *number*

Synopsis Maximum time to receive fragments for packet reassembly
Context **configure isa tunnel-group number reassemble max-wait-time number**
Tree [max-wait-time](#)
Range 1 to 5000
Units milliseconds
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

stats-collection

Synopsis Enter the **stats-collection** context
Context **configure isa tunnel-group number stats-collection**
Tree [stats-collection](#)
Description Commands in this context configure the ISA statistics collection.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-dp-cpu-usage *boolean*

Synopsis Collect statistics used to derive ISA DP CPU usage
Context **configure isa tunnel-group number stats-collection isa-dp-cpu-usage boolean**
Tree [isa-dp-cpu-usage](#)
Description When configured to **true**, this command collects statistics used to derive ISA CPU DP usage and impacts the ISA performance.

	When configured to false , statistics are not collected.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

strict-esp-sequence-number-ordering *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict ESP sequence number ordering
Context	configure <i>isa tunnel-group number</i> strict-esp-sequence-number-ordering <i>boolean</i>
Tree	strict-esp-sequence-number-ordering
Description	When configured to true , the router enables strict ESP sequence number ordering. When ESP sequence number ordering is enabled, the outbound ESP sequence number of a CHILD_SA must be in the same order as when clear packets are received by the same CHILD_SA.
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

tunnel-member-pool [*name*] *string*

Synopsis	Enter the tunnel-member-pool list instance
Context	configure <i>isa tunnel-member-pool</i> <i>string</i>
Tree	tunnel-member-pool
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	ISA tunnel-member pool name
Context	configure <i>isa tunnel-member-pool</i> <i>string</i>
Tree	tunnel-member-pool
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure <i>isa tunnel-member-pool string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [*esa-id*] *reference vm reference*

Synopsis	Add a list entry for esa
Context	configure <i>isa tunnel-member-pool string esa reference vm reference</i>
Tree	<i>esa</i>
Description	Commands in this context add specified ESA-VMs to the pool.
Max. Instances	16
Notes	The following elements are part of a choice: esa or isa .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[esa-id] *reference*

Synopsis	ESA ID
Context	configure <i>isa tunnel-member-pool string esa reference vm reference</i>
Tree	<i>esa</i>
Reference	configure <i>esa number</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm reference

Synopsis	ESM-VM ID
Context	configure isa tunnel-member-pool string esa reference vm reference
Tree	esa
Reference	configure esa number vm number
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

isa [isa-id] string

Synopsis	Add a list entry for isa
Context	configure isa tunnel-member-pool string isa string
Tree	isa
Max. Instances	16
Notes	The following elements are part of a choice: esa or isa .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[isa-id] string

Synopsis	ISA ID associated with the tunnel member pool
Context	configure isa tunnel-member-pool string isa string
Tree	isa
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

video-group [video-group-id] number

Synopsis	Enter the video-group list instance
Context	configure isa video-group number
Tree	video-group

Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[video-group-id] number

Synopsis	Video group identifier
Context	configure isa video-group number
Tree	video-group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ad-insert boolean



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable the ad insert server for the ISA video group
Context	configure isa video-group number ad-insert boolean
Tree	ad-insert
Default	false
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the video group
Context	configure isa video-group number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable the analyzer for all streams on the video group
Context	configure isa video-group number analyzer boolean
Tree	analyzer
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure isa video-group number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Allow FCC server capability for the group
Context **configure** *isa video-group number fcc-server boolean*
Tree *fcc-server*
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable the local RET server for the group
Context **configure** *isa video-group number local-rt-server boolean*
Tree *local-rt-server*
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mda [*mda-id*] *string*

Synopsis	Add a list entry for mda
Context	configure isa video-group number mda string
Tree	mda
Max. Instances	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[mda-id] *string*

Synopsis	MDA identifier
Context	configure isa video-group number mda string
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

resv-ret *number*

Synopsis	Egress bandwidth reserved for retransmission
Context	configure isa video-group number resv-ret number
Tree	resv-ret
Range	0 to 10500
Units	megabps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-client *boolean*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allow client capability for retransmission
Context	configure isa video-group <i>number</i> rt-client <i>boolean</i>
Tree	rt-client
Default	true
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

stream-selection *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allow stream selection for the group
Context	configure isa video-group <i>number</i> stream-selection <i>boolean</i>
Tree	stream-selection
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vapp [[esa-id](#)] *reference* [vapp-id](#) *reference*

Synopsis	Add a list entry for vapp
Context	configure isa video-group <i>number</i> vapp <i>reference</i> vapp-id <i>reference</i>

Tree	vapp
Description	This command adds a list entry for the ESA and VM ID to the list of video group member ESA virtual applications.
Max. Instances	6
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[esa-id] reference

Synopsis	ESA ID
Context	configure isa video-group <i>number</i> vapp <i>reference</i> vapp-id <i>reference</i>
Tree	vapp
Reference	configure esa <i>number</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vapp-id reference

Synopsis	Virtual application ID
Context	configure isa video-group <i>number</i> vapp <i>reference</i> vapp-id <i>reference</i>
Tree	vapp
Reference	configure esa <i>number</i> vm <i>number</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

watermark

Synopsis	Enter the watermark context
Context	configure isa video-group <i>number</i> watermark
Tree	watermark
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

bandwidth

Synopsis Enter the **bandwidth** context

Context **configure isa video-group number watermark bandwidth**

Tree [bandwidth](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc number

Synopsis FCC watermark parameters based on the bandwidth

Context **configure isa video-group number watermark bandwidth fcc number**

Tree [fcc](#)

Range 1 to 99

Default 90

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ret number

Synopsis RET watermark parameters based on the bandwidth

Context **configure isa video-group number watermark bandwidth ret number**

Tree [ret](#)

Range 1 to 99

Default 90

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

total number

Synopsis	Total watermark parameters based on the bandwidth
Context	configure isa video-group number watermark bandwidth total number
Tree	total
Range	1 to 99
Default	90
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

session

Synopsis	Enter the session context
Context	configure isa video-group number watermark session
Tree	session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc number

Synopsis	FCC watermark parameters based on the session
Context	configure isa video-group number watermark session fcc number
Tree	fcc
Range	1 to 99
Default	90
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ret number

Synopsis	RET watermark parameters based on the session
Context	configure isa video-group number watermark session ret number

Tree	ret
Range	1 to 99
Default	90
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

total number

Synopsis	Total watermark parameters based on the session
Context	configure isa video-group <i>number</i> watermark session total <i>number</i>
Tree	total
Range	1 to 99
Default	90
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

wlan-gw-group [id] number

Synopsis	Enter the wlan-gw-group list instance
Context	configure isa wlan-gw-group <i>number</i>
Tree	wlan-gw-group
Max. Instances	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] number

Synopsis	WLAN-GW ISA group ID
Context	configure isa wlan-gw-group <i>number</i>
Tree	wlan-gw-group
Range	1 to 4

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-iom-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of WLAN-GW IOMs used as active IOMs
Context	configure <i>isa wlan-gw-group number active-iom-limit number</i>
Tree	active-iom-limit
Range	1 to 7
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-mda-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of ISA MDAs in active use by the group
Context	configure <i>isa wlan-gw-group number active-mda-limit number</i>
Tree	active-mda-limit
Range	1 to 14
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the WLAN Gateway group
Context	configure <i>isa wlan-gw-group number admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure <i>isa wlan-gw-group number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

distributed-sub-mgmt

Synopsis	Enter the distributed-sub-mgmt context
Context	configure <i>isa wlan-gw-group number distributed-sub-mgmt</i>
Tree	distributed-sub-mgmt
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-aa-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA AA group for WLAN-GW DSM subscribers
Context	configure <i>isa wlan-gw-group number distributed-sub-mgmt isa-aa-group reference</i>
Tree	isa-aa-group
Reference	configure <i>isa application-assurance-group number</i>

Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-aa-oversubscription-factor *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of WLAN GW ISAs that a single ISA can serve
Context	configure <i>isa wlan-gw-group number distributed-sub-mgmt isa-aa-oversubscription-factor number</i>
Tree	isa-aa-oversubscription-factor
Range	1 to 10
Default	1
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

esa [[esa-id](#)] *reference vm reference*

Synopsis	Add a list entry for esa
Context	configure <i>isa wlan-gw-group number esa reference vm reference</i>
Tree	esa
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

[esa-id] *reference*

Synopsis	ESA ID
Context	configure <i>isa wlan-gw-group number esa reference vm reference</i>
Tree	esa
Reference	configure <i>esa number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

vm *reference*

Synopsis	VM ID
Context	configure <i>isa wlan-gw-group number esa reference vm reference</i>
Tree	<i>esa</i>
Reference	configure <i>esa number vm number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

iom [*slot-number*] *reference*

Synopsis	Add a list entry for iom
Context	configure <i>isa wlan-gw-group number iom reference</i>
Tree	<i>iom</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[slot-number] *reference*

Synopsis	IOM slot to use in the WLAN-GW group
Context	configure <i>isa wlan-gw-group number iom reference</i>
Tree	<i>iom</i>
Reference	configure <i>card number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mda [*mda-id*] *string*

Synopsis	Add a list entry for mda
Context	configure <i>isa wlan-gw-group number mda string</i>
Tree	<i>mda</i>
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s

[mda-id] *string*

Synopsis MDA slot value
Context **configure** *isa wlan-gw-group number mda string*
Tree [mda](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s

nat

Synopsis Enter the **nat** context
Context **configure** *isa wlan-gw-group number nat*
Tree [nat](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log

Synopsis Enter the **log** context
Context **configure** *isa wlan-gw-group number nat log*
Tree [log](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-events *boolean*

Synopsis Suppress LSN events when RADIUS accounting is enabled
Context **configure** *isa wlan-gw-group number nat log suppress-lsn-events boolean*
Tree [suppress-lsn-events](#)
Default true
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-sub-blocks-free *boolean*

Synopsis	Suppress LSN Free block and NAT pool block notification
Context	configure <i>isa wlan-gw-group number nat log suppress-lsn-sub-blocks-free boolean</i>
Tree	suppress-lsn-sub-blocks-free
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lsn *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use Large Scale NAT
Context	configure <i>isa wlan-gw-group number nat lsn boolean</i>
Tree	lsn
Default	true
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy for ISA group
Context	configure <i>isa wlan-gw-group number nat radius-accounting-policy reference</i>
Tree	radius-accounting-policy
Reference	configure <i>aaa radius isa-policy string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the session-limits context
Context	configure <i>isa wlan-gw-group number nat session-limits</i>
Tree	session-limits

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved *number*

Synopsis Number of sessions reserved for prioritized sessions
Context **configure isa wlan-gw-group** *number nat session-limits reserved number*
Tree [reserved](#)
Range 1 to 6291456
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upnp-mappings *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Maximum number of UPnP mappings per member
Context **configure isa wlan-gw-group** *number nat session-limits upnp-mappings number*
Tree [upnp-mappings](#)
Description This command specifies the maximum number of Universal Plug and Play (UPnP) mappings per member.
Range 1 to 524288
Default 524288
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis Enable the **watermarks** context
Context **configure isa wlan-gw-group** *number nat session-limits watermarks*
Tree [watermarks](#)
Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis Session limit high watermark for each MDA in the group
Context **configure** isa wlan-gw-group number nat session-limits watermarks high number
Tree high
Range 0 to 100
Units percent
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis Session limit low watermark for each MDA in the group
Context **configure** isa wlan-gw-group number nat session-limits watermarks low number
Tree low
Range 0 to 100
Units percent
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Port policy used to configure ports for the ISA group
Context **configure** isa wlan-gw-group number port-policy reference
Tree port-policy
Reference **configure** port-policy string
Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy *keyword*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Hardware unit subject to redundancy
Context **configure isa wlan-gw-group number redundancy keyword**
Tree **redundancy**
Default iom
Options iom, mda
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scaling-profile *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis ISA scaling profile identifier
Context **configure isa wlan-gw-group number scaling-profile keyword**
Tree **scaling-profile**
Default profile1
Options profile1, profile2, profile3
Introduced 20.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s

tunnel-port-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel port policy for per-tunnel QoS processing
Context	configure isa wlan-gw-group <i>number</i> tunnel-port-policy <i>reference</i>
Tree	tunnel-port-policy
Reference	configure port-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enter the watermarks context
Context	configure isa wlan-gw-group <i>number</i> watermarks
Tree	watermarks
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mark [[entity](#)] *keyword*

Synopsis	Enter the mark list instance
Context	configure isa wlan-gw-group <i>number</i> watermarks mark <i>keyword</i>
Tree	mark
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[entity](#)] *keyword*

Synopsis	Entity to be monitored
Context	configure isa wlan-gw-group <i>number</i> watermarks mark <i>keyword</i>
Tree	mark
Options	user-equipment, bridge-domain, radius-proxy-client
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis High watermark for the WLAN-GW group
Context **configure** [isa wlan-gw-group](#) *number* [watermarks mark](#) *keyword* [high](#) *number*
Tree [high](#)
Range 1 to 100
Units percent
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis Low watermark for the WLAN-GW group
Context **configure** [isa wlan-gw-group](#) *number* [watermarks mark](#) *keyword* [low](#) *number*
Tree [low](#)
Range 0 to 99
Units percent
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.21 lag commands

```

configure
- lag string
  - access
    - adapt-qos
      - include-egr-hash-cfg boolean
      - mode keyword
    - bandwidth number
    - booking-factor number
    - per-fp-egr-queuing boolean
    - per-fp-ing-queuing boolean
    - per-fp-sap-instance boolean
  - adaptive-load-balancing
    - bandwidth-threshold number
    - interval number
    - tolerance number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness
    - ipv4
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-on-distributing-only boolean
      - local-ip-address string
      - max-admin-down-time (number | keyword)
      - max-setup-time (number | keyword)
      - multiplier number
      - receive-interval number
      - remote-ip-address string
      - transmit-interval number
    - ipv6
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-on-distributing-only boolean
      - local-ip-address string
      - max-admin-down-time (number | keyword)
      - max-setup-time (number | keyword)
      - multiplier number
      - receive-interval number
      - remote-ip-address string
      - transmit-interval number
  - soft-reset-extension boolean
  - description string
  - dynamic-cost boolean
  - encap-type keyword
  - eth-cfm
    - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
    - ais
      - client-meg-level number
      - interface-support boolean
      - interval number
      - low-priority-defect keyword
      - priority number
    - alarm-notification
      - fng-alarm-time number
      - fng-reset-time number

```

configure lag eth-cfm mep apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- ccm-tlv-ignore keyword
- collect-lmm-stats boolean
- csf
- multiplier decimal-number
- description string
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- facility-fault boolean
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- vlan (number | keyword)
- hash-weight-threshold
- action keyword
- cost number
- value number
- hold-time-down number
- lacp
- administrative-key number
- mode keyword
- system-id string
- system-priority number
- lacp-mux-control keyword
- lacp-xmit-interval keyword
- lacp-xmit-stdby boolean
- link-map-profile number
- apply-groups reference
- apply-groups-exclude reference
- description string
- failure-mode keyword
- link reference
- apply-groups reference
- apply-groups-exclude reference
- port-type keyword
- mac-address string
- max-ports number
- mode keyword
- monitor-oper-group reference
- per-link-hash
- weighted
- auto-rebalance boolean
- subscriber-hash-mode keyword
- port reference
- apply-groups reference
- apply-groups-exclude reference
- hash-weight (number | keyword)
- priority number

```

configure lag port sub-group

- **sub-group** (*number* | *keyword*)
- **port-threshold**
- **action** *keyword*
- **cost** *number*
- **value** *number*
- **port-type** *keyword*
- **port-weight-speed** *number*
- **selection-criteria**
- **mode** *keyword*
- **slave-to-partner** *boolean*
- **subgroup-hold-time** (*number* | *keyword*)
- **standby-signaling** *keyword*
- **weight-threshold**
- **action** *keyword*
- **cost** *number*
- **value** *number*

3.21.1 lag command descriptions

lag [*lag-name*] *string*

Synopsis	Enter the lag list instance
Context	configure lag <i>string</i>
Tree	lag
Introduced	16.0.R1
Platforms	All

[lag-name] *string*

Synopsis	LAG name
Context	configure lag <i>string</i>
Tree	lag
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

access

Synopsis	Enter the access context
Context	configure lag <i>string</i> access
Tree	access
Introduced	16.0.R1
Platforms	All

adapt-qos

Synopsis	Enter the adapt-qos context
Context	configure lag <i>string</i> access adapt-qos
Tree	adapt-qos
Introduced	16.0.R1

Platforms All

include-egr-hash-cfg *boolean*

Synopsis Factor egress hashing into buffer and rate distribution
Context **configure lag** *string* **access adapt-qos include-egr-hash-cfg** *boolean*
Tree [include-egr-hash-cfg](#)
Default false
Introduced 16.0.R1
Platforms All

mode *keyword*

Synopsis QoS adaptation mode
Context **configure lag** *string* **access adapt-qos mode** *keyword*
Tree [mode](#)
Options link, distribute, port-fair
Introduced 16.0.R1
Platforms All

bandwidth *number*

Synopsis Administrative bandwidth applied to this LAG
Context **configure lag** *string* **access bandwidth** *number*
Tree [bandwidth](#)
Range 1 to 6400000000
Units bps
Introduced 16.0.R1
Platforms All

booking-factor *number*

Synopsis Booking factor against the administrative bandwidth
Context **configure lag** *string* **access booking-factor** *number*
Tree [booking-factor](#)

Range	1 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

per-fp-egr-queuing *boolean*

Synopsis	Per FP egress queuing
Context	configure lag <i>string</i> access per-fp-egr-queuing <i>boolean</i>
Tree	per-fp-egr-queuing
Default	false
Introduced	16.0.R1
Platforms	All

per-fp-ing-queuing *boolean*

Synopsis	Enable ingress queuing per forwarding port
Context	configure lag <i>string</i> access per-fp-ing-queuing <i>boolean</i>
Tree	per-fp-ing-queuing
Default	false
Introduced	16.0.R1
Platforms	All

per-fp-sap-instance *boolean*

Synopsis	SAP instance allocation on a LAG
Context	configure lag <i>string</i> access per-fp-sap-instance <i>boolean</i>
Tree	per-fp-sap-instance
Default	false
Introduced	16.0.R1
Platforms	All

adaptive-load-balancing

Synopsis	Enable the adaptive-load-balancing context
----------	---

Context	configure lag string adaptive-load-balancing
Tree	adaptive-load-balancing
Introduced	20.10.R1
Platforms	All

bandwidth-threshold *number*

Synopsis	Minimum bandwidth for adaptive load balancing
Context	configure lag string adaptive-load-balancing bandwidth-threshold <i>number</i>
Tree	bandwidth-threshold
Range	0 to 100
Units	percent
Introduced	22.10.R1
Platforms	All

interval *number*

Synopsis	The statistics pooling interval for the LAG ports
Context	configure lag string adaptive-load-balancing interval <i>number</i>
Tree	interval
Range	15 30 60 120
Default	30
Units	seconds
Introduced	21.5.R1
Platforms	All

tolerance *number*

Synopsis	Threshold that triggers link utilization optimization
Context	configure lag string adaptive-load-balancing tolerance <i>number</i>
Tree	tolerance
Description	This command configures the threshold value that is based on the difference between the most-loaded and least-loaded links in a LAG. When the threshold value is exceeded, the adaptive load balancing operation attempts to optimize traffic distribution between LAG links.
Range	1 to 100

Default	20
Units	percent
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LAG
Context	configure lag <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure lag <i>string</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure lag <i>string</i> bfd-liveness ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of micro-BFD session for IP family
Context	configure lag <i>string</i> bfd-liveness ipv4 admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bfd-on-distributing-only *boolean*

Synopsis	Restrict micro-BFD sessions to LACP state distributing
Context	configure lag string bfd-liveness ipv4 bfd-on-distributing-only <i>boolean</i>
Tree	bfd-on-distributing-only
Default	false
Introduced	16.0.R1
Platforms	All

local-ip-address *string*

Synopsis	BFD source address
Context	configure lag string bfd-liveness ipv4 local-ip-address <i>string</i>
Tree	local-ip-address
Introduced	16.0.R1
Platforms	All

max-admin-down-time (*number* | *keyword*)

Synopsis	Maximum time to forward traffic after micro-BFD is down
Context	configure lag string bfd-liveness ipv4 max-admin-down-time (<i>number</i> <i>keyword</i>)
Tree	max-admin-down-time
Range	0 to 3600
Default	0
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

max-setup-time (*number* | *keyword*)

Synopsis	Maximum time to forward traffic during micro-BFD setup
Context	configure lag <i>string</i> bfd-liveness ipv4 max-setup-time (<i>number</i> <i>keyword</i>)
Tree	max-setup-time
Range	0 to 60000
Default	infinite
Units	milliseconds
Options	infinite
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Interval multiplier to detect BFD packets not received
Context	configure lag <i>string</i> bfd-liveness ipv4 multiplier <i>number</i>
Tree	multiplier
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive-interval *number*

Synopsis	Receive timer for micro-BFD session over the LAG links
Context	configure lag <i>string</i> bfd-liveness ipv4 receive-interval <i>number</i>
Tree	receive-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

remote-ip-address *string*

Synopsis	BFD destination address
Context	configure lag <i>string</i> bfd-liveness ipv4 remote-ip-address <i>string</i>
Tree	remote-ip-address
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit timer for micro-BFD session over the LAG links
Context	configure lag <i>string</i> bfd-liveness ipv4 transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure lag <i>string</i> bfd-liveness ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of micro-BFD session for IP family
Context	configure lag <i>string</i> bfd-liveness ipv6 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bfd-on-distributing-only *boolean*

Synopsis	Restrict micro-BFD sessions to LACP state distributing
Context	configure lag string bfd-liveness ipv6 bfd-on-distributing-only boolean
Tree	bfd-on-distributing-only
Default	false
Introduced	16.0.R1
Platforms	All

local-ip-address *string*

Synopsis	BFD source address
Context	configure lag string bfd-liveness ipv6 local-ip-address string
Tree	local-ip-address
Introduced	16.0.R1
Platforms	All

max-admin-down-time (*number | keyword*)

Synopsis	Maximum time to forward traffic after micro-BFD is down
Context	configure lag string bfd-liveness ipv6 max-admin-down-time (number keyword)
Tree	max-admin-down-time
Range	0 to 3600
Default	0
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

max-setup-time (*number | keyword*)

Synopsis	Maximum time to forward traffic during micro-BFD setup
Context	configure lag string bfd-liveness ipv6 max-setup-time (number keyword)
Tree	max-setup-time
Range	0 to 60000

Default	infinite
Units	milliseconds
Options	infinite
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Interval multiplier to detect BFD packets not received
Context	configure lag <i>string</i> bfd-liveness ipv6 multiplier <i>number</i>
Tree	multiplier
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive-interval *number*

Synopsis	Receive timer for micro-BFD session over the LAG links
Context	configure lag <i>string</i> bfd-liveness ipv6 receive-interval <i>number</i>
Tree	receive-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

remote-ip-address *string*

Synopsis	BFD destination address
Context	configure lag <i>string</i> bfd-liveness ipv6 remote-ip-address <i>string</i>
Tree	remote-ip-address
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit timer for micro-BFD session over the LAG links
Context	configure lag string bfd-liveness ipv6 transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

soft-reset-extension *boolean*

Synopsis	Extend BFD timers during soft reset
Context	configure lag string bfd-liveness soft-reset-extension <i>boolean</i>
Tree	soft-reset-extension
Default	true
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure lag string description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dynamic-cost *boolean*

Synopsis	Allow LAG costing using operational aggregate bandwidth
Context	configure lag string dynamic-cost <i>boolean</i>
Tree	dynamic-cost
Default	false

Introduced 16.0.R1
Platforms All

encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Encapsulation type
Context **configure lag** *string* **encap-type** *keyword*
Tree **encap-type**
Options null, dot1q, qinq
Introduced 16.0.R1
Platforms All

eth-cfm

Synopsis Enter the **eth-cfm** context
Context **configure lag** *string* **eth-cfm**
Tree **eth-cfm**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*

Synopsis Enter the **mep** list instance
Context **configure lag** *string* **eth-cfm mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*
Tree **mep**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain string association string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id number

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the ais context
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais client-meg-level <i>number</i>
Tree	client-meg-level
Range	1 to 7
Max.	7
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interface-support <i>boolean</i>

Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interval <i>number</i>
Tree	interval
Range	1 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	all-def
Options	all-def, mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais priority <i>number</i>
Tree	priority
Range	0 to 7
Default	7

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm boolean

Synopsis Generate CCM messages

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean**

Tree **ccm**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority number

Synopsis Priority of CCM and LTM messages transmitted by the MEP

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number**

Tree **ccm-ltm-priority**

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size number

Synopsis Number of octets of padding to insert in CCM packets

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number**

Tree **ccm-padding-size**

Description This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval**) is less than 1 second.

Range 3 to 1500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-tlv-ignore *keyword*

Synopsis TLV to ignore on reception

Context **configure lag** *string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-tlv-ignore keyword*

Tree [ccm-tlv-ignore](#)

Description This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine.

When unconfigured, the MEP processes all the recognized TLVs.

Options interface-status, port-status

Max. Instances 2

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis Collect statistics for loss measurement message tests

Context **configure lag** *string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-lmm-stats boolean*

Tree [collect-lmm-stats](#)

Description When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.

The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters.

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis Enable the **csf** context

Context	configure lag <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf</i>
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure lag <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number</i>
Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure lag <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure lag <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test</i>
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number**

Tree [bit-error-threshold](#)

Range 0 to 11840

Default 1

Units bit errors

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis Enter the **test-pattern** context

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern**

Tree [test-pattern](#)

Description Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis Generate a CRC checksum

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean**

Tree [crc-tlv](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-fault *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> facility-fault <i>boolean</i>
Tree	facility-fault
Description	When configured to true , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition. When configured to false , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean

Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace
Description	<p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
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Context	configure lag <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure lag <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan (*number | keyword*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outer VLAN ID of the tunnel
Context	configure lag <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number vlan (number keyword)</i>
Tree	vlan
Range	1 to 4094
Default	none
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hash-weight-threshold

Synopsis	Enter the hash-weight-threshold context
Context	configure lag string hash-weight-threshold
Tree	hash-weight-threshold
Introduced	19.10.R1
Platforms	All

action *keyword*

Synopsis	Action when the sum of the hash weight is not exceeded
Context	configure lag string hash-weight-threshold action keyword
Tree	action
Default	down
Options	down, dynamic-cost, static-cost
Introduced	19.10.R1
Platforms	All

cost *number*

Synopsis	Static cost of the LAG
Context	configure lag string hash-weight-threshold cost number
Tree	cost
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

value *number*

Synopsis	Sum of the hash weight values of all active LAG ports
Context	configure lag string hash-weight-threshold value number
Tree	value
Range	1 to 6400000
Introduced	19.10.R1
Platforms	All

hold-time-down *number*

Synopsis	Delay time for reporting the LAG is down
Context	configure lag <i>string</i> hold-time-down <i>number</i>
Tree	hold-time-down
Range	1 to 2000
Units	deciseconds
Introduced	16.0.R1
Platforms	All

lacp

Synopsis	Enable the lacp context
Context	configure lag <i>string</i> lacp
Tree	lacp
Introduced	16.0.R1
Platforms	All

administrative-key *number*

Synopsis	Key to identify the channel group on each LACP port
Context	configure lag <i>string</i> lacp administrative-key <i>number</i>
Tree	administrative-key
Description	<p>This command configures the administrative key that identifies the channel group on each port configured to use LACP.</p> <p>In an MC-LAG configuration, both redundant nodes must be configured with the same key values. In any other case, the key is only locally significant.</p>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Mode in which LACP operates
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Context	configure lag string lacp mode keyword
Tree	mode
Default	passive
Options	passive, active
Introduced	16.0.R1
Platforms	All

system-id string

Synopsis	System ID
Context	configure lag string lacp system-id string
Tree	system-id
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

system-priority number

Synopsis	System priority value
Context	configure lag string lacp system-priority number
Tree	system-priority
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

lacp-mux-control keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MUX machine control for LACP LAG in active/passive mode
Context	configure lag string lacp-mux-control keyword
Tree	lacp-mux-control
Default	coupled
Options	coupled, independent

Introduced 16.0.R1
Platforms All

lacp-xmit-interval *keyword*

Synopsis Time for periodic transmission
Context **configure lag** *string lacp-xmit-interval keyword*
Tree [lacp-xmit-interval](#)
Default fast
Options slow, fast
Introduced 16.0.R1
Platforms All

lacp-xmit-stdby *boolean*

Synopsis Allow LACP message transmission on standby links
Context **configure lag** *string lacp-xmit-stdby boolean*
Tree [lacp-xmit-stdby](#)
Default true
Introduced 16.0.R1
Platforms All

link-map-profile [[link-map-profile-id](#)] *number*

Synopsis Enter the **link-map-profile** list instance
Context **configure lag** *string link-map-profile number*
Tree [link-map-profile](#)
Introduced 16.0.R1
Platforms All

[link-map-profile-id] *number*

Synopsis Link map profile to control LAG ports
Context **configure lag** *string link-map-profile number*
Tree [link-map-profile](#)

Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure lag <i>string link-map-profile number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

failure-mode *keyword*

Synopsis	Failure mode of LAG link profile
Context	configure lag <i>string link-map-profile number failure-mode keyword</i>
Tree	failure-mode
Default	per-link-hash
Options	per-link-hash, discard
Introduced	16.0.R1
Platforms	All

link [[port-id](#)] *reference*

Synopsis	Enter the link list instance
Context	configure lag <i>string link-map-profile number link reference</i>
Tree	link
Introduced	16.0.R1
Platforms	All

[port-id] *reference*

Synopsis	Port associated with the link map profile
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Context	configure lag string link-map-profile number link reference
Tree	link
Reference	configure lag string port reference
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

port-type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of the associated port for this entry
Context	configure lag string link-map-profile number link reference port-type keyword
Tree	port-type
Options	primary, secondary
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mac-address string

Synopsis	MAC address of the LAG
Context	configure lag string mac-address string
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

max-ports number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ports allowed in the LAG
Context	configure lag string max-ports number
Tree	max-ports
Description	This command configures the maximum number of ports allowed in the LAG. This command must be configured to 64 when the LAG name is a numeric identifier in the range of 1 to 64. If the LAG name is a numeric identifier in the range of 65 to 800, this command must be configured to 32.
Range	32 64
Introduced	21.2.R1
Platforms	All

mode keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operation mode of the LAG
Context	configure lag string mode keyword
Tree	mode
Default	network
Options	access, network, hybrid
Introduced	16.0.R1
Platforms	All

monitor-oper-group reference

Synopsis	Operational group to monitor
Context	configure lag string monitor-oper-group reference
Tree	monitor-oper-group
Reference	configure service oper-group string
Introduced	19.5.R1
Platforms	All

per-link-hash

Synopsis	Enable the per-link-hash context
Context	configure lag string per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

weighted

Synopsis	Enable the weighted context
Context	configure lag string per-link-hash weighted
Tree	weighted
Introduced	16.0.R1
Platforms	All

auto-rebalance *boolean*

Synopsis	Auto-rebalance SAPs, users, or interfaces for new links
Context	configure lag string per-link-hash weighted auto-rebalance <i>boolean</i>
Tree	auto-rebalance
Default	false
Introduced	16.0.R1
Platforms	All

subscriber-hash-mode *keyword*

Synopsis	Subscriber traffic load balance over LAG member links
Context	configure lag string per-link-hash weighted subscriber-hash-mode <i>keyword</i>
Tree	subscriber-hash-mode
Description	<p>This command configures weighted subscriber traffic to be load balanced over LAG member links. Traffic hashing can be performed based on SAPs or Vports.</p> <p>SAP-based hashing supports weights configured at the subscriber level in the subscriber profile. The SAP hashing mode supports only SAP to subscriber (1:1) deployment models.</p>

Vport-based load balancing supports SAP to subscriber (1:1) and SAP to service (N:1) deployment models.

Default	sap
Options	sap, vport
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port [[port-id](#)] *reference*

Synopsis	Enter the port list instance
Context	configure lag string port reference
Tree	port
Introduced	16.0.R1
Platforms	All

[port-id] *reference*

Synopsis	Identifier to uniquely identify the port in the LAG
Context	configure lag string port reference
Tree	port
Reference	configure port string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hash-weight (*number* | *keyword*)

Synopsis	Flow hashing distribution between LAG ports
Context	configure lag string port reference hash-weight (<i>number</i> <i>keyword</i>)
Tree	hash-weight
Range	1 to 100000
Options	port-speed
Introduced	19.5.R1
Platforms	All

priority *number*

Synopsis	Priority of the port in the LAG
Context	configure lag <i>string</i> port <i>reference</i> priority <i>number</i>
Tree	priority
Range	1 to 65535
Default	32768
Introduced	16.0.R1
Platforms	All

sub-group (*number* | *keyword*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Subgroup of the port in the LAG
Context	configure lag <i>string</i> port <i>reference</i> sub-group (<i>number</i> <i>keyword</i>)
Tree	sub-group
Range	1 to 8
Default	1
Options	auto-iom, auto-mda
Introduced	16.0.R1
Platforms	All

port-threshold

Synopsis	Enter the port-threshold context
Context	configure lag <i>string</i> port-threshold
Tree	port-threshold
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action when the active links are at or below threshold
Context	configure lag <i>string</i> port-threshold action <i>keyword</i>

Tree	action
Default	down
Options	down, dynamic-cost, static-cost
Introduced	16.0.R1
Platforms	All

cost *number*

Synopsis	Static cost of the LAG
Context	configure lag <i>string</i> port-threshold cost <i>number</i>
Tree	cost
Range	1 to 16777215
Introduced	16.0.R3
Platforms	All

value *number*

Synopsis	Active link threshold at which action is taken
Context	configure lag <i>string</i> port-threshold value <i>number</i>
Tree	value
Range	0 to 63
Introduced	16.0.R1
Platforms	All

port-type *keyword*

Synopsis	Port type of the LAG
Context	configure lag <i>string</i> port-type <i>keyword</i>
Tree	port-type
Default	standard
Options	standard, hs
Introduced	16.0.R1
Platforms	All

port-weight-speed *number*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Speed corresponding to a port weight unit
Context	configure lag string port-weight-speed <i>number</i>
Tree	port-weight-speed
Range	1 10
Units	gigabps
Introduced	16.0.R1
Deprecated	22.10.R1
Platforms	All

selection-criteria

Synopsis	Enter the selection-criteria context
Context	configure lag string selection-criteria
Tree	selection-criteria
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Criteria to select the active subgroup
Context	configure lag string selection-criteria mode <i>keyword</i>
Tree	mode
Default	highest-count
Options	highest-count, highest-weight, best-port
Introduced	16.0.R1
Platforms	All

slave-to-partner *boolean*

Synopsis	Use slave-to-partner for selection criteria
Context	configure lag string selection-criteria slave-to-partner <i>boolean</i>

Tree	slave-to-partner
Default	false
Introduced	16.0.R1
Platforms	All

subgroup-hold-time (*number* | *keyword*)

Synopsis	Delay time when switching to a new active subgroup
Context	configure lag string selection-criteria subgroup-hold-time (<i>number</i> <i>keyword</i>)
Tree	subgroup-hold-time
Range	0 to 2000
Default	0
Units	deciseconds
Options	infinite
Introduced	16.0.R1
Platforms	All

standby-signaling *keyword*

Synopsis	Way of signaling a member port to the remote side
Context	configure lag string standby-signaling <i>keyword</i>
Tree	standby-signaling
Default	lacp
Options	lacp, power-off
Introduced	16.0.R1
Platforms	All

weight-threshold



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enter the weight-threshold context
Context	configure lag string weight-threshold
Tree	weight-threshold

Introduced	16.0.R1
Deprecated	22.10.R1
Platforms	All

action *keyword*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Action to take if the number of active links in the LAG is at or below the threshold value
Context	configure lag string weight-threshold action keyword
Tree	action
Default	down
Options	down, dynamic-cost, static-cost
Introduced	16.0.R1
Deprecated	22.10.R1
Platforms	All

cost *number*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Static cost of the LAG
Context	configure lag string weight-threshold cost number
Tree	cost
Range	1 to 16777215
Introduced	16.0.R3
Deprecated	22.10.R1
Platforms	All

value *number*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Active link threshold at which action is taken
----------	--

Context	configure lag <i>string</i> weight-threshold <i>value</i> <i>number</i>
Tree	value
Range	0 to 63
Introduced	16.0.R1
Deprecated	22.10.R1
Platforms	All

3.22 li commands

```

li
- li-filter
- associations
  - li-ip-filter reference
  - ip-filter string
  - li-ipv6-filter reference
  - ipv6-filter string
  - li-mac-filter reference
  - mac-filter string
- li-ip-filter string
- description string
- entry number
- description string
- match
  - dst-ip
    - address (ipv4-address | ipv4-prefix-with-host-bits)
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - fragment keyword
  - protocol (number | keyword)
  - src-ip
    - address (ipv4-address | ipv4-prefix-with-host-bits)
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
- li-ipv6-filter string
- description string
- entry number
- description string
- match
  - dst-ip
    - address (ipv6-address | ipv6-prefix-with-host-bits)
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - next-header (number | keyword)
  - src-ip
    - address (ipv6-address | ipv6-prefix-with-host-bits)
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number

```

li li-filter li-ipv6-filter entry match src-port range

```

    - range
      - end number
      - start number
- li-mac-filter string
- description string
- entry number
  - description string
  - match
    - dst-mac
      - address string
      - mask string
    - frame-type keyword
    - src-mac
      - address string
      - mask string
- lock-filter keyword
- reserved-block string
- description string
- entry-range
  - end number
  - start number
- ip-filter string
- ipv6-filter string
- mac-filter string
- li-source string
- admin-state keyword
- li-ip-filter reference
  - entry reference
    - intercept-id number
    - session-id number
- li-ipv6-filter reference
  - entry reference
    - intercept-id number
    - session-id number
- li-mac-filter reference
  - entry reference
    - intercept-id number
    - session-id number
- nat
  - dslite string b4 string
  - intercept-id number
  - session-id number
  - ethernet-header
    - destination-address string
    - source-address string
    - type number
  - l2-aware string
  - intercept-id number
  - session-id number
  - nat44 string ip string
  - intercept-id number
  - session-id number
  - nat64 string ip string
  - intercept-id number
  - session-id number
- port string
  - egress boolean
  - ingress boolean
- sap string
  - egress boolean
  - ingress boolean
  - intercept-id number
  - session-id number
- subscriber string

```


li li-source subscriber egress

```
- egress boolean
- fc keyword
- host-type keyword
- ingress boolean
- intercept-id number
- ip-address string
- ip-family keyword
- mac-address string
- sap-id string
- session-id number
- sla-profile string
- wlan-gw-dsm-ue string
- intercept-id number
- session-id number
- log
- log-id string
- admin-state keyword
- description string
- destination
  - memory
    - max-entries number
  - netconf
    - max-entries number
  - snmp
    - max-entries number
- filter string
- netconf-stream string
- source
  - li boolean
  - time-format keyword
- mirror-dest-reservation
- end number
- start number
- mirror-dest-template string
- layer-3-encap
  - direction-bit boolean
  - encap-type keyword
  - ip-source string
  - router-instance string
  - udp
    - destination number
    - source number
- type keyword
- nat
- use-outside-ip-address boolean
- radius
- mirror-dest-template reference
- x-interfaces
- admin-state keyword
- correlation-id
  - ipoe keyword
  - pppoe keyword
- ine-identifier string
- lic string
  - authentication
    - password string
    - private-ki string
    - sequence-group string
  - description string
  - identifier string
  - ipv4
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - port number
  - router-instance string
```

li x-interfaces user-db

```
- user-db string
- x1
  - ipv4
    - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - lic-peer reference
    - local-tcp-port number
    - timeouts
      - message-timeout number
  - x2
    - ipv4
      - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - lic-peer reference
      - timeouts
        - keep-alive number
        - request number
  - x3
    - alarms
      - cpu-alarm
        - high-threshold number
        - low-threshold number
      - memory-alarm
        - high-threshold number
        - low-threshold number
      - throughput-alarm
        - high-threshold number
        - low-threshold number
    - ipv4
      - local-address-range
        - end string
        - start string
    - li-group number
    - lic-peers reference
    - session-limit number
    - timeouts
      - keep-alive number
      - request number
      - target-retry-wait number
```

3.22.1 li command descriptions

li

Synopsis	Configure lawful intercept
Context	li
Tree	li
Introduced	19.10.R1
Platforms	All

li-filter

Synopsis	Enter the li-filter context
Context	li li-filter
Tree	li-filter
Introduced	19.10.R1
Platforms	All

associations

Synopsis	Enter the associations context
Context	li li-filter associations
Tree	associations
Introduced	19.10.R1
Platforms	All

li-ip-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the li-ip-filter list instance
Context	li li-filter associations li-ip-filter reference
Tree	li-ip-filter
Introduced	19.10.R1
Platforms	All

[li-filter-name] *reference*

Synopsis	Name of an existing LI IP filter
Context	li li-filter associations li-ip-filter <i>reference</i>
Tree	li-ip-filter
Reference	li li-filter li-ip-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ip-filter [[filter-name](#)] *string*

Synopsis	Add a list entry for ip-filter
Context	li li-filter associations li-ip-filter <i>reference</i> ip-filter <i>string</i>
Tree	ip-filter
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[filter-name] *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	li li-filter associations li-ip-filter <i>reference</i> ip-filter <i>string</i>
Tree	ip-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

li-ipv6-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the li-ipv6-filter list instance
Context	li li-filter associations li-ipv6-filter <i>reference</i>

Tree	li-ipv6-filter
Introduced	19.10.R1
Platforms	All

[li-filter-name] *reference*

Synopsis	LI IPv6 filter name
Context	li li-filter associations li-ipv6-filter reference
Tree	li-ipv6-filter
Reference	li li-filter li-ipv6-filter string
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ipv6-filter [[filter-name](#)] *string*

Synopsis	Add a list entry for ipv6-filter
Context	li li-filter associations li-ipv6-filter reference ipv6-filter string
Tree	ipv6-filter
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[filter-name] *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	li li-filter associations li-ipv6-filter reference ipv6-filter string
Tree	ipv6-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

li-mac-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the li-mac-filter list instance
Context	li li-filter associations li-mac-filter reference
Tree	li-mac-filter
Introduced	19.10.R1
Platforms	All

[li-filter-name] *reference*

Synopsis	LI MAC filter name
Context	li li-filter associations li-mac-filter reference
Tree	li-mac-filter
Reference	li li-filter li-mac-filter string
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mac-filter [[filter-name](#)] *string*

Synopsis	Add a list entry for mac-filter
Context	li li-filter associations li-mac-filter reference mac-filter string
Tree	mac-filter
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[filter-name] *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	li li-filter associations li-mac-filter reference mac-filter string
Tree	mac-filter

String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

li-ip-filter [[li-filter-name](#)] *string*

Synopsis	Enter the li-ip-filter list instance
Context	li li-filter li-ip-filter <i>string</i>
Tree	li-ip-filter
Description	<p>Commands in this context create LI IPv4 filter lists, which can be used to create confidential IPv4 filter based LI source entries.</p> <p>The LI IPv4 filter entries are merged into normal IPv4 filters configured with the li li-filter associations and li li-filter reserved-block commands. The LI IPv4 filter entries are visible only to users with LI permissions.</p>
Introduced	19.10.R1
Platforms	All

[li-filter-name] *string*

Synopsis	LI filter name
Context	li li-filter li-ip-filter <i>string</i>
Tree	li-ip-filter
Description	This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-ip-filter <i>string description string</i>
Tree	description
String Length	1 to 80

Introduced	19.10.R1
Platforms	All

entry [*li-entry-id*] *number*

Synopsis	Enter the entry list instance
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i>
Tree	entry
Description	<p>Commands in this context configure an entry for the LI filter.</p> <p>Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.</p> <p>The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.</p> <p>Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.</p>
Introduced	19.10.R1
Platforms	All

[li-entry-id] *number*

Synopsis	LI filter entry ID
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80

Introduced 19.10.R1
Platforms All

match

Synopsis Enter the **match** context

Context [li](#) [li-filter](#) [li-ip-filter](#) *string* [entry](#) *number* [match](#)

Tree [match](#)

Description Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur.

A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.

Introduced 19.10.R1
Platforms All

dst-ip

Synopsis Enter the **dst-ip** context

Context [li](#) [li-filter](#) [li-ip-filter](#) *string* [entry](#) *number* [match](#) [dst-ip](#)

Tree [dst-ip](#)

Introduced 19.10.R1
Platforms All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis IP address to match

Context [li](#) [li-filter](#) [li-ip-filter](#) *string* [entry](#) *number* [match](#) [dst-ip](#) [address](#) (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Tree [address](#)

Introduced 19.10.R1
Platforms All

mask *string*

Synopsis Mask that is applied as an AND to the IP address

Context	li li-filter li-ip-filter <i>string entry number match dst-ip mask string</i>
Tree	mask
Introduced	19.10.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	li li-filter li-ip-filter <i>string entry number match dst-port</i>
Tree	dst-port
Introduced	19.10.R1
Platforms	All

eq number

Synopsis	Condition on equality to specified value
Context	li li-filter li-ip-filter <i>string entry number match dst-port eq number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

gt number

Synopsis	Condition on being greater than the specified value
Context	li li-filter li-ip-filter <i>string entry number match dst-port gt number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

lt number

Synopsis	Condition on being less than the specified value
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match dst-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enable the range context
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

end number

Synopsis	Upper bound port to match
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

start number

Synopsis	Lower bound port to match
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65534

Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

fragment *keyword*

Synopsis	Fragmentation state as the match criterion
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true
Introduced	20.2.R1
Platforms	All

protocol (*number* | *keyword*)

Synopsis	IP protocol to match
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	19.10.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match src-ip
Tree	src-ip
Introduced	19.10.R1
Platforms	All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	IP address to match
----------	---------------------

Context	li li-filter li-ip-filter string entry number match src-ip address (ipv4-address ipv4-prefix-with-host-bits)
Tree	address
Introduced	19.10.R1
Platforms	All

mask string

Synopsis	Mask that is applied as an AND to the IP address
Context	li li-filter li-ip-filter string entry number match src-ip mask string
Tree	mask
Introduced	19.10.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	li li-filter li-ip-filter string entry number match src-port
Tree	src-port
Introduced	19.10.R1
Platforms	All

eq number

Synopsis	Condition on equality to specified value
Context	li li-filter li-ip-filter string entry number match src-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

gt number

Synopsis	Condition on being greater than the specified value
----------	---

Context	li li-filter li-ip-filter <i>string entry number match src-port gt number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

lt number

Synopsis	Condition on being less than the specified value
Context	li li-filter li-ip-filter <i>string entry number match src-port lt number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enable the range context
Context	li li-filter li-ip-filter <i>string entry number match src-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

end number

Synopsis	Upper bound port to match
Context	li li-filter li-ip-filter <i>string entry number match src-port range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1

Platforms All

start number

Synopsis Lower bound port to match
 Context [li li-filter li-ip-filter](#) *string entry number match src-port range start number*
 Tree [start](#)
 Range 0 to 65534
 Notes This element is mandatory.
 Introduced 19.10.R1
 Platforms All

li-ipv6-filter [[li-filter-name](#)] *string*

Synopsis Enter the **li-ipv6-filter** list instance
 Context [li li-filter li-ipv6-filter](#) *string*
 Tree [li-ipv6-filter](#)
 Description Commands in this context create LI IPv6 filter lists, which can be used to create confidential IPv6 filter based LI source entries.
 The LI IPv6 filter entries are merged into normal IPv6 filters configured with the **li li-filter associations** and **li li-filter reserved-block** commands. However, the LI IPv6 filter entries are visible only to users with LI permissions.
 Introduced 19.10.R1
 Platforms All

[li-filter-name] *string*

Synopsis LI filter name
 Context [li li-filter li-ipv6-filter](#) *string*
 Tree [li-ipv6-filter](#)
 Description This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 19.10.R1
 Platforms All

description string

Synopsis	Text description
Context	li li-filter li-ipv6-filter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

entry [li-entry-id] number

Synopsis	Enter the entry list instance
Context	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i>
Tree	entry
Description	<p>Commands in this context configure an entry for the LI filter.</p> <p>Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.</p> <p>The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.</p> <p>Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.</p>
Introduced	19.10.R1
Platforms	All

[li-entry-id] number

Synopsis	LI filter entry ID
Context	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-ipv6-filter <i>string entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

match

Synopsis	Enter the match context
Context	li li-filter li-ipv6-filter <i>string entry number match</i>
Tree	match
Description	<p>Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur.</p> <p>A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.</p>
Introduced	19.10.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	li li-filter li-ipv6-filter <i>string entry number match dst-ip</i>
Tree	dst-ip
Introduced	19.10.R1
Platforms	All

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IP address to match
Context	li li-filter li-ipv6-filter <i>string entry number match dst-ip address (ipv6-address ipv6-prefix-with-host-bits)</i>
Tree	address

Introduced 19.10.R1
Platforms All

mask string

Synopsis Mask that is applied as an AND to the IPv6 address
Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match dst-ip mask string*
Tree [mask](#)
Introduced 19.10.R1
Platforms All

dst-port

Synopsis Enter the **dst-port** context
Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match dst-port*
Tree [dst-port](#)
Introduced 19.10.R1
Platforms All

eq number

Synopsis Condition on equality to specified value
Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match dst-port eq number*
Tree [eq](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced 19.10.R1
Platforms All

gt number

Synopsis Condition on being greater than the specified value
Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match dst-port gt number*
Tree [gt](#)
Range 0 to 65534

Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

lt *number*

Synopsis	Condition on being less than the specified value
Context	li li-filter li-ipv6-filter <i>string</i> <i>entry</i> <i>number</i> match dst-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enable the range context
Context	li li-filter li-ipv6-filter <i>string</i> <i>entry</i> <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound port to match
Context	li li-filter li-ipv6-filter <i>string</i> <i>entry</i> <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

start number

Synopsis	Lower bound port to match
Context	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egg, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	19.10.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i> match src-ip
Tree	src-ip
Introduced	19.10.R1
Platforms	All

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IP address to match
Context	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i> match src-ip address (<i>ipv6-address</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	address
Introduced	19.10.R1

Platforms All

mask string

Synopsis Mask that is applied as an AND to the IPv6 address
Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match src-ip mask string*
Tree [mask](#)
Introduced 19.10.R1
Platforms All

src-port

Synopsis Enter the **src-port** context
Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match src-port*
Tree [src-port](#)
Introduced 19.10.R1
Platforms All

eq number

Synopsis Condition on equality to specified value
Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match src-port eq number*
Tree [eq](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced 19.10.R1
Platforms All

gt number

Synopsis Condition on being greater than the specified value
Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match src-port gt number*
Tree [gt](#)
Range 0 to 65534
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 19.10.R1
Platforms All

lt *number*

Synopsis Condition on being less than the specified value
Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match src-port lt number*
Tree [lt](#)
Range 1 to 65535
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced 19.10.R1
Platforms All

range

Synopsis Enable the **range** context
Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match src-port range*
Tree [range](#)
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced 19.10.R1
Platforms All

end *number*

Synopsis Upper bound port to match
Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match src-port range end number*
Tree [end](#)
Range 1 to 65535
Notes This element is mandatory.
Introduced 19.10.R1
Platforms All

start *number*

Synopsis Lower bound port to match

Context	<code>li li-filter li-ipv6-filter string entry number match src-port range start number</code>
Tree	<code>start</code>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

li-mac-filter [`li-filter-name`] *string*

Synopsis	Enter the li-mac-filter list instance
Context	<code>li li-filter li-mac-filter string</code>
Tree	<code>li-mac-filter</code>
Description	<p>Commands in this context configure LI MAC filter lists, which can be used to create confidential MAC filter based LI source entries.</p> <p>The LI MAC filter entries are merged into normal MAC filters as configured using the li-filter associations and li-filter reserved-block commands. The LI MAC filter entries are visible only to users with LI permissions.</p>
Introduced	19.10.R1
Platforms	All

[li-filter-name] *string*

Synopsis	LI filter name
Context	<code>li li-filter li-mac-filter string</code>
Tree	<code>li-mac-filter</code>
Description	This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	<code>li li-filter li-mac-filter string description string</code>

Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

entry [[li-entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i>
Tree	entry

Description Commands in this context configure an entry for the LI filter.

Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.

The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.

Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.

Introduced	19.10.R1
Platforms	All

[li-entry-id] *number*

Synopsis	LI filter entry ID
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> description <i>string</i>

Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

match

Synopsis	Enter the match context
Context	li li-filter li-mac-filter <i>string entry number match</i>
Tree	match
Description	<p>Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur.</p> <p>A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.</p>
Introduced	19.10.R1
Platforms	All

dst-mac

Synopsis	Enable the dst-mac context
Context	li li-filter li-mac-filter <i>string entry number match dst-mac</i>
Tree	dst-mac
Introduced	19.10.R1
Platforms	All

address *string*

Synopsis	MAC address for filter match
Context	li li-filter li-mac-filter <i>string entry number match dst-mac address string</i>
Tree	address
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

mask string

Synopsis	MAC address mask for filter match
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> match dst-mac mask <i>string</i>
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	19.10.R1
Platforms	All

frame-type keyword

Synopsis	Frame type for MAC filter match
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> match frame-type <i>keyword</i>
Tree	frame-type
Description	This command specifies the frame type for MAC filter entry matching. A filter can be edited even if an LI source references an entry in the filter.
Default	802dot3
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Introduced	19.10.R1
Platforms	All

src-mac

Synopsis	Enable the src-mac context
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> match src-mac
Tree	src-mac
Introduced	19.10.R1
Platforms	All

address string

Synopsis	MAC address for filter match
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> match src-mac address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	19.10.R1

Platforms All

mask string

Synopsis MAC address mask for filter match
Context [li li-filter li-mac-filter string entry number match src-mac mask string](#)
Tree [mask](#)
Default ff:ff:ff:ff:ff:ff
Introduced 19.10.R1
Platforms All

lock-filter keyword

Synopsis Lock state of LI filters
Context [li li-filter lock-filter keyword](#)
Tree [lock-filter](#)
Default lock
Options lock, unlock
Introduced 19.10.R1
Platforms All

reserved-block [block-name] string

Synopsis Enter the **reserved-block** list instance
Context [li li-filter reserved-block string](#)
Tree [reserved-block](#)
Max. Instances 8
Introduced 19.10.R1
Platforms All

[block-name] string

Synopsis Object uniquely identifying an LI reserved block
Context [li li-filter reserved-block string](#)
Tree [reserved-block](#)

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter reserved-block <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

entry-range

Synopsis	Enable the entry-range context
Context	li li-filter reserved-block <i>string</i> entry-range
Tree	entry-range
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound of the range
Context	li li-filter reserved-block <i>string</i> entry-range <i>end</i> <i>number</i>
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	Lower bound of the range
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Context	li li-filter reserved-block <i>string</i> entry-range <i>start</i> <i>number</i>
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

ip-filter [[filter-name](#)] *string*

Synopsis	Add a list entry for ip-filter
Context	li li-filter reserved-block <i>string</i> ip-filter <i>string</i>
Tree	ip-filter
Introduced	19.10.R1
Platforms	All

[filter-name] *string*

Synopsis	IP filter ID for LI filter reserved block
Context	li li-filter reserved-block <i>string</i> ip-filter <i>string</i>
Tree	ip-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ipv6-filter [[filter-name](#)] *string*

Synopsis	Add a list entry for ipv6-filter
Context	li li-filter reserved-block <i>string</i> ipv6-filter <i>string</i>
Tree	ipv6-filter
Introduced	19.10.R1
Platforms	All

[filter-name] *string*

Synopsis	IP filter ID for LI filter reserved block
Context	li li-filter reserved-block <i>string</i> ipv6-filter <i>string</i>
Tree	ipv6-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mac-filter [[filter-name](#)] *string*

Synopsis	Add a list entry for mac-filter
Context	li li-filter reserved-block <i>string</i> mac-filter <i>string</i>
Tree	mac-filter
Introduced	19.10.R1
Platforms	All

[filter-name] *string*

Synopsis	IP filter ID for LI filter reserved block
Context	li li-filter reserved-block <i>string</i> mac-filter <i>string</i>
Tree	mac-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

li-source [[service-name](#)] *string*

Synopsis	Enter the li-source list instance
Context	li li-source <i>string</i>
Tree	li-source
Introduced	19.10.R1
Platforms	All

[service-name] *string*

Synopsis	Administrative service name
Context	li li-source <i>string</i>
Tree	li-source
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of mirror service
Context	li li-source <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

li-ip-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the li-ip-filter list instance
Context	li li-source <i>string</i> li-ip-filter <i>reference</i>
Tree	li-ip-filter
Introduced	19.10.R1
Platforms	All

[li-filter-name] *reference*

Synopsis	A unique ID for an li-ip-filter
Context	li li-source <i>string</i> li-ip-filter <i>reference</i>
Tree	li-ip-filter
Reference	li li-filter li-ip-filter <i>string</i>
Notes	This element is part of a list key.

Introduced	19.10.R1
Platforms	All

entry [*li-entry-id*] *reference*

Synopsis	Enter the entry list instance
Context	li li-source <i>string</i> li-ip-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[li-entry-id] *reference*

Synopsis	A unique ID for an li-ip-filter entry
Context	li li-source <i>string</i> li-ip-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Reference	li li-filter li-ip-filter <i>string</i> entry <i>number</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept ID of the traffic flow
Context	li li-source <i>string</i> li-ip-filter <i>reference</i> entry <i>reference</i> intercept-id <i>number</i>
Tree	intercept-id
Description	This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session ID of the traffic flow
Context	li li-source <i>string</i> li-ip-filter <i>reference</i> entry <i>reference</i> session-id <i>number</i>
Tree	session-id
Description	This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

li-ipv6-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the li-ipv6-filter list instance
Context	li li-source <i>string</i> li-ipv6-filter <i>reference</i>
Tree	li-ipv6-filter
Introduced	19.10.R1
Platforms	All

[[li-filter-name](#)] *reference*

Synopsis	A unique ID for an li-ipv6-filter
Context	li li-source <i>string</i> li-ipv6-filter <i>reference</i>
Tree	li-ipv6-filter
Reference	li li-filter li-ipv6-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [[li-entry-id](#)] *reference*

Synopsis	Enter the entry list instance
Context	li li-source <i>string</i> li-ipv6-filter <i>reference</i> entry <i>reference</i>
Tree	entry

Min. Instances	1
Introduced	19.10.R1
Platforms	All

[li-entry-id] reference

Synopsis	A unique ID for an li-ipv6-filter entry
Context	li li-source string li-ipv6-filter reference entry reference
Tree	entry
Reference	li li-filter li-ipv6-filter string entry number
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id number

Synopsis	Intercept ID of the traffic flow
Context	li li-source string li-ipv6-filter reference entry reference intercept-id number
Tree	intercept-id
Description	This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

session-id number

Synopsis	Session ID of the traffic flow
Context	li li-source string li-ipv6-filter reference entry reference session-id number
Tree	session-id
Description	This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

li-mac-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the li-mac-filter list instance
Context	li li-source <i>string</i> li-mac-filter <i>reference</i>
Tree	li-mac-filter
Introduced	19.10.R1
Platforms	All

[li-filter-name] *reference*

Synopsis	A unique ID for an li-mac-filter
Context	li li-source <i>string</i> li-mac-filter <i>reference</i>
Tree	li-mac-filter
Reference	li li-filter li-mac-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [[li-entry-id](#)] *reference*

Synopsis	Enter the entry list instance
Context	li li-source <i>string</i> li-mac-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[li-entry-id] *reference*

Synopsis	A unique ID for an li-mac-filter entry
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Context	li li-source <i>string</i> li-mac-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Reference	li li-filter li-mac-filter <i>string</i> entry <i>number</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept ID of the traffic flow
Context	li li-source <i>string</i> li-mac-filter <i>reference</i> entry <i>reference</i> intercept-id <i>number</i>
Tree	intercept-id
Description	This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session ID of the traffic flow
Context	li li-source <i>string</i> li-mac-filter <i>reference</i> entry <i>reference</i> session-id <i>number</i>
Tree	session-id
Description	This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

nat

Synopsis	Enter the nat context
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Context	li li-source <i>string</i> nat
Tree	nat
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dslite [[router-instance](#)] *string* [b4](#) *string*

Synopsis	Enter the dslite list instance
Context	li li-source <i>string</i> nat dslite <i>string</i> b4 <i>string</i>
Tree	dslite
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[router-instance](#)] *string*

Synopsis	Name of the service
Context	li li-source <i>string</i> nat dslite <i>string</i> b4 <i>string</i>
Tree	dslite
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

b4 *string*

Synopsis	B4 prefix of the subscriber
Context	li li-source <i>string</i> nat dslite <i>string</i> b4 <i>string</i>
Tree	dslite
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id *number*

Synopsis	The intercept id of the traffic flow
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Context [li li-source string nat dslite string b4 string intercept-id number](#)
Tree [intercept-id](#)
Range 1 to 4294967295
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id number

Synopsis The session id of the traffic flow
Context [li li-source string nat dslite string b4 string session-id number](#)
Tree [session-id](#)
Range 1 to 4294967295
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ethernet-header

Synopsis Enter the **ethernet-header** context
Context [li li-source string nat ethernet-header](#)
Tree [ethernet-header](#)
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-address string

Synopsis Destination MAC address field of Ethernet encapsulation
Context [li li-source string nat ethernet-header destination-address string](#)
Tree [destination-address](#)
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-address string

Synopsis Source MAC address field of the Ethernet encapsulation
Context [li li-source string nat ethernet-header source-address string](#)

Tree	source-address
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Ethertype of the ethernet encapsulation
Context	li li-source string nat ethernet-header type number
Tree	type
Range	1536 to 65535
Default	1792
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware [[subscriber-id](#)] *string*

Synopsis	Enter the l2-aware list instance
Context	li li-source string nat l2-aware string
Tree	l2-aware
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[subscriber-id] *string*

Synopsis	The string identifying the subscribe
Context	li li-source string nat l2-aware string
Tree	l2-aware
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id *number*

Synopsis	The intercept id of the traffic flow
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Context [li li-source string nat l2-aware string intercept-id number](#)
Tree [intercept-id](#)
Range 1 to 4294967295
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id *number*

Synopsis The session id of the traffic flow
Context [li li-source string nat l2-aware string session-id number](#)
Tree [session-id](#)
Range 1 to 4294967295
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44 [[router-instance](#)] *string ip string*

Synopsis Enter the **nat44** list instance
Context [li li-source string nat nat44 string ip string](#)
Tree [nat44](#)
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[router-instance] *string*

Synopsis Name of the service
Context [li li-source string nat nat44 string ip string](#)
Tree [nat44](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip string

Synopsis	IP address of the subscriber
Context	li li-source string nat nat44 string ip string
Tree	nat44
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id number

Synopsis	The intercept id of the traffic flow
Context	li li-source string nat nat44 string ip string intercept-id number
Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id number

Synopsis	The session id of the traffic flow
Context	li li-source string nat nat44 string ip string session-id number
Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat64 [[router-instance](#)] [string ip string](#)

Synopsis	Enter the nat64 list instance
Context	li li-source string nat nat64 string ip string
Tree	nat64
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[router-instance] string

Synopsis	Name of the service
Context	li li-source string nat nat64 string ip string
Tree	nat64
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip string

Synopsis	IP prefix of the subscriber
Context	li li-source string nat nat64 string ip string
Tree	nat64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id number

Synopsis	The intercept id of the traffic flow
Context	li li-source string nat nat64 string ip string intercept-id number
Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id number

Synopsis	The session id of the traffic flow
Context	li li-source string nat nat64 string ip string session-id number
Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port [**port-id**] *string*

Synopsis Enter the **port** list instance
Context [li](#) [li-source](#) *string* **port** *string*
Tree [port](#)
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[port-id] *string*

Synopsis Port ID
Context [li](#) [li-source](#) *string* **port** *string*
Tree [port](#)
Notes This element is part of a list key.
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

egress *boolean*

Synopsis Perform lawful intercept on egress traffic
Context [li](#) [li-source](#) *string* **port** *string* **egress** *boolean*
Tree [egress](#)
Description When configured to **true**, the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default false
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress *boolean*

Synopsis Perform lawful intercept on ingress traffic
Context [li](#) [li-source](#) *string* **port** *string* **ingress** *boolean*
Tree [ingress](#)

Description	When configured to true , the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sap [[sap-id](#)] *string*

Synopsis	Enter the sap list instance
Context	li li-source <i>string sap string</i>
Tree	sap
Description	Commands in this context create a service access point (SAP) within an LI configuration. The specified SAP must define a FastE, GigE, or XGigE, or XGigE access port with a dot1q, null, or q-in-q encapsulation type.
Introduced	19.10.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
Context	li li-source <i>string sap string</i>
Tree	sap
Description	This command specifies the physical port identifier portion of the SAP definition.
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Perform lawful intercept on egress traffic
Context	li li-source <i>string sap string egress boolean</i>
Tree	egress

Description	When configured to true , the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

ingress *boolean*

Synopsis	Perform lawful intercept on ingress traffic
Context	li li-source <i>string</i> sap <i>string</i> ingress <i>boolean</i>
Tree	ingress
Description	When configured to true , the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept ID of the traffic flow
Context	li li-source <i>string</i> sap <i>string</i> intercept-id <i>number</i>
Tree	intercept-id
Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the configure mirror mirror-dest encap layer-3-encap header-type command is configured with ip-udp-shim routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p> <p>When the mirror service is configured with ip-gre routable encap under the header-type command, no intercept ID is inserted and none should be specified against the LI source entries.</p>
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session ID of the traffic flow
Context	<code>li li-source string sap string session-id number</code>
Tree	<code>session-id</code>
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with ip-udp-shim routable encap under the configure mirror mirror-dest encap layer-3-encap header-type command. For all types of LI source entries, when the mirror service is configured with ip-udp-shim routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with ip-gre routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

subscriber [`subscriber-id`] *string*

Synopsis	Enter the subscriber list instance
Context	<code>li li-source string subscriber string</code>
Tree	<code>subscriber</code>
Description	Commands in this context add hosts of a subscriber to a mirroring service.
Introduced	19.10.R1
Platforms	All

[subscriber-id] *string*

Synopsis	Subscriber ID
Context	<code>li li-source string subscriber string</code>
Tree	<code>subscriber</code>
String Length	1 to 64
Notes	This element is part of a list key.

Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Perform lawful intercept on egress traffic
Context	li li-source <i>string</i> subscriber <i>string</i> egress <i>boolean</i>
Tree	egress
Description	When configured to true , the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding classes to be mirrored
Context	li li-source <i>string</i> subscriber <i>string</i> fc <i>keyword</i>
Tree	fc
Description	This command specifies the name of the forwarding class with which to associate LI traffic. The forwarding class name must already be defined within the system. If the FC name is not already defined, an error is returned and this command has no effect. If the FC name is defined, the forwarding class associated with the FC name overrides the default forwarding class.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	19.10.R1
Platforms	All

host-type *keyword*

Synopsis	Subscriber host type to be monitored
Context	li li-source <i>string</i> subscriber <i>string</i> host-type <i>keyword</i>
Tree	host-type
Description	This command specifies the host type for LI.

Options	ipoe, ppp
Introduced	19.10.R1
Platforms	All

ingress *boolean*

Synopsis	Perform lawful intercept on ingress traffic
Context	li li-source <i>string</i> subscriber <i>string</i> ingress <i>boolean</i>
Tree	ingress
Description	When configured to true , the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept ID of the traffic flow
Context	li li-source <i>string</i> subscriber <i>string</i> intercept-id <i>number</i>
Tree	intercept-id
Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the configure mirror mirror-dest encap layer-3-encap header-type command is configured with ip-udp-shim routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p> <p>When the mirror service is configured with ip-gre routable encap under the header-type command, no intercept ID is inserted and none should be specified against the LI source entries.</p>
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

ip-address *string*

Synopsis	IP address of the subscriber
Context	li li-source <i>string</i> subscriber <i>string</i> ip-address <i>string</i>
Tree	ip-address
Description	This command specifies the service IP address (system IP address) of the remote device sending LI traffic. If 0.0.0.0 is specified, any remote router is allowed to send to this service.
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

ip-family *keyword*

Synopsis	IP family for LI
Context	li li-source <i>string</i> subscriber <i>string</i> ip-family <i>keyword</i>
Tree	ip-family
Description	This command specifies the IP family for LI.
Options	ipv4, ipv6
Introduced	19.10.R1
Platforms	All

mac-address *string*

Synopsis	The source MAC address
Context	li li-source <i>string</i> subscriber <i>string</i> mac-address <i>string</i>
Tree	mac-address
Description	This command specifies a MAC address when defining a static host. Multiple static hosts may be configured with the same MAC address because each definition is distinguished by a unique IP address.
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

sap-id *string*

Synopsis	SAP ID
Context	li li-source <i>string</i> subscriber <i>string</i> sap-id <i>string</i>
Tree	sap-id
String Length	1 to 45
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session ID of the traffic flow
Context	li li-source <i>string</i> subscriber <i>string</i> session-id <i>number</i>
Tree	session-id
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with ip-udp-shim routable encap under the configure mirror mirror-dest encap layer-3-encap header-type command. For all types of LI source entries, when the mirror service is configured with ip-udp-shim routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with ip-gre routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

sla-profile *string*

Synopsis	SLA profile
Context	li li-source <i>string</i> subscriber <i>string</i> sla-profile <i>string</i>
Tree	sla-profile
Description	This command specifies an SLA profile name.

Each host of a subscriber can use a different SLA profile. This option allows interception of only the hosts using the specified SLA profile. In some deployments, SLA profiles are assigned per type of traffic. There can be, for example, a specific SLA profile for voice traffic (which could be used for all SIP hosts).

String Length	1 to 32
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

wlan-gw-dsm-ue [**mac**] *string*

Synopsis	Enter the wlan-gw-dsm-ue list instance
Context	li li-source string wlan-gw-dsm-ue string
Tree	wlan-gw-dsm-ue
Introduced	19.10.R1
Platforms	All

[mac] *string*

Synopsis	MAC address of the DSM UE
Context	li li-source string wlan-gw-dsm-ue string
Tree	wlan-gw-dsm-ue
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept identifier
Context	li li-source string wlan-gw-dsm-ue string intercept-id number
Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session identifier
Context	li li-source <i>string</i> wlan-gw-dsm-ue <i>string</i> session-id <i>number</i>
Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

log

Synopsis	Enter the log context
Context	li log
Tree	log
Introduced	19.10.R1
Platforms	All

log-id [[name](#)] *string*

Synopsis	Enter the log-id list instance
Context	li log log-id <i>string</i>
Tree	log-id
Max. Instances	30
Introduced	19.10.R1
Platforms	All

[[name](#)] *string*

Synopsis	Log ID
Context	li log log-id <i>string</i>
Tree	log-id
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

admin-state *keyword*

Synopsis	The administrative state of the log
Context	li log log-id string admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li log log-id string description string
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

destination

Synopsis	Enter the destination context
Context	li log log-id string destination
Tree	destination
Introduced	19.10.R1
Platforms	All

memory

Synopsis	Enable the memory context
Context	li log log-id string destination memory
Tree	memory
Notes	The following elements are part of a choice: memory , netconf , or snmp .
Introduced	19.10.R1
Platforms	All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this memory log
Context	li log log-id string destination memory max-entries number
Tree	max-entries
Range	50 to 1024
Default	100
Introduced	19.10.R1
Platforms	All

netconf

Synopsis	Enable the netconf context
Context	li log log-id string destination netconf
Tree	netconf
Notes	The following elements are part of a choice: memory , netconf , or snmp .
Introduced	20.2.R1
Platforms	All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of events stored in the NETCONF log
Context	li log log-id string destination netconf max-entries number
Tree	max-entries
Description	This command configures the maximum number of events stored in the NETCONF log. If this setting needs to be modified, the log ID must be removed and re-created.
Range	50 to 1024
Default	100

Introduced 20.2.R1
Platforms All

snmp

Synopsis Enable the **snmp** context
Context [li log log-id string destination snmp](#)
Tree [snmp](#)
Notes The following elements are part of a choice: **memory**, **netconf**, or **snmp**.
Introduced 19.10.R1
Platforms All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Number of events stored in this snmp log
Context [li log log-id string destination snmp max-entries number](#)
Tree [max-entries](#)
Range 50 to 1024
Default 100
Introduced 19.10.R1
Platforms All

filter *string*

Synopsis Event filter ID to associate with log ID configuration
Context [li log log-id string filter string](#)
Tree [filter](#)
String Length 1 to 64
Introduced 19.10.R1
Platforms All

netconf-stream *string*

Synopsis	Destination NETCONF stream name
Context	li log log-id <i>string</i> netconf-stream <i>string</i>
Tree	netconf-stream
String Length	1 to 32
Introduced	20.2.R1
Platforms	All

source

Synopsis	Enter the source context
Context	li log log-id <i>string</i> source
Tree	source
Introduced	19.10.R1
Platforms	All

li *boolean*

Synopsis	Event stream for events configured for LI activities
Context	li log log-id <i>string</i> source li <i>boolean</i>
Tree	li
Default	false
Introduced	19.10.R1
Platforms	All

time-format *keyword*

Synopsis	Time zone to display date and time
Context	li log log-id <i>string</i> time-format <i>keyword</i>
Tree	time-format
Default	utc
Options	utc, local
Introduced	19.10.R1
Platforms	All

mirror-dest-reservation

Synopsis	Enter the mirror-dest-reservation context
Context	li mirror-dest-reservation
Tree	mirror-dest-reservation
Introduced	19.10.R1
Platforms	All

end number

Synopsis	Last service id
Context	li mirror-dest-reservation end number
Tree	end
Range	1 to 2147483647
Introduced	19.10.R1
Platforms	All

start number

Synopsis	First service id
Context	li mirror-dest-reservation start number
Tree	start
Range	1 to 2147483647
Introduced	19.10.R1
Platforms	All

mirror-dest-template [[name](#)] *string*

Synopsis	Enter the mirror-dest-template list instance
Context	li mirror-dest-template string
Tree	mirror-dest-template
Max. Instances	8
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Mirror destination template name
Context	li mirror-dest-template <i>string</i>
Tree	mirror-dest-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

layer-3-encap

Synopsis	Enter the layer-3-encap context
Context	li mirror-dest-template <i>string</i> layer-3-encap
Tree	layer-3-encap
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction-bit *boolean*

Synopsis	Use highest bit in interception ID for flow direction
Context	li mirror-dest-template <i>string</i> layer-3-encap direction-bit <i>boolean</i>
Tree	direction-bit
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encap-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	The header type of the layer 3 encapsulation.
Context	li mirror-dest-template <i>string</i> layer-3-encap encap-type <i>keyword</i>
Tree	encap-type

Default	ip-udp-shim
Options	ip-udp-shim, ip-gre
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-source *string*

Synopsis	Source IPv4 address for Layer 3 encapsulation
Context	li mirror-dest-template <i>string</i> layer-3-encap ip-source <i>string</i>
Tree	ip-source
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Virtual router instance to inject mirrored packets
Context	li mirror-dest-template <i>string</i> layer-3-encap router-instance <i>string</i>
Tree	router-instance
String Length	1 to 64
Default	Base
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	li mirror-dest-template <i>string</i> layer-3-encap udp
Tree	udp
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination *number*

Synopsis	Destination UDP port
Context	li mirror-dest-template <i>string</i> layer-3-encap udp destination <i>number</i>

Tree	destination
Range	1 to 65535
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source number

Synopsis	Source UDP port
Context	li mirror-dest-template <i>string layer-3-encap udp source number</i>
Tree	source
Range	1 to 65535
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encapsulation type supported by the mirror service
Context	li mirror-dest-template <i>string type keyword</i>
Tree	type
Default	ether
Options	ether, ip-only
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis	Enter the nat context
Context	li nat
Tree	nat
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-outside-ip-address *boolean*

Synopsis	Report outside IP address for L2-Aware NAT subscribers
Context	li nat use-outside-ip-address <i>boolean</i>
Tree	use-outside-ip-address
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the radius context
Context	li radius
Tree	radius
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mirror-dest-template *reference*

Synopsis	RADIUS triggered mirror destination template
Context	li radius mirror-dest-template <i>reference</i>
Tree	mirror-dest-template
Reference	li mirror-dest-template <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

x-interfaces

Synopsis	Enter the x-interfaces context
Context	li x-interfaces
Tree	x-interfaces
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

admin-state *keyword*

Synopsis	Administrative state of the x-interfaces
Context	li x-interfaces admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

correlation-id

Synopsis	Enter the correlation-id context
Context	li x-interfaces correlation-id
Tree	correlation-id
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipoe *keyword*

Synopsis	RADIUS accounting ID type for subscriber correlation
Context	li x-interfaces correlation-id ipoe keyword
Tree	ipoe
Default	radius-host-acct-id
Options	radius-host-acct-id, radius-queue-acct-id, radius-session-acct-id
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

pppoe *keyword*

Synopsis	RADIUS accounting ID type for subscriber correlation
Context	li x-interfaces correlation-id pppoe keyword
Tree	pppoe
Default	radius-host-acct-id
Options	radius-host-acct-id, radius-queue-acct-id, radius-session-acct-id
Introduced	21.5.R1

Platforms 7750 SR-1, 7750 SR-7/12/12e

ine-identifier *string*

Synopsis Intercepting Network Element (INE) ID
Context [li x-interfaces ine-identifier string](#)
Tree [ine-identifier](#)
String Length 1 to 32
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

lic [[name](#)] *string*

Synopsis Enter the **lic** list instance
Context [li x-interfaces lic string](#)
Tree [lic](#)
Max. Instances 18
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

[name] *string*

Synopsis LIC name
Context [li x-interfaces lic string](#)
Tree [lic](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

authentication

Synopsis Enter the **authentication** context
Context [li x-interfaces lic string authentication](#)

Tree [authentication](#)
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

password string

Synopsis Password for the X1 and X2 interfaces
Context [li x-interfaces lic string authentication password string](#)
Tree [password](#)
String Length 1 to 50
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

private-ki string

Synopsis Private Ki string for the X1 and X2 interfaces
Context [li x-interfaces lic string authentication private-ki string](#)
Tree [private-ki](#)
String Length 1 to 50
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

sequence-group string

Synopsis Sequence group for the X1 and X2 interfaces
Context [li x-interfaces lic string authentication sequence-group string](#)
Tree [sequence-group](#)
String Length 1 to 42
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

description string

Synopsis Text description
Context [li x-interfaces lic string description string](#)

Tree	description
String Length	1 to 80
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

identifier string

Synopsis	LIC ID
Context	li x-interfaces lic string identifier string
Tree	identifier
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipv4

Synopsis	Enter the ipv4 context
Context	li x-interfaces lic string ipv4
Tree	ipv4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the LIC
Context	li x-interfaces lic string ipv4 ip-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	ip-address
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

port number

Synopsis	TCP port associated with the LIC
Context	li x-interfaces lic string port number
Tree	port

Range	0 to 65535
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

router-instance *string*

Synopsis	Virtual router instance used by the X-interfaces
Context	li x-interfaces lic string router-instance string
Tree	router-instance
String Length	0 to 64
Default	
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

user-db *string*

Synopsis	Location of the data-trigger host for the LIC
Context	li x-interfaces user-db string
Tree	user-db
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

x1

Synopsis	Enter the x1 context
Context	li x-interfaces x1
Tree	x1
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipv4

Synopsis	Enter the ipv4 context
Context	li x-interfaces x1 ipv4

Tree	ipv4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	X1 interface IP address
Context	li x-interfaces x1 ipv4 local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-address
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

lic-peer *reference*

Synopsis	Peer LIC for the X1 interface
Context	li x-interfaces x1 lic-peer <i>reference</i>
Tree	lic-peer
Reference	li x-interfaces lic <i>string</i>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

local-tcp-port *number*

Synopsis	Local TCP port used for the X1 interface
Context	li x-interfaces x1 local-tcp-port <i>number</i>
Tree	local-tcp-port
Range	1 to 65535
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

timeouts

Synopsis	Enter the timeouts context
Context	li x-interfaces x1 timeouts
Tree	timeouts

Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

message-timeout *number*

Synopsis Maximum time for the LIC to reply to an X1 message
Context [li x-interfaces x1 timeouts message-timeout number](#)
Tree [message-timeout](#)
Range 180 to 300
Default 180
Units seconds
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

x2

Synopsis Enter the **x2** context
Context [li x-interfaces x2](#)
Tree [x2](#)
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

ipv4

Synopsis Enter the **ipv4** context
Context [li x-interfaces x2 ipv4](#)
Tree [ipv4](#)
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis X2 interface IP address
Context [li x-interfaces x2 ipv4 local-address \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)
Tree [local-address](#)

Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

lic-peer *reference*

Synopsis Peer LIC for the X2 interface
Context [li x-interfaces x2 lic-peer reference](#)
Tree [lic-peer](#)
Reference [li x-interfaces lic string](#)
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

timeouts

Synopsis Enter the **timeouts** context
Context [li x-interfaces x2 timeouts](#)
Tree [timeouts](#)
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

keep-alive *number*

Synopsis Keep-alive timeout
Context [li x-interfaces x2 timeouts keep-alive number](#)
Tree [keep-alive](#)
Range 300 to 600
Default 300
Units seconds
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

request *number*

Synopsis Tx2-normal timeout
Context [li x-interfaces x2 timeouts request number](#)

Tree	request
Range	5 to 30
Default	5
Units	seconds
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

x3

Synopsis	Enter the x3 context
Context	li x-interfaces x3
Tree	x3
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

alarms

Synopsis	Enter the alarms context
Context	li x-interfaces x3 alarms
Tree	alarms
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

cpu-alarm

Synopsis	Enter the cpu-alarm context
Context	li x-interfaces x3 alarms cpu-alarm
Tree	cpu-alarm
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

high-threshold *number*

Synopsis	High threshold value of the CPU usage alarm
Context	li x-interfaces x3 alarms cpu-alarm high-threshold <i>number</i>

Tree	high-threshold
Range	1 to 100
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

low-threshold *number*

Synopsis	Low threshold value of the CPU usage alarm
Context	li x-interfaces x3 alarms cpu-alarm low-threshold <i>number</i>
Tree	low-threshold
Range	0 to 99
Default	0
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

memory-alarm

Synopsis	Enter the memory-alarm context
Context	li x-interfaces x3 alarms memory-alarm
Tree	memory-alarm
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

high-threshold *number*

Synopsis	High threshold of the packet buffer memory usage alarm
Context	li x-interfaces x3 alarms memory-alarm high-threshold <i>number</i>
Tree	high-threshold
Range	1 to 100
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

low-threshold *number*

Synopsis	Low threshold of the packet buffer memory usage alarm
Context	li x-interfaces x3 alarms memory-alarm low-threshold <i>number</i>
Tree	low-threshold
Range	0 to 99
Default	0
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

throughput-alarm

Synopsis	Enter the throughput-alarm context
Context	li x-interfaces x3 alarms throughput-alarm
Tree	throughput-alarm
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

high-threshold *number*

Synopsis	High threshold value of the throughput alarm
Context	li x-interfaces x3 alarms throughput-alarm high-threshold <i>number</i>
Tree	high-threshold
Range	1 to 4294967295
Units	megabps
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

low-threshold *number*

Synopsis	Low threshold value of the throughput alarm
Context	li x-interfaces x3 alarms throughput-alarm low-threshold <i>number</i>
Tree	low-threshold
Range	1 to 4294967295

Units	megabps
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipv4

Synopsis	Enter the ipv4 context
Context	li x-interfaces x3 ipv4
Tree	ipv4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

local-address-range

Synopsis	Enter the local-address-range context
Context	li x-interfaces x3 ipv4 local-address-range
Tree	local-address-range
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

end string

Synopsis	Upper bound of the range
Context	li x-interfaces x3 ipv4 local-address-range end string
Tree	end
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

start string

Synopsis	Lower bound of the range
Context	li x-interfaces x3 ipv4 local-address-range start string
Tree	start
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

li-group *number*

Synopsis	ISA group of the X3 interface
Context	li x-interfaces x3 li-group <i>number</i>
Tree	li-group
Range	1 to 4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

lic-peers [[name](#)] *reference*

Synopsis	Add a list entry for lic-peers
Context	li x-interfaces x3 lic-peers <i>reference</i>
Tree	lic-peers
Max. Instances	16
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

[name] *reference*

Synopsis	Peer LIC for the X3 interface
Context	li x-interfaces x3 lic-peers <i>reference</i>
Tree	lic-peers
Reference	li x-interfaces lic <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

session-limit *number*

Synopsis	Maximum number of X3 sessions initiated to the LIC
Context	li x-interfaces x3 session-limit <i>number</i>
Tree	session-limit
Range	1 to 32

Default	32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

timeouts

Synopsis	Enter the timeouts context
Context	li x-interfaces x3 timeouts
Tree	timeouts
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

keep-alive number

Synopsis	Keep-alive timeout
Context	li x-interfaces x3 timeouts keep-alive number
Tree	keep-alive
Range	300 to 600
Default	300
Units	seconds
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

request number

Synopsis	Tx3-normal timeout
Context	li x-interfaces x3 timeouts request number
Tree	request
Range	5 to 30
Default	5
Units	seconds
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

target-retry-wait *number*

Synopsis	Retry interval for target tunnel setup
Context	li x-interfaces x3 timeouts target-retry-wait <i>number</i>
Tree	target-retry-wait
Range	300 to 1200
Default	300
Units	seconds
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

3.23 log commands

```

configure
- log
- accounting-policy number
- admin-state keyword
- align boolean
- apply-groups reference
- apply-groups-exclude reference
- collection-interval number
- custom-record
- aa-specific
- aa-sub-attributes
- app-profile boolean
- app-service-options boolean
- aa-sub-counters
- long-duration-flow-count boolean
- medium-duration-flow-count boolean
- short-duration-flow-count boolean
- total-flow-duration boolean
- total-flows-completed-count boolean
- from-aa-sub-counters
- flows-active-count boolean
- flows-admitted-count boolean
- flows-denied-count boolean
- forwarding-class boolean
- max-throughput-octet-count boolean
- max-throughput-packet-count boolean
- max-throughput-timestamp boolean
- octets-admitted-count boolean
- octets-denied-count boolean
- packets-admitted-count boolean
- packets-denied-count boolean
- to-aa-sub-counters
- flows-active-count boolean
- flows-admitted-count boolean
- flows-denied-count boolean
- forwarding-class boolean
- max-throughput-octet-count boolean
- max-throughput-packet-count boolean
- max-throughput-timestamp boolean
- octets-admitted-count boolean
- octets-denied-count boolean
- packets-admitted-count boolean
- packets-denied-count boolean
- apply-groups reference
- apply-groups-exclude reference
- policer number
- apply-groups reference
- apply-groups-exclude reference
- e-counters
- exceed-profile-octets-discarded-count boolean
- exceed-profile-octets-forwarded-count boolean
- exceed-profile-octets-offered-count boolean
- exceed-profile-packets-discarded-count boolean
- exceed-profile-packets-forwarded-count boolean
- exceed-profile-packets-offered-count boolean
- in-plus-profile-octets-discarded-count boolean
- in-plus-profile-octets-forwarded-count boolean
- in-plus-profile-octets-offered-count boolean
- in-plus-profile-packets-discarded-count boolean

```

configure log accounting-policy custom-record policer e-counters in-plus-profile-packets-forwarded-count

```

- in-plus-profile-packets-forwarded-count boolean
- in-plus-profile-packets-offered-count boolean
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-octets-offered-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- in-profile-packets-offered-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-octets-offered-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- out-profile-packets-offered-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- i-counters
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-octets-offered-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- in-profile-packets-offered-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-octets-offered-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- out-profile-packets-offered-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- queue number
- apply-groups reference
- apply-groups-exclude reference
- e-counters
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- i-counters
- all-octets-offered-count boolean
- all-packets-offered-count boolean
- high-octets-discarded-count boolean
- high-octets-offered-count boolean
- high-packets-discarded-count boolean
- high-packets-offered-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-forwarded-count boolean
- low-octets-discarded-count boolean
- low-octets-offered-count boolean
- low-packets-discarded-count boolean
- low-packets-offered-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-packets-forwarded-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- ref-aa-specific-counter
- any boolean
- ref-policer
- all

```

configure log accounting-policy custom-record ref-policer e-counters

```
- e-counters
- exceed-profile-octets-discarded-count boolean
- exceed-profile-octets-forwarded-count boolean
- exceed-profile-octets-offered-count boolean
- exceed-profile-packets-discarded-count boolean
- exceed-profile-packets-forwarded-count boolean
- exceed-profile-packets-offered-count boolean
- in-plus-profile-octets-discarded-count boolean
- in-plus-profile-octets-forwarded-count boolean
- in-plus-profile-octets-offered-count boolean
- in-plus-profile-packets-discarded-count boolean
- in-plus-profile-packets-forwarded-count boolean
- in-plus-profile-packets-offered-count boolean
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-octets-offered-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- in-profile-packets-offered-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-octets-offered-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- out-profile-packets-offered-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- i-counters
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-octets-offered-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- in-profile-packets-offered-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-octets-offered-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- out-profile-packets-offered-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- id reference
- ref-queue
- all
- e-counters
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- i-counters
- all-octets-offered-count boolean
- all-packets-offered-count boolean
- high-octets-discarded-count boolean
- high-octets-offered-count boolean
- high-packets-discarded-count boolean
- high-packets-offered-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-forwarded-count boolean
- low-octets-discarded-count boolean
```

configure log accounting-policy custom-record ref-queue i-counters low-octets-offered-count

- **low-octets-offered-count** *boolean*
- **low-packets-discarded-count** *boolean*
- **low-packets-offered-count** *boolean*
- **out-profile-octets-forwarded-count** *boolean*
- **out-profile-packets-forwarded-count** *boolean*
- **uncoloured-octets-offered-count** *boolean*
- **uncoloured-packets-offered-count** *boolean*
- **id** *reference*
- **significant-change** *number*
- **default** *boolean*
- **description** *string*
- **destination**
 - **file** *reference*
 - **null**
- **include-system-info** *boolean*
- **record** *keyword*
- **app-route-notifications**
 - **cold-start-wait** *number*
 - **route-recovery-wait** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **encryption-key** *string*
- **event-damping** *boolean*
- **event-handling**
 - **handler** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **min-delay** *number*
 - **script-policy**
 - **name** *reference*
 - **owner** *reference*
- **event-trigger**
 - **adp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
 - **application-assurance event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**

configure log event-trigger application-assurance entry debounce time

```
    - time number
    - value number
    - description string
    - filter reference
    - handler reference
- aps event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- atm event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- auto-prov event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- bfd event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
```

configure log event-trigger bfd entry handler

- **handler** *reference*
- **bgp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **bier event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **calltrace event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **cflowd event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **chassis event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure log event-trigger chassis apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **debug event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **dhcp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **dhcps event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **diameter event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*

configure log event-trigger diameter entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
 - **time** *number*
 - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **dynsvc event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **efm-oam event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **elmi event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ering event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*

configure log event-trigger ering entry debounce value

- **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **eth-cfm event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **etun event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **filter event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **gmpls event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*

configure log event-trigger gsm

- **gsm** event keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** string
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** string
 - **filter** reference
 - **handler** reference
- **igh** event keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** string
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** string
 - **filter** reference
 - **handler** reference
- **igmp** event keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** string
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** string
 - **filter** reference
 - **handler** reference
- **igmp-snooping** event keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** string
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** string
 - **filter** reference
 - **handler** reference
- **ip** event keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference

configure log event-trigger ip description

- **description** *string*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ipsec event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **isis event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **l2tp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **lag event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure log event-trigger lag entry apply-groups-exclude

```
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
  - ldap event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - ldp event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - li event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - lldp event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
```


configure log event-trigger lldp entry description

- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **lldp event** *keyword*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
- **time** *number*
- **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **logger event** *keyword*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
- **time** *number*
- **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **macsec event** *keyword*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
- **time** *number*
- **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **mc-redundancy event** *keyword*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
- **time** *number*
- **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **mcpath event** *keyword*

configure log event-trigger mcpath admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **mgmt-core event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **mirror event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **mld event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **mld-snooping event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*

configure log event-trigger mld-snooping entry

- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **mpls event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **mpls-tp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **msdp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **nat event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure log event-trigger nat entry debounce

- **debounce**
 - **time** *number*
 - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **ntp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **oam event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **openflow event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ospf event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*

configure log event-trigger ospf entry filter

- **filter** *reference*
- **handler** *reference*
- **pcap event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **pcep event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **pim event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **pim-snooping event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **port event** *keyword*
 - **admin-state** *keyword*

configure log event-trigger port apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ppp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **pppoe event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **pppoe-clnt event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ptp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*

configure log event-trigger ptp entry admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
 - **time** *number*
 - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **radius event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **rip event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ripng event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **route-policy event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**

configure log event-trigger route-policy entry debounce time

```

    - time number
    - value number
    - description string
    - filter reference
    - handler reference
- rpki event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- rsvp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- satellite event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- security event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference

```


configure log event-trigger security entry handler

- **handler** *reference*
- **sflow event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **snmp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **sr-mpls event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **srv6 event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **stp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure log event-trigger stp apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **svcmgr event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **system event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **tls event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **tree-sid event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*

configure log event-trigger tree-sid entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
 - **time** *number*
 - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **user event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **video event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **vrtr event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **vrtr event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*

configure log event-trigger vrtr entry debounce value

```

    - value number
    - description string
    - filter reference
    - handler reference
- wlan-gw event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- wpp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- file string
  - apply-groups reference
  - apply-groups-exclude reference
  - compact-flash-location
    - backup keyword
    - primary keyword
  - description string
  - retention number
  - rollover number
- filter string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-action keyword
  - description string
  - named-entry string
    - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - match
    - application
      - eq keyword
      - neq keyword
    - event
      - eq number
      - gt number
      - gte number
      - lt number
      - lte number
      - neq number

```

configure log filter named-entry match message

```

    - message
      - eq string
      - neq string
      - regexp boolean
    - severity
      - eq keyword
      - gt keyword
      - gte keyword
      - lt keyword
      - lte keyword
      - neq keyword
    - subject
      - eq string
      - neq string
      - regexp boolean
    - vrtr-name
      - eq string
      - neq string
      - regexp boolean
  - log-events
    - adp event keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - generate boolean
      - repeat boolean
      - severity keyword
      - specific-throttle boolean
      - specific-throttle-interval number
      - specific-throttle-limit number
      - throttle boolean
    - application-assurance event keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - generate boolean
      - repeat boolean
      - severity keyword
      - specific-throttle boolean
      - specific-throttle-interval number
      - specific-throttle-limit number
      - throttle boolean
    - aps event keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - generate boolean
      - repeat boolean
      - severity keyword
      - specific-throttle boolean
      - specific-throttle-interval number
      - specific-throttle-limit number
      - throttle boolean
    - atm event keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - generate boolean
      - repeat boolean
      - severity keyword
      - specific-throttle boolean
      - specific-throttle-interval number
      - specific-throttle-limit number
      - throttle boolean
    - auto-prov event keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - generate boolean

```

configure log log-events auto-prov repeat

- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **bfd event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **bgp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **bier event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **calltrace event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **cflowd event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **chassis event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*

configure log log-events chassis specific-throttle-limit

- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **debug event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **dhcp event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **dhcps event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **diameter event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **dotlx event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **dynsvc event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **efm-oam event** *keyword*
- **apply-groups** *reference*

configure log log-events efm-oam apply-groups-exclude

- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **elmi event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **ering event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **eth-cfm event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **etun event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **filter event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **gmpls event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*

configure log log-events gmp1s specific-throttle

```
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– gsmP event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– igh event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– igmp event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– igmp-snooping event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– ip event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– ipsec event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
```

configure log log-events isis

- **isis event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **l2tp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **lag event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **ldap event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **ldp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **li event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **lldp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*

configure log log-events lldp repeat

```
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- lmp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- logger event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- macsec event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- mc-redundancy event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- mcpath event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- mgmt-core event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
```

configure log log-events mgmt-core specific-throttle-limit

```
– specific-throttle-limit number
– throttle boolean
– mirror event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– mld event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– mld-snooping event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– mpls event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– mpls-tp event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– msdp event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– nat event keyword
– apply-groups reference
```

configure log log-events nat apply-groups-exclude

```
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– ntp event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– oam event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– openflow event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– ospf event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– pcap event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– pcep event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
```

configure log log-events pcep specific-throttle

```

- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- pfcp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- pim event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- pim-snooping event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- port event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- ppp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- pppoe event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean

```

configure log log-events pppoe-clnt

```
– pppoe-clnt event keyword
  – apply-groups reference
  – apply-groups-exclude reference
  – generate boolean
  – repeat boolean
  – severity keyword
  – specific-throttle boolean
  – specific-throttle-interval number
  – specific-throttle-limit number
  – throttle boolean
– ptp event keyword
  – apply-groups reference
  – apply-groups-exclude reference
  – generate boolean
  – repeat boolean
  – severity keyword
  – specific-throttle boolean
  – specific-throttle-interval number
  – specific-throttle-limit number
  – throttle boolean
– python event keyword
  – apply-groups reference
  – apply-groups-exclude reference
  – generate boolean
  – repeat boolean
  – severity keyword
  – specific-throttle boolean
  – specific-throttle-interval number
  – specific-throttle-limit number
  – throttle boolean
– radius event keyword
  – apply-groups reference
  – apply-groups-exclude reference
  – generate boolean
  – repeat boolean
  – severity keyword
  – specific-throttle boolean
  – specific-throttle-interval number
  – specific-throttle-limit number
  – throttle boolean
– rip event keyword
  – apply-groups reference
  – apply-groups-exclude reference
  – generate boolean
  – repeat boolean
  – severity keyword
  – specific-throttle boolean
  – specific-throttle-interval number
  – specific-throttle-limit number
  – throttle boolean
– ripng event keyword
  – apply-groups reference
  – apply-groups-exclude reference
  – generate boolean
  – repeat boolean
  – severity keyword
  – specific-throttle boolean
  – specific-throttle-interval number
  – specific-throttle-limit number
  – throttle boolean
– route-policy event keyword
  – apply-groups reference
  – apply-groups-exclude reference
  – generate boolean
```

configure log log-events route-policy repeat

- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **rpki event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **rsvp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **satellite event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **security event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **sflow event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **snmp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*

configure log log-events snmp specific-throttle-limit

- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **sr-mpls event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **srv6 event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **stp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **svcmgr event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **system event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **tls event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **tree-sid event** *keyword*
 - **apply-groups** *reference*

configure log log-events tree-sid apply-groups-exclude

```
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– user event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– video event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– vrtr event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– wlan-gw event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
– specific-throttle boolean
– specific-throttle-interval number
– specific-throttle-limit number
– throttle boolean
– wpp event keyword
– apply-groups reference
– apply-groups-exclude reference
– generate boolean
– repeat boolean
– severity keyword
```

configure log log-events wpp specific-throttle

```

- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- log-id string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- destination
- cli
- max-entries number
- console
- file reference
- memory
- max-entries number
- netconf
- max-entries number
- snmp
- max-entries number
- syslog reference
- filter reference
- netconf-stream string
- python-policy reference
- source
- change boolean
- debug boolean
- main boolean
- security boolean
- time-format keyword
- route-preference
- primary keyword
- secondary keyword
- services-all-events
- service reference
- snmp-trap-group string
- apply-groups reference
- apply-groups-exclude reference
- description string
- trap-target string
- address (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- description string
- notify-community string
- port number
- replay boolean
- security-level keyword
- version keyword
- syslog string
- address (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- description string
- facility keyword
- log-prefix (keyword | string)
- port number
- severity keyword
- tls-client-profile reference
- throttle-rate
- interval number
- limit number

```

3.23.1 log command descriptions

log

Synopsis	Enter the log context
Context	configure log
Tree	log
Introduced	16.0.R1
Platforms	All

accounting-policy [[policy-id](#)] *number*

Synopsis	Enter the accounting-policy list instance
Context	configure log accounting-policy <i>number</i>
Tree	accounting-policy
Introduced	16.0.R1
Platforms	All

[\[policy-id\]](#) *number*

Synopsis	Accounting policy unique ID
Context	configure log accounting-policy <i>number</i>
Tree	accounting-policy
Range	1 to 99
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the accounting policy
Context	configure log accounting-policy <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	This command controls the administrative state of the accounting policy.

When an accounting policy is disabled, no accounting data is written to the destination log ID. Counters in the billing data reflect totals, and not increments. When the policy is re-enabled, the counters include the data collected during the period the policy was administratively disabled.

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

align *boolean*

Synopsis	Align statistics collection interval to absolute time
Context	configure log accounting-policy <i>number</i> align <i>boolean</i>
Tree	align
Description	<p>When the align command is configured to true, statistics collection is aligned to the nearest interval within an hour. Statistics are generated when the absolute time can be divided by the collection-interval value, after which the collection interval continues. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:15, 15:30, 15:45, 16:00, 16:15, and so on. This supports synchronized statistics intervals and collection across multiple nodes in the network.</p> <p>When the align command is configured to false, statistics collection occurs immediately after the configuration has been committed. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:03, 15:18, 15:33, 15:48, 16:03, and so on.</p>
Default	false
Introduced	19.10.R1
Platforms	All

collection-interval *number*

Synopsis	Accounting collection interval
Context	configure log accounting-policy <i>number</i> collection-interval <i>number</i>
Tree	collection-interval
Range	1 to 120
Units	minutes
Introduced	16.0.R1
Platforms	All

custom-record

Synopsis	Enter the custom-record context
Context	configure log accounting-policy <i>number</i> custom-record
Tree	custom-record
Introduced	16.0.R1
Platforms	All

aa-specific

Synopsis	Enter the aa-specific context
Context	configure log accounting-policy <i>number</i> custom-record aa-specific
Tree	aa-specific
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-attributes

Synopsis	Enter the aa-sub-attributes context
Context	configure log accounting-policy <i>number</i> custom-record aa-specific aa-sub-attributes
Tree	aa-sub-attributes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile *boolean*

Synopsis	Include application profile to be exported
Context	configure log accounting-policy <i>number</i> custom-record aa-specific aa-sub-attributes app-profile <i>boolean</i>
Tree	app-profile
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-service-options *boolean*

Synopsis	Include application service options
Context	configure log accounting-policy number custom-record aa-specific aa-sub-attributes app-service-options <i>boolean</i>
Tree	app-service-options
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-counters

Synopsis	Enter the aa-sub-counters context
Context	configure log accounting-policy number custom-record aa-specific aa-sub-counters
Tree	aa-sub-counters
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

long-duration-flow-count *boolean*

Synopsis	Include the long duration flow count
Context	configure log accounting-policy number custom-record aa-specific aa-sub-counters long-duration-flow-count <i>boolean</i>
Tree	long-duration-flow-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

medium-duration-flow-count *boolean*

Synopsis	Include the medium duration flow
Context	configure log accounting-policy number custom-record aa-specific aa-sub-counters medium-duration-flow-count <i>boolean</i>
Tree	medium-duration-flow-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

short-duration-flow-count *boolean*

Synopsis	Include the short duration flow count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific aa-sub-counters short-duration-flow-count <i>boolean</i>
Tree	short-duration-flow-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

total-flow-duration *boolean*

Synopsis	Include the total flow duration count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific aa-sub-counters total-flow-duration <i>boolean</i>
Tree	total-flow-duration
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

total-flows-completed-count *boolean*

Synopsis	Include the total of completed flows count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific aa-sub-counters total-flows-completed-count <i>boolean</i>
Tree	total-flows-completed-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

from-aa-sub-counters

Synopsis	Enter the from-aa-sub-counters context
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters
Tree	from-aa-sub-counters

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-active-count *boolean*

Synopsis Include the active flows
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [aa-specific](#) [from-aa-sub-counters](#) [flows-active-count](#) *boolean*
Tree [flows-active-count](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-admitted-count *boolean*

Synopsis Include the admitted flows
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [aa-specific](#) [from-aa-sub-counters](#) [flows-admitted-count](#) *boolean*
Tree [flows-admitted-count](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-denied-count *boolean*

Synopsis Include the denied flows
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [aa-specific](#) [from-aa-sub-counters](#) [flows-denied-count](#) *boolean*
Tree [flows-denied-count](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forwarding-class *boolean*

Synopsis Include forwarding class

Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters forwarding-class <i>boolean</i>
Tree	forwarding-class
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-octet-count *boolean*

Synopsis	Include maximum throughput as measured in octet count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters max-throughput-octet-count <i>boolean</i>
Tree	max-throughput-octet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-packet-count *boolean*

Synopsis	Include maximum throughput as measured in packet count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters max-throughput-packet-count <i>boolean</i>
Tree	max-throughput-packet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-timestamp *boolean*

Synopsis	Include timestamp of the maximum throughput
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters max-throughput-timestamp <i>boolean</i>
Tree	max-throughput-timestamp
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octets-admitted-count *boolean*

Synopsis	Include the admitted octets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters octets-admitted-count <i>boolean</i>
Tree	octets-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octets-denied-count *boolean*

Synopsis	Include the denied octets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters octets-denied-count <i>boolean</i>
Tree	octets-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-admitted-count *boolean*

Synopsis	Include the admitted packets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters packets-admitted-count <i>boolean</i>
Tree	packets-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-denied-count *boolean*

Synopsis	Include the denied packets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters packets-denied-count <i>boolean</i>
Tree	packets-denied-count

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to-aa-sub-counters

Synopsis	Enter the to-aa-sub-counters context
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters
Tree	to-aa-sub-counters
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-active-count *boolean*

Synopsis	Include the active flows
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters flows-active-count <i>boolean</i>
Tree	flows-active-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-admitted-count *boolean*

Synopsis	Include the admitted flows
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters flows-admitted-count <i>boolean</i>
Tree	flows-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-denied-count *boolean*

Synopsis	Include the denied flows
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Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters flows-denied-count <i>boolean</i>
Tree	flows-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forwarding-class *boolean*

Synopsis	Include forwarding class
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters forwarding-class <i>boolean</i>
Tree	forwarding-class
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-octet-count *boolean*

Synopsis	Include maximum throughput as measured in octet count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters max-throughput-octet-count <i>boolean</i>
Tree	max-throughput-octet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-packet-count *boolean*

Synopsis	Include maximum throughput as measured in packet count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters max-throughput-packet-count <i>boolean</i>
Tree	max-throughput-packet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-timestamp *boolean*

Synopsis	Include timestamp of the maximum throughput
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters max-throughput-timestamp <i>boolean</i>
Tree	max-throughput-timestamp
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octets-admitted-count *boolean*

Synopsis	Include the admitted octets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters octets-admitted-count <i>boolean</i>
Tree	octets-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octets-denied-count *boolean*

Synopsis	Include the denied octets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters octets-denied-count <i>boolean</i>
Tree	octets-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-admitted-count *boolean*

Synopsis	Include the admitted packets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters packets-admitted-count <i>boolean</i>
Tree	packets-admitted-count

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-denied-count *boolean*

Synopsis	Include the denied packets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters packets-denied-count <i>boolean</i>
Tree	packets-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer [*id*] *number*

Synopsis	Enter the policer list instance
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i>
Tree	policer
Introduced	19.10.R1
Platforms	All

[id] *number*

Synopsis	Policer ID
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

e-counters

Synopsis	Enter the e-counters context
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Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters
Tree	e-counters
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-discarded-count *boolean*

Synopsis	Include the exceed profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-octets-discarded-count <i>boolean</i>
Tree	exceed-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-forwarded-count *boolean*

Synopsis	Include the exceed profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-octets-forwarded-count <i>boolean</i>
Tree	exceed-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-offered-count *boolean*

Synopsis	Include the exceed profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-octets-offered-count <i>boolean</i>
Tree	exceed-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-discarded-count *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-packets-discarded-count <i>boolean</i>
Tree	exceed-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-forwarded-count *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-packets-forwarded-count <i>boolean</i>
Tree	exceed-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-offered-count *boolean*

Synopsis	Include the exceed profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-packets-offered-count <i>boolean</i>
Tree	exceed-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-discarded-count *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-octets-discarded-count <i>boolean</i>
Tree	in-plus-profile-octets-discarded-count
Default	false

Introduced 19.10.R1
Platforms All

in-plus-profile-octets-forwarded-count *boolean*

Synopsis Include the in-plus profile octets forwarded count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-octets-forwarded-count](#) *boolean*
Tree [in-plus-profile-octets-forwarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-plus-profile-octets-offered-count *boolean*

Synopsis Include the in-plus profile octets offered count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-octets-offered-count](#) *boolean*
Tree [in-plus-profile-octets-offered-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-plus-profile-packets-discarded-count *boolean*

Synopsis Include the in-plus profile packets discarded count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-packets-discarded-count](#) *boolean*
Tree [in-plus-profile-packets-discarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-plus-profile-packets-forwarded-count *boolean*

Synopsis Include the in-plus profile packets forwarded count

Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-packets-forwarded-count <i>boolean</i>
Tree	in-plus-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-packets-offered-count *boolean*

Synopsis	Include the in-plus profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-packets-offered-count <i>boolean</i>
Tree	in-plus-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count

Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-packets-offered-count <i>boolean</i>
Tree	out-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncoloured octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false

Introduced 19.10.R1
Platforms All

uncoloured-packets-offered-count *boolean*

Synopsis Include the uncoloured packets offered count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#)
[uncoloured-packets-offered-count](#) *boolean*
Tree [uncoloured-packets-offered-count](#)
Default false
Introduced 19.10.R1
Platforms All

i-counters

Synopsis Enter the **i-counters** context
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#)
Tree [i-counters](#)
Introduced 19.10.R1
Platforms All

in-profile-octets-discarded-count *boolean*

Synopsis Include the in profile octets discarded count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [in-profile-octets-discarded-count](#) *boolean*
Tree [in-profile-octets-discarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-profile-octets-forwarded-count *boolean*

Synopsis Include the in profile octets forwarded count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [in-profile-octets-forwarded-count](#) *boolean*

Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count
Default	false

Introduced 19.10.R1
Platforms All

out-profile-packets-discarded-count *boolean*

Synopsis Include the out profile packets discarded count
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-discarded-count](#) *boolean*
Tree [out-profile-packets-discarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

out-profile-packets-forwarded-count *boolean*

Synopsis Include the out profile packets forwarded count
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-forwarded-count](#) *boolean*
Tree [out-profile-packets-forwarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

out-profile-packets-offered-count *boolean*

Synopsis Include the out profile packets offered count
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-offered-count](#) *boolean*
Tree [out-profile-packets-offered-count](#)
Default false
Introduced 19.10.R1
Platforms All

uncoloured-octets-offered-count *boolean*

Synopsis Include the uncoloured octets offered count

Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncoloured packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

queue [*id*] *number*

Synopsis	Enter the queue list instance
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	Queue ID for which counters are collected in the record
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i>
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

e-counters

Synopsis	Enter the e-counters context
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters
Tree	e-counters
Introduced	16.0.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count

Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

i-counters

Synopsis	Enter the i-counters context
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters
Tree	i-counters
Introduced	16.0.R1
Platforms	All

all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters all-octets-offered-count <i>boolean</i>
Tree	all-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

all-packets-offered-count *boolean*

Synopsis	Include all packets offered count
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Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters all-packets-offered-count <i>boolean</i>
Tree	all-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters high-octets-discarded-count <i>boolean</i>
Tree	high-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

high-octets-offered-count *boolean*

Synopsis	Include the high octets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters high-octets-offered-count <i>boolean</i>
Tree	high-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-packets-discarded-count *boolean*

Synopsis	Include the high packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters high-packets-discarded-count <i>boolean</i>
Tree	high-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

high-packets-offered-count *boolean*

Synopsis	Include the high packets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters high-packets-offered-count <i>boolean</i>
Tree	high-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-octets-discarded-count <i>boolean</i>
Tree	low-octets-discarded-count

Default	false
Introduced	16.0.R1
Platforms	All

low-octets-offered-count *boolean*

Synopsis	Include the low octets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-octets-offered-count <i>boolean</i>
Tree	low-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

low-packets-discarded-count *boolean*

Synopsis	Include the low packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-packets-discarded-count <i>boolean</i>
Tree	low-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-packets-offered-count *boolean*

Synopsis	Include the low packets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-packets-offered-count <i>boolean</i>
Tree	low-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false

Introduced 16.0.R1
Platforms All

ref-aa-specific-counter

Synopsis Enter the **ref-aa-specific-counter** context
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-aa-specific-counter](#)
Tree [ref-aa-specific-counter](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*

Synopsis Report a change to any counter
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-aa-specific-counter](#) [any](#) *boolean*
Tree [any](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ref-policer

Synopsis Enter the **ref-policer** context
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#)
Tree [ref-policer](#)
Introduced 19.10.R1
Platforms All

all

Synopsis Apply significant change to counters for all policers
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [all](#)
Tree [all](#)
Notes The following elements are part of a choice: **all** or **id**.

Introduced 19.10.R1
Platforms All

e-counters

Synopsis Enter the **e-counters** context
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#)
Tree [e-counters](#)
Introduced 19.10.R1
Platforms All

exceed-profile-octets-discarded-count *boolean*

Synopsis Include the exceed profile octets discarded count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#) [exceed-profile-octets-discarded-count](#) *boolean*
Tree [exceed-profile-octets-discarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

exceed-profile-octets-forwarded-count *boolean*

Synopsis Include the exceed profile octets forwarded count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#) [exceed-profile-octets-forwarded-count](#) *boolean*
Tree [exceed-profile-octets-forwarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

exceed-profile-octets-offered-count *boolean*

Synopsis Include the exceed profile octets offered count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#) [exceed-profile-octets-offered-count](#) *boolean*

Tree	exceed-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-discarded-count *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-packets-discarded-count <i>boolean</i>
Tree	exceed-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-forwarded-count *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-packets-forwarded-count <i>boolean</i>
Tree	exceed-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-offered-count *boolean*

Synopsis	Include the exceed profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-packets-offered-count <i>boolean</i>
Tree	exceed-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-discarded-count *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-octets-discarded-count <i>boolean</i>
Tree	in-plus-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-plus profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-octets-forwarded-count <i>boolean</i>
Tree	in-plus-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-offered-count *boolean*

Synopsis	Include the in-plus profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-octets-offered-count <i>boolean</i>
Tree	in-plus-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-packets-discarded-count *boolean*

Synopsis	Include the in-plus profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-packets-discarded-count <i>boolean</i>
Tree	in-plus-profile-packets-discarded-count
Default	false

Introduced 19.10.R1
Platforms All

in-plus-profile-packets-forwarded-count *boolean*

Synopsis Include the in-plus profile packets forwarded count
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-plus-profile-packets-forwarded-count](#) *boolean*
Tree [in-plus-profile-packets-forwarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-plus-profile-packets-offered-count *boolean*

Synopsis Include the in-plus profile packets offered count
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-plus-profile-packets-offered-count](#) *boolean*
Tree [in-plus-profile-packets-offered-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-profile-octets-discarded-count *boolean*

Synopsis Include the in profile octets discarded count
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-profile-octets-discarded-count](#) *boolean*
Tree [in-profile-octets-discarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-profile-octets-forwarded-count *boolean*

Synopsis Include the in profile octets forwarded count

Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count

Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-packets-offered-count <i>boolean</i>
Tree	out-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncoloured octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncoloured packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

i-counters

Synopsis	Enter the i-counters context
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters
Tree	i-counters
Introduced	19.10.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count

Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy number custom-record ref-policer i-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy number custom-record ref-policer i-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy number custom-record ref-policer i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-packets-offered-count <i>boolean</i>
Tree	out-profile-packets-offered-count
Default	false

Introduced 19.10.R1
Platforms All

uncoloured-octets-offered-count *boolean*

Synopsis Include the uncoloured octets offered count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [i-counters](#)
[uncoloured-octets-offered-count](#) *boolean*
Tree [uncoloured-octets-offered-count](#)
Default false
Introduced 19.10.R1
Platforms All

uncoloured-packets-offered-count *boolean*

Synopsis Include the uncoloured packets offered count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [i-counters](#)
[uncoloured-packets-offered-count](#) *boolean*
Tree [uncoloured-packets-offered-count](#)
Default false
Introduced 19.10.R1
Platforms All

id *reference*

Synopsis Policer ID
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [id](#) *reference*
Tree [id](#)
Reference **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number*
Notes The following elements are part of a choice: **all** or **id**.
Introduced 19.10.R1
Platforms All

ref-queue

Synopsis Enter the **ref-queue** context

Context	configure log accounting-policy number custom-record ref-queue
Tree	ref-queue
Description	Commands in this context configure reference queue counters for significant change only reporting. The custom record is only generated when the change in the sum of all queue and policer reference counters equals or exceeds the configured (non-zero) significant change value.
Introduced	16.0.R1
Platforms	All

all

Synopsis	Apply significant change to counters for all queues
Context	configure log accounting-policy number custom-record ref-queue all
Tree	all
Notes	The following elements are part of a choice: all or id .
Introduced	16.0.R1
Platforms	All

e-counters

Synopsis	Enter the e-counters context
Context	configure log accounting-policy number custom-record ref-queue e-counters
Tree	e-counters
Introduced	16.0.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	configure log accounting-policy number custom-record ref-queue e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count

Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

i-counters

Synopsis	Enter the i-counters context
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters
Tree	i-counters
Introduced	16.0.R1
Platforms	All

all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters all-octets-offered-count <i>boolean</i>
Tree	all-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

all-packets-offered-count *boolean*

Synopsis	Include all packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters all-packets-offered-count <i>boolean</i>
Tree	all-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters high-octets-discarded-count <i>boolean</i>
Tree	high-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

high-octets-offered-count *boolean*

Synopsis	Include the high octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters high-octets-offered-count <i>boolean</i>
Tree	high-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-packets-discarded-count *boolean*

Synopsis	Include the high packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters high-packets-discarded-count <i>boolean</i>
Tree	high-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

high-packets-offered-count *boolean*

Synopsis	Include the high packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters high-packets-offered-count <i>boolean</i>
Tree	high-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count

Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-octets-discarded-count <i>boolean</i>
Tree	low-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-octets-offered-count *boolean*

Synopsis	Include the low octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-octets-offered-count <i>boolean</i>
Tree	low-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

low-packets-discarded-count *boolean*

Synopsis	Include the low packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-packets-discarded-count <i>boolean</i>
Tree	low-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-packets-offered-count *boolean*

Synopsis	Include the low packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-packets-offered-count <i>boolean</i>
Tree	low-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false

Introduced 16.0.R1
Platforms All

uncoloured-octets-offered-count *boolean*

Synopsis Include the uncolored octets offered count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [i-counters](#)
[uncoloured-octets-offered-count](#) *boolean*
Tree [uncoloured-octets-offered-count](#)
Default false
Introduced 16.0.R1
Platforms All

uncoloured-packets-offered-count *boolean*

Synopsis Include the uncolored packets offered count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [i-counters](#)
[uncoloured-packets-offered-count](#) *boolean*
Tree [uncoloured-packets-offered-count](#)
Default false
Introduced 16.0.R1
Platforms All

id *reference*

Synopsis Queue ID
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [id](#) *reference*
Tree [id](#)
Reference **configure** [log accounting-policy](#) *number* [custom-record](#) [queue](#) *number*
Notes The following elements are part of a choice: **all** or **id**.
Introduced 16.0.R1
Platforms All

significant-change *number*

Synopsis Significant change required to generate the record

Context	configure log accounting-policy <i>number</i> custom-record significant-change <i>number</i>
Tree	significant-change
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

default *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default accounting policy for all objects that do not have an accounting policy
Context	configure log accounting-policy <i>number</i> default <i>boolean</i>
Tree	default
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log accounting-policy <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination

Synopsis	Enter the destination context
Context	configure log accounting-policy <i>number</i> destination
Tree	destination
Introduced	16.0.R1
Platforms	All

file reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Unique file identifier when creating a log or accounting file
Context	configure log accounting-policy number destination file reference
Tree	file
Reference	configure log file string
Notes	The following elements are part of a choice: file or null .
Introduced	16.0.R1
Platforms	All

null



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Indicate no destination for accounting policy records
Context	configure log accounting-policy number destination null
Tree	null
Notes	The following elements are part of a choice: file or null .
Introduced	16.0.R1
Platforms	All

include-system-info *boolean*

Synopsis	Include system information in accounting policy records
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Context	configure log accounting-policy <i>number</i> include-system-info <i>boolean</i>
Tree	include-system-info
Default	false
Introduced	16.0.R1
Platforms	All

record *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Accounting policy record type
Context	configure log accounting-policy <i>number</i> record <i>keyword</i>
Tree	record
Description	<p>This command adds the accounting record type to the accounting policy that is forwarded to the configured accounting file. A record name can only be used in one accounting policy. To obtain a list of all record types that can be configured, use the show log accounting-records command.</p> <p>To configure an accounting policy for access ports, select a service record (for example, service-ingress-octets). To change the record name to another service record, configure the new record name with this command.</p> <p>When configuring an accounting policy for network ports, select a network record. To change the record name to another network record, configure the new record name with this command.</p> <p>Note: AA, video, and subscriber records are not applicable to the 7950 XRS.</p>
Options	<p>service-ingress-octets, service-egress-octets, service-ingress-packets, service-egress-packets, network-ingress-octets, network-egress-octets, network-ingress-packets, network-egress-packets, compact-service-ingress-octets, combined-service-ingress, combined-network-ing-egr-octets, combined-service-ing-egr-octets, complete-service-ingress-egress, combined-sdp-ingress-egress, complete-sdp-ingress-egress, complete-subscriber-ingress-egress, aa-protocol, aa-application, aa-app-group, aa-subscriber-protocol, aa-subscriber-application, custom-record-subscriber, custom-record-service, custom-record-aa-sub, queue-group-octets, queue-group-packets, combined-queue-group, combined-mpls-lsp-ingress, combined-mpls-lsp-egress, combined-ldp-lsp-egress, saa, video, aa-performance, complete-ethernet-port, extended-service-ingress-egress, complete-network-ing-egr, aa-partition, complete-pm, aa-admit-deny, network-interface-ingress-octets,</p>

network-interface-egress-octets, network-interface-ingress-packets,
network-interface-egress-packets, combined-network-interface-ingress,
combined-network-interface-egress, complete-network-interface-ing-egr,
access-egress-octets, access-egress-packets, combined-access-egress,
combined-network-egress, complete-service-activation-test, combined-mpls-srte-egress

Introduced 16.0.R1

Platforms All

app-route-notifications

Synopsis Enter the **app-route-notifications** context

Context **configure** [log app-route-notifications](#)

Tree [app-route-notifications](#)

Introduced 16.0.R1

Platforms All

cold-start-wait *number*

Synopsis Time delay before notifying specific CPM applications for available route

Context **configure** [log app-route-notifications cold-start-wait *number*](#)

Tree [cold-start-wait](#)

Range 1 to 300

Introduced 16.0.R1

Platforms All

route-recovery-wait *number*

Synopsis Time delay before notifying specific CPM applications after route recovery or change

Context **configure** [log app-route-notifications route-recovery-wait *number*](#)

Tree [route-recovery-wait](#)

Range 1 to 100

Introduced 16.0.R1

Platforms All

encryption-key *string*

Synopsis Secret key for the encryption of log files

Context	configure log encryption-key <i>string</i>
Tree	encryption-key
Description	This command specifies the encryption key used by AES-256-CTR for log file encryption. The encryption key is used for all local log files on the system.
String Length	1 to 71
Introduced	22.7.R1
Platforms	All

event-damping *boolean*

Synopsis	Allow event damping algorithm to suppress QoS or filter change events
Context	configure log event-damping <i>boolean</i>
Tree	event-damping
Default	true
Introduced	16.0.R1
Platforms	All

event-handling

Synopsis	Enter the event-handling context
Context	configure log event-handling
Tree	event-handling
Introduced	16.0.R1
Platforms	All

handler [[name](#)] *string*

Synopsis	Enter the handler list instance
Context	configure log event-handling handler <i>string</i>
Tree	handler
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	EHS handler name
Context	configure log event-handling handler <i>string</i>
Tree	handler
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS handler
Context	configure log event-handling handler <i>string admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-handling handler <i>string description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-handling handler <i>string entry</i> <i>number</i>
Tree	entry
Max. Instances	1500

Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis EHS handler entry ID
Context **configure log event-handling handler** *string entry number*
Tree *entry*
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS handler entry
Context **configure log event-handling handler** *string entry number admin-state keyword*
Tree *admin-state*
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure log event-handling handler** *string entry number description string*
Tree *description*
String Length 1 to 80
Introduced 16.0.R1
Platforms All

min-delay *number*

Synopsis Minimum delay between subsequent executions of the script policy

Context	configure log event-handling handler <i>string</i> entry <i>number</i> min-delay <i>number</i>
Tree	min-delay
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

script-policy

Synopsis	Enable the script-policy context
Context	configure log event-handling handler <i>string</i> entry <i>number</i> script-policy
Tree	script-policy
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Script policy name
Context	configure log event-handling handler <i>string</i> entry <i>number</i> script-policy <i>name</i> <i>reference</i>
Tree	name
Reference	configure system script-control script-policy <i>string</i> <i>owner</i> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

owner *reference*

Synopsis	Script policy owner
Context	configure log event-handling handler <i>string</i> entry <i>number</i> script-policy <i>owner</i> <i>reference</i>
Tree	owner
Default	TIMOS CLI
Reference	configure system script-control script-policy <i>string</i> <i>owner</i> <i>string</i>
Introduced	16.0.R1
Platforms	All

event-trigger

Synopsis	Enter the event-trigger context
Context	configure log event-trigger
Tree	event-trigger
Introduced	16.0.R1
Platforms	All

adp event keyword

Synopsis	Enter the adp list instance
Context	configure log event-trigger adp event keyword
Tree	adp
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger adp event keyword
Tree	adp
Options	tmnxDiscoveryEndNotify, tmnxDiscoveryCellularReq
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger adp event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

description *string*

Synopsis	Text description
Context	configure log event-trigger adp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

debounce

Synopsis Enter the **debounce** context

Context **configure log event-trigger adp event keyword entry number debounce**

Tree [debounce](#)

Introduced 16.0.R1

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

time number

Synopsis Time window for events for EHS to trigger a response

Context **configure log event-trigger adp event keyword entry number debounce time number**

Tree [time](#)

Range 1 to 604800

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

value number

Synopsis Occurrences in time interval to trigger EHS response

Context **configure log event-trigger adp event keyword entry number debounce value number**

Tree [value](#)

Range 2 to 15

Introduced 16.0.R1

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

description string

Synopsis Text description

Context **configure log event-trigger adp event keyword entry number description string**

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

filter reference

Synopsis Log filter for EHS event trigger entry
Context **configure log event-trigger adp event** *keyword entry number filter reference*
Tree [filter](#)
Reference **configure log filter** *string*
Introduced 16.0.R1
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

handler reference

Synopsis Event handler for EHS event trigger entry
Context **configure log event-trigger adp event** *keyword entry number handler reference*
Tree [handler](#)
Reference **configure log event-handling handler** *string*
Introduced 16.0.R1
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

application-assurance event keyword

Synopsis Enter the **application-assurance** list instance
Context **configure log event-trigger application-assurance event** *keyword*
Tree [application-assurance](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log event-trigger application-assurance event** *keyword*
Tree [application-assurance](#)

Options	<p>tmnxBsxIlsaAaGrpFailureV2, tmnxBsxIlsaAaGrpFailureClearV2, tmnxBsxIlsaAaGrpNonRedundantV2, tmnxBsxIlsaAaGrpSwitchover, tmnxBsxIlsaAaGrpFlowFull, tmnxBsxIlsaAaGrpFlowFullClear, tmnxBsxIlsaAaSubLoadBalance, tmnxBsxIlsaAaGrpCapCostThres, tmnxBsxIlsaAaGrpCapCostThresClear, tmnxBsxIlsaAaSubscribersUnassigned, tmnxBsxIlsaAaSubscriberAcctDataLoss, tmnxBsxIlsaAaSubPolResExceeded, tmnxBsxIlsaAaSubPolResExceededClear, tmnxBsxIlsaAaGrpFlowSetup, tmnxBsxIlsaAaGrpFlowSetupClear, tmnxBsxIlsaAaGrpPacketRate, tmnxBsxIlsaAaGrpPacketRateClear, tmnxBsxIlsaAaGrpBitRate, tmnxBsxIlsaAaGrpBitRateClear, tmnxBsxTransIpPolAaSubCreated, tmnxBsxTransIpPolAaSubDeleted, tmnxBsxTransIpPolRadCoAAudit, tmnxBsxTransIpPolRadCoAError, tmnxBsxTransIpPolRadDiscError, tmnxBsxTransIpPolDhcpAddWarning, tmnxBsxTransIpPolDhcpDelWarning, tmnxBsxIlsaAaGrpFmSbWaSBufOvld, tmnxBsxIlsaAaGrpFmSbWaSBufOvldClr, tmnxBsxIlsaAaGrpToSbWaSBufOvld, tmnxBsxIlsaAaGrpToSbWaSBufOvldClr, tmnxBsxIlsaAaGrpOvldCutthru, tmnxBsxIlsaAaGrpOvldCutthruClr, tmnxBsxTransIpPersistenceWarn, tmnxBsxAarPlnstOperStateChanged, tmnxBsxAarPlnstStateChanged, tmnxBsxRadApFailure, tmnxBsxRadApServOperStateChange, tmnxBsxMobileSubModifyFailure, tmnxBsxRadApIntrmUpdateSkipped, tmnxBsxHttpUrlParamLimitExceeded, tmnxBsxUrlFilterOperStateChange, tmnxBsxSubModifyFailure, tmnxBsxDnsIpCacheFull, tmnxBsxDnsIpCacheFullClear, tmnxBsxUrlListUpdate, tmnxBsxUrlListFailure, tmnxBsxIlsaAaTimFileProcFailure, tmnxBsxStatTcaThreshCrossed, tmnxBsxStatTcaThreshCrossedClear, tmnxBsxStatPolcrTcaThreshCrossed, tmnxBsxStatPolcrTcaThreshCrClear, tmnxBsxStatFtrTcaThreshCrossed, tmnxBsxStatFtrTcaThreshCrClear, tmnxBsxStatFtrEnTcaThreshCrossed, tmnxBsxStatFtrEnTcaThreshCrClear, tmnxBsxTransIpPolDiamGxError, tmnxBsxDatapathCpuUsage, tmnxBsxDatapathCpuUsageClear, tmnxBsxTcpValTcaCrossed, tmnxBsxTcpValTcaCrossedClear, tmnxBsxCertProfileOperStateChngd, tmnxBsxSubQuarantined, tmnxBsxSubQuarantinedClear, tmnxBsxUrlFtrWebServOprStateChg</p>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger application-assurance event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [log event-trigger application-assurance event](#) *keyword* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger application-assurance event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger application-assurance event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger application-assurance event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger application-assurance event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger application-assurance event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger application-assurance event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger application-assurance event <i>keyword</i> entry number description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger application-assurance event <i>keyword</i> entry number filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger application-assurance event <i>keyword</i> entry number handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aps event *keyword*

Synopsis	Enter the aps list instance
Context	configure log event-trigger aps event <i>keyword</i>
Tree	aps
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger](#) [aps event](#) *keyword*

Tree [aps](#)

Options [apsEventSwitchover](#), [apsEventModeMismatch](#), [apsEventChannelMismatch](#), [apsEventPSBF](#), [apsEventFEPLF](#), [tApsModeMismatchClear](#), [tApsChannelMismatchClear](#), [tApsPSBFClear](#), [tApsFEPLFClear](#), [tApsLocalSwitchCommandSet](#), [tApsLocalSwitchCommandClear](#), [tApsRemoteSwitchCommandSet](#), [tApsRemoteSwitchCommandClear](#), [tApsMcApsCtlLinkStateChange](#), [tApsChanTxLaisStateChange](#), [tApsPrimaryChannelChange](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger](#) [aps event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis Text description

Context **configure** [log event-trigger](#) [aps event](#) *keyword* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

entry [id] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger aps event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger aps event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger aps event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger aps event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger aps event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger aps event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	configure log event-trigger aps event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger aps event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger aps event](#) *keyword* [entry number handler reference](#)
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

atm event *keyword*

Synopsis Enter the **atm** list instance
Context **configure** [log event-trigger atm event](#) *keyword*
Tree [atm](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger atm event](#) *keyword*
Tree [atm](#)
Options tAtmTcSubLayerDown, tAtmTcSubLayerClear, atmVclStatusChange, atmVplStatusChange, atmVtlStatusChange, atmIfcStatusChange, tAtmPlcpSubLayerDown, tAtmPlcpSubLayerClear, tAtmEpOutOfPeerVpiOrVciRange, tAtmMaxPeerVccsExceeded, tAtmMaxPeerVpcsExceeded, tAtmIlliLinkStatusChange, atmIlliPeerVclStatusChange, atmIlliPeerVplStatusChange
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context	configure log event-trigger atm event <i>keyword admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

description *string*

Synopsis	Text description
Context	configure log event-trigger atm event <i>keyword description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger atm event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger atm event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger atm event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger atm event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger atm event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger atm event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

description *string*

Synopsis	Text description
Context	configure log event-trigger atm event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger atm event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger atm event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

auto-prov [event](#) *keyword*

Synopsis	Enter the auto-prov list instance
Context	configure log event-trigger auto-prov event <i>keyword</i>
Tree	auto-prov
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger auto-prov event <i>keyword</i>
Tree	auto-prov
Options	autoNodeProv
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger auto-prov event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger auto-prov event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1

Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger auto-prov event](#) *keyword entry number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger auto-prov event](#) *keyword entry number admin-state keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure** [log event-trigger auto-prov event](#) *keyword entry number debounce*
Tree [debounce](#)
Introduced 16.0.R1
Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure** [log event-trigger auto-prov event](#) *keyword entry number debounce time number*

Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

bfd event *keyword*

Synopsis	Enter the bfd list instance
Context	configure log event-trigger bfd event <i>keyword</i>
Tree	bfd
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger bfd event <i>keyword</i>
Tree	bfd
Options	tmnxBfdOnLspSessDown, tmnxBfdOnLspSessUp, tmnxBfdOnLspSessDeleted, tmnxBfdOnLspSessProtChange, tmnxBfdOnLspSessNoCpmNpResources, tmnxBfdOnLspSessNoTailResources, tmnxBfdOnLspExtSessDown, tmnxBfdOnLspExtSessUp, tmnxBfdOnLspExtSessDeleted, tmnxBfdOnLspExtSessProtChange, tmnxBfdOnLspExtSessNoCpmNpResrcs
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger bfd event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger bfd event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger bfd event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger bfd event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger bfd event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger bfd event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger bfd event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger bfd event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger bfd event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger bfd event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger bfd event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

bgp event *keyword*

Synopsis	Enter the bgp list instance
Context	configure log event-trigger bgp event <i>keyword</i>
Tree	bgp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger bgp event <i>keyword</i>
Tree	bgp
Options	sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError, tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tmnxBmpSessionStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger bgp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger bgp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

entry [id] *number*

Synopsis Enter the **entry** list instance
Context **configure log event-trigger bgp event** *keyword entry number*
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure log event-trigger bgp event** *keyword entry number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure log event-trigger bgp event** *keyword entry number admin-state keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger bgp event** *keyword entry number debounce*
Tree [debounce](#)

Introduced 16.0.R1
Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure log event-trigger bgp event** *keyword entry number debounce time number*
Tree [time](#)
Range 1 to 604800
Units seconds
Introduced 16.0.R1
Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure log event-trigger bgp event** *keyword entry number debounce value number*
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure log event-trigger bgp event** *keyword entry number description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure log event-trigger bgp event** *keyword entry number filter reference*

Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger bgp event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

bier event *keyword*

Synopsis	Enter the bier list instance
Context	configure log event-trigger bier event <i>keyword</i>
Tree	bier
Introduced	19.5.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger bier event <i>keyword</i>
Tree	bier
Options	vRtrBierBfrIdCollision, vRtrBierMtMismatch, vRtrBierSubDomainMismatch, vRtrBierUnsupportedNhop
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger bier event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger bier event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger bier event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	19.5.R1
Platforms	All

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger bier event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger bier event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger bier event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	19.5.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger bier event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	19.5.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger bier event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15
Introduced	19.5.R1

Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger bier event](#) *keyword entry number description string*
Tree [description](#)
String Length 1 to 80
Introduced 19.5.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger bier event](#) *keyword entry number filter reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 19.5.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger bier event](#) *keyword entry number handler reference*
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 19.5.R1
Platforms All

calltrace [event](#) *keyword*

Synopsis Enter the **calltrace** list instance
Context **configure** [log event-trigger calltrace event](#) *keyword*
Tree [calltrace](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger](#) [calltrace event](#) *keyword*
Tree [calltrace](#)
Options tmnxCallTraceMaxFilesNumReached, tmnxCallTraceLocSizeLimitReached, calltraceDebugEvent
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger](#) [calltrace event](#) *keyword* [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [log event-trigger](#) [calltrace event](#) *keyword* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context	configure log event-trigger calltrace event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger calltrace event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger calltrace event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger calltrace event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger calltrace event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger calltrace event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger calltrace event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger calltrace event keyword entry number filter reference
Tree	filter
Reference	configure log filter string

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger calltrace event](#) *keyword* [entry number handler reference](#)
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd [event](#) *keyword*

Synopsis Enter the **cflowd** list instance
Context **configure** [log event-trigger cflowd event](#) *keyword*
Tree [cflowd](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger cflowd event](#) *keyword*
Tree [cflowd](#)
Options tmnCflowdCreateFailure, tmnCflowdStateChange, tmnCflowdFlowCreateFailure, tmnCflowdPacketTxFailure
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger cflowd event](#) *keyword* [admin-state](#) *keyword*

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger cflowd event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger cflowd event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger cflowd event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger cflowd event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger cflowd event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger cflowd event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger cflowd event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger cflowd event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger cflowd event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger cflowd event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

chassis [event](#) *keyword*

Synopsis	Enter the chassis list instance
Context	configure log event-trigger chassis event <i>keyword</i>
Tree	chassis
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger chassis event <i>keyword</i>
Tree	chassis
Options	tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSynclftimingHoldover, tmnxEqSynclftimingHoldoverClear, tmnxEqSynclftimingRef1Alarm, tmnxEqSynclftimingRef1AlarmClear, tmnxEqSynclftimingRef2Alarm, tmnxEqSynclftimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSynclftimingBITSAlarm, tmnxEqSynclftimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded, tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete, tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange, tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent, tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm, tmnxEqMdaSyncENotCompatible, tmnxIPseclsaGrpActivelsaChgd, tmnxEqCardPChipMemoryEvent, tmnxIPseclsaGrpUnableToSwitch, tmnxIPseclsaGrpTnlLowWMark, tmnxIPseclsaGrpTnlHighWMark, tmnxIPseclsaGrpTnlMax, tmnxEqSynclftimingRef1Quality, tmnxEqSynclftimingRef2Quality, tmnxEqSynclftimingBITSQuality, tmnxEqSynclftimingBITS2Quality, tmnxEqSynclftimingRefSwitch, tmnxEqSynclftimingBITS2Alarm, tmnxEqSynclftimingBITS2AlarmClr, tmnxEqSynclftimingBITSOutRefChg, tmnxEqCardPChipCamEvent, tmnxEqSynclftimingSystemQuality, tmnxEqHwEnhancedCapability, tmnxEqSynclftimingPTPQuality, tmnxEqSynclftimingPTPAlarm, tmnxEqSynclftimingPTPAlarmClr, tmnxPeFirmwareVersionWarning, tmnxMDAIsaTunnelGroupChange, tmnxEqPowerCapacityExceeded, tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity, tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState, tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent, tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent, tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent, tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear, tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear, tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear, tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm, tmnxEqProvPowerCapacityAlmClr, tmnxPlcyAcctStatsPoolExcResource, tmnxPlcyAcctStatsPoolLowResource, tmnxPlcyAcctStatsEventOvrflwClr, tmnxPlcyAcctStatsEventOvrflw, tmnxlomResHighLimitReached, tmnxlomResExhausted, tmnxlomResStateClr, tmnxlomEventOverflow, tmnxlomEventOverflowClr, tmnxEqDataPathFailureProtImpact, tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail, tmnxEqMdaIngrXplError, tmnxSynclftimBITS2048khzUnsup, tmnxSynclftimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise, tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp,

tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail,
tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail,
tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail,
tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail,
tmnxEqPhysChassPowerSupOutFailCl, tmnxEqPhysChassisFanFailure,
tmnxEqPhysChassisFanFailureClear, tIPseclsaMemLowWatermark,
tIPseclsaMemHighWatermark, tIPseclsaMemMax, tmnxCpmMemSizeMismatch,
tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir,
tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect,
tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed,
tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail,
tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear,
tmnxPhysChassisPCMInputFeed, tmnxPhysChassisPCMInputFeedClr,
tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear,
tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload,
tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload,
tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload,
tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload,
tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload,
tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload,
tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload,
tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload,
tmnxIPv6CpmFilterOverloadClear, tmnxBluetoothModuleConnectionChg,
tmnxGnssAcquiringFix, tmnxGnssAcquiredFix, tmnxPhysChassisPMOutFail,
tmnxPhysChassisPMOutFailClr, tmnxPhysChassisPMInputFeed,
tmnxPhysChassisPMInputFeedClr, tmnxPhysChassisFilterDoorOpen,
tmnxPhysChassisFilterDoorClosed, tmnxPhysChassisPMOverTemp,
tmnxPhysChassisPMOverTempClr, tmnxEqFpgaSoftError,
tmnxEqSynclfTimingSyncEQuality, tmnxEqSynclfTimingSyncE2Quality,
tmnxEqSynclfTimingSyncEAlarm, tmnxEqSynclfTimingSyncEAlarmClr,
tmnxEqSynclfTimingSyncE2Alarm, tmnxEqSynclfTimingSyncE2AlarmClr,
tmnxEqHwEventDetected, tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered,
tmnxEsaConnected, tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared,
tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved,
tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark,
tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch,
tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr,
tmnxEqSynclfTimingGnssQuality, tmnxEqSynclfTimingGnss2Quality,
tmnxEqSynclfTimingGnssAlarm, tmnxEqSynclfTimingGnss2Alarm,
tmnxEqSynclfTimingGnssAlarmClr, tmnxEqSynclfTimingGnss2AlarmClr,
tmnxEsaFirmwareUpgradeStarted, tmnxPlcyAcctPlcrPoolExcResource,
tmnxPlcyAcctPlcrPoolLowResource, tChassisAirflowDirMismatch,
tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch,
tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup,
tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw,
tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared,
tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear,
tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear,
tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull,
tmnxIPv6FilterEgrNearFullClear, tmnxEsaHwStatusDegraded,
tmnxEsaHwStatusDegradedClr, tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr,

tmnxEsaHwPwrSup1Degraded, tmnxEsaHwPwrSup1DegradedClr,
tmnxEsaHwPwrSup1Failed, tmnxEsaHwPwrSup1FailedClr,
tmnxEsaHwPwrSup2Degraded, tmnxEsaHwPwrSup2DegradedClr,
tmnxEsaHwPwrSup2Failed, tmnxEsaHwPwrSup2FailedClr,
tmnxEsaHwFanBankNonRedun, tmnxEsaHwFanBankNonRedunClr,
tmnxEsaHwFanBankFailRedun, tmnxEsaHwFanBankFailRedunClr,
tmnxEsaHwFanStatusDegraded, tmnxEsaHwFanStatusDegradedClr,
tmnxEsaHwFanStatusFailed, tmnxEsaHwFanStatusFailedClr,
tmnxEsaHwPwrSupMismatch, tmnxEsaHwPwrSupMismatchClr,
tmnxEsaHwPwrSupBankNonRedun, tmnxEsaHwPwrSupBankNonRedunClr,
tmnxEsaHwPwrSupBankFailRedun, tmnxEsaHwPwrSupBankFailRedunClr,
tmnxEsaHwTemperatureDegraded, tmnxEsaHwTemperatureDegradedClr,
tmnxEsaHwTemperatureFailed, tmnxEsaHwTemperatureFailedClr,
tmnxSasAlarminput1StateChanged, tmnxSasAlarminput2StateChanged,
tmnxSasAlarminput3StateChanged, tmnxSasAlarminput4StateChanged,
tmnxAlarmInputVoltageFailure, tmnxlomRsrcUsageHighLimitReached,
tmnxlomRsrcUsageExhausted, tmnxlomRsrcUsageRecovered,
tmnxlomRsrcUserOversubscribed, tmnxlomRsrcUserOversubscribedClr,
tmnxlomRsrcEventOverflow, tmnxlomRsrcEventOverflowClr,
tmnxlomRsrcOwnerOversubscribed, tmnxlomRsrcOwnerOversubscribedClr,
tmnxInterChassisCommsDown, tmnxInterChassisCommsUp,
tmnxCpmlcPortDown, tmnxCpmlcPortUp, tmnxCpmlcPortSFFInserted,
tmnxCpmlcPortSFFRemoved, tmnxCpmANoLocallcPort, tmnxCpmBNoLocallcPort,
tmnxCpmALocallcPortAvail, tmnxCpmBLocallcPortAvail, CpmlcPortSFFStatusFailure,
CpmlcPortSFFStatusDDMCorrupt, CpmlcPortSFFStatusReadError,
CpmlcPortSFFStatusUnsupported, tmnxCpmlcPortDDMFailure,
tmnxCpmlcPortDDMClear, tmnxSfmlcPortDown, tmnxSfmlcPortUp,
tmnxSfmlcPortSFFInserted, tmnxSfmlcPortSFFRemoved, SfmlcPortSFFStatusFailure,
SfmlcPortSFFStatusDDMCorrupt, SfmlcPortSFFStatusReadError,
SfmlcPortSFFStatusUnsupported, tmnxSfmlcPortDDMFailure,
tmnxSfmlcPortDDMClear, tmnxSfmlcPortDegraded, tmnxSfmlcPortDegradedClear,
tmnxCardResMacFdbHighUsgSet, tmnxCardResMacFdbHighUsgClr,
tmnxPowerShelfInputPwrModeSwitch, tmnxPowerShelfCommsDown,
tmnxPowerShelfCommsUp, tmnxPowerShelfOutputStatusSwitch,
tmnxPowerShelfOutputStatusDown, tmnxPowerShelfOutputStatusUp

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state keyword

Synopsis Administrative state of the EHS event trigger

Context **configure** log event-trigger chassis event keyword **admin-state** keyword

Tree **admin-state**

Default disable

Options enable, disable

Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger chassis event](#) *keyword* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger chassis event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger chassis event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger chassis event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger chassis event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger chassis event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger chassis event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
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Context	configure log event-trigger chassis event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger chassis event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger chassis event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

debug event keyword

Synopsis	Enter the debug list instance
Context	configure log event-trigger debug event keyword
Tree	debug
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	configure log event-trigger debug event <i>keyword</i>
Tree	debug
Options	traceEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger debug event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger debug event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger debug event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger debug event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger debug event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger debug event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger debug event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure** [log event-trigger debug event keyword entry number debounce value number](#)
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger debug event keyword entry number description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger debug event keyword entry number filter reference](#)
Tree [filter](#)
Reference **configure** [log filter string](#)
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger debug event keyword entry number handler reference](#)
Tree [handler](#)
Reference **configure** [log event-handling handler string](#)

Introduced	16.0.R1
Platforms	All

dhcp event keyword

Synopsis	Enter the dhcp list instance
Context	configure log event-trigger dhcp event keyword
Tree	dhcp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger dhcp event keyword
Tree	dhcp
Options	svcDHCPLeaseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLeaseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLeaseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLeaseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLeaseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError, tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError, tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded, tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni, tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet, tmnxVRtrDHCP6ClientMacUnresolved, sapDHCPLeaseStateMobilityError, sdpBindDHCPLeaseStateMobilityErr, svcDHCPMiscellaneousProblem, sapStatHost6DynMacConflict
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger dhcp event keyword admin-state keyword
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger dhcp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger dhcp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger dhcp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger dhcp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

dhcps [event](#) *keyword*

Synopsis	Enter the dhcps list instance
Context	configure log event-trigger dhcps event <i>keyword</i>
Tree	dhcps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger dhcps event keyword
Tree	dhcps
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange, tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong, tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange, tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPIThTooLowV6, tmnxDhcpSvrPIThDepletedV6, tmnxDhcpSvrPfxThTooLowV6, tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired, tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger dhcps event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure log event-trigger dhcps event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis Enter the **entry** list instance
Context **configure log event-trigger dhcpd event** *keyword entry number*
Tree [entry](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure log event-trigger dhcpd event** *keyword entry number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure log event-trigger dhcpd event** *keyword entry number admin-state keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger dhcpd event** *keyword entry number debounce*
Tree [debounce](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time number

Synopsis Time window for events for EHS to trigger a response
Context **configure log event-trigger dhcp event keyword entry number debounce time number**
Tree [time](#)
Range 1 to 604800
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis Occurrences in time interval to trigger EHS response
Context **configure log event-trigger dhcp event keyword entry number debounce value number**
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis Text description
Context **configure log event-trigger dhcp event keyword entry number description string**
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis Log filter for EHS event trigger entry
Context **configure log event-trigger dhcp event keyword entry number filter reference**

Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger dhcps event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter event *keyword*

Synopsis	Enter the diameter list instance
Context	configure log event-trigger diameter event <i>keyword</i>
Tree	diameter
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger diameter event <i>keyword</i>
Tree	diameter
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger diameter event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger diameter event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger diameter event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger diameter event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger diameter event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger diameter event keyword entry number debounce value number
Tree	value
Range	2 to 15

Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger](#) [diameter event](#) *keyword* [entry](#) *number* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger](#) [diameter event](#) *keyword* [entry](#) *number* [filter](#) *reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger](#) [diameter event](#) *keyword* [entry](#) *number* [handler](#) *reference*
Tree [handler](#)
Reference **configure** [log event-handling](#) [handler](#) *string*
Introduced 16.0.R1
Platforms All

dynsvc [event](#) *keyword*

Synopsis Enter the **dynsvc** list instance
Context **configure** [log event-trigger](#) [dynsvc event](#) *keyword*
Tree [dynsvc](#)

Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger dynsvc event keyword](#)
Tree [dynsvc](#)
Options tmnxDynSvcSapFailed
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger dynsvc event keyword admin-state keyword](#)
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger dynsvc event keyword description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context	configure log event-trigger dynsvc event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger dynsvc event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger dynsvc event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger dynsvc event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger dynsvc event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger dynsvc event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger dynsvc event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger dynsvc event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger dynsvc event keyword entry number handler reference](#)
Tree [handler](#)
Reference **configure** [log event-handling handler string](#)
Introduced 16.0.R1
Platforms All

efm-oam [event keyword](#)

Synopsis Enter the **efm-oam** list instance
Context **configure** [log event-trigger efm-oam event keyword](#)
Tree [efm-oam](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger efm-oam event keyword](#)
Tree [efm-oam](#)
Options tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected, tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent, tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr, tmnxDot3OamNonThresholdEventClr
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger efm-oam event keyword admin-state keyword](#)

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger efm-oam event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger efm-oam event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger efm-oam event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger efm-oam event <i>keyword</i> entry number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger efm-oam event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger efm-oam event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger efm-oam event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15

Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* [filter](#) *reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* [handler](#) *reference*
Tree [handler](#)
Reference **configure** [log event-handling](#) [handler](#) *string*
Introduced 16.0.R1
Platforms All

elmi [event](#) *keyword*

Synopsis Enter the **elmi** list instance
Context **configure** [log event-trigger elmi event](#) *keyword*
Tree [elmi](#)

Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger elmi event](#) *keyword*
Tree [elmi](#)
Options tmnxElmilfStatusChangeEvent, tmnxElmiEVCStatusChangeEvent
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger elmi event](#) *keyword* [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger elmi event](#) *keyword* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context	configure log event-trigger elmi event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger elmi event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger elmi event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger elmi event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger elmi event <i>keyword entry number</i> debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger elmi event <i>keyword entry number</i> debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger elmi event <i>keyword entry number</i> description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger elmi event <i>keyword entry number</i> filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger elmi event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

ering event *keyword*

Synopsis	Enter the ering list instance
Context	configure log event-trigger ering event <i>keyword</i>
Tree	ering
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ering event <i>keyword</i>
Tree	ering
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsnRaiseAlarm, tmnxEthRingApsPrvsnClearAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ering event <i>keyword admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger](#) [ering event](#) *keyword* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger](#) [ering event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger](#) [ering event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger](#) [ering event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ering event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ering event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ering event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
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Context **configure log event-trigger ering event keyword entry number description string**
Tree **description**
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter reference

Synopsis Log filter for EHS event trigger entry
Context **configure log event-trigger ering event keyword entry number filter reference**
Tree **filter**
Reference **configure log filter string**
Introduced 16.0.R1
Platforms All

handler reference

Synopsis Event handler for EHS event trigger entry
Context **configure log event-trigger ering event keyword entry number handler reference**
Tree **handler**
Reference **configure log event-handling handler string**
Introduced 16.0.R1
Platforms All

eth-cfm event keyword

Synopsis Enter the **eth-cfm** list instance
Context **configure log event-trigger eth-cfm event keyword**
Tree **eth-cfm**
Introduced 16.0.R1
Platforms All

event keyword

Synopsis Log event as a trigger for one or more EHS handlers

Context	configure log event-trigger eth-cfm event <i>keyword</i>
Tree	eth-cfm
Options	dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFcltyFaultRaise, tmnxDot1agCfmMepFcltyFaultClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger eth-cfm event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger eth-cfm event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger eth-cfm event <i>keyword</i> entry <i>number</i>
Tree	entry

Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure log event-trigger eth-cfm event keyword entry number**
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure log event-trigger eth-cfm event keyword entry number admin-state keyword**
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger eth-cfm event keyword entry number debounce**
Tree [debounce](#)
Introduced 16.0.R1
Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure log event-trigger eth-cfm event keyword entry number debounce time number**

Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger eth-cfm event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger eth-cfm event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger eth-cfm event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger eth-cfm event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

etun [event keyword](#)

Synopsis	Enter the etun list instance
Context	configure log event-trigger etun event keyword
Tree	etun
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger etun event keyword
Tree	etun
Options	tmnxEthTunnelApsCfgRaiseAlarm, tmnxEthTunnelApsCfgClearAlarm, tmnxEthTunnelApsPrvsnRaiseAlarm, tmnxEthTunnelApsPrvsnClearAlarm, tmnxEthTunnelApsNoRspRaiseAlarm, tmnxEthTunnelApsNoRspClearAlarm, tmnxEthTunnelApsSwitchoverAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger etun event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger etun event](#) *keyword* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger etun event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger etun event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger etun event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger etun event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger etun event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger etun event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
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Context	configure log event-trigger etun event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger etun event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger etun event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

filter event keyword

Synopsis	Enter the filter list instance
Context	configure log event-trigger filter event keyword
Tree	filter
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
----------	---

Context	configure log event-trigger filter event <i>keyword</i>
Tree	filter
Options	tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped, tFilterBgpFlowSpecProblem, tFilterApplyPathProblem, tFilterRadSharedFltrAlarmRaised, tFilterRadSharedFltrAlarmClear, tFilterEmbeddingOperStateChange, tFilterEmbedOpenflowOperStateChg, tFilterOpenflowRequestRejected, tFilterEmbedFlowspecOperStateChg, tFilterEmbedVsdOperStateChg, tFilterRPActiveDestChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger filter event <i>keyword admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger filter event <i>keyword description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger filter event <i>keyword entry</i> <i>number</i>
Tree	entry

Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure log event-trigger filter event** *keyword entry number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure log event-trigger filter event** *keyword entry number admin-state keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger filter event** *keyword entry number debounce*
Tree [debounce](#)
Introduced 16.0.R1
Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure log event-trigger filter event** *keyword entry number debounce time number*

Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger filter event <i>keyword</i> entry <i>number</i> debounce <i>value</i> <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger filter event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger filter event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger filter event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

gmpls [event keyword](#)

Synopsis	Enter the gmpls list instance
Context	configure log event-trigger gmpls event keyword
Tree	gmpls
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger gmpls event keyword
Tree	gmpls
Options	vRtrGmplsLspPathStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger gmpls event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger gmpls event](#) *keyword* [description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger gmpls event](#) *keyword* [entry number](#)
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger gmpls event](#) *keyword* [entry number](#)
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger gmpls event](#) *keyword* [entry number](#) [admin-state](#) *keyword*
Tree [admin-state](#)
Default enable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger gmpls event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger gmpls event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger gmpls event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger gmpls event keyword entry number description string

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger gmpls event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger gmpls event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

gsmp event keyword

Synopsis	Enter the gsmp list instance
Context	configure log event-trigger gsmp event keyword
Tree	gsmp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger gsmp event keyword

Tree	gsmp
Options	tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL, tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL, tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected, tmnxAncpStringRejected
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger gsmp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger gsmp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger gsmp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger gsmp event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger gsmp event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger gsmp event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger gsmp event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds

Introduced 16.0.R1
Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure log event-trigger gsmp event** *keyword entry number debounce value number*
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure log event-trigger gsmp event** *keyword entry number description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure log event-trigger gsmp event** *keyword entry number filter reference*
Tree [filter](#)
Reference **configure log filter** *string*
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure log event-trigger gsmp event** *keyword entry number handler reference*
Tree [handler](#)

Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

igh event *keyword*

Synopsis	Enter the igh list instance
Context	configure log event-trigger igh event <i>keyword</i>
Tree	igh
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger igh event <i>keyword</i>
Tree	igh
Options	tmnxIfGroupHandlerProtoOprChange, tmnxIfGroupHdlrMbrProtoOprChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger igh event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
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Context	configure log event-trigger igh event <i>keyword description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger igh event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger igh event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger igh event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger igh event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger igh event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger igh event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger igh event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger igh event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger igh event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

igmp event keyword

Synopsis	Enter the igmp list instance
Context	configure log event-trigger igmp event <i>keyword</i>
Tree	igmp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger igmp event <i>keyword</i>
Tree	igmp
Options	vRtrIgmplfRxQueryVerMismatch, vRtrIgmplfCModeRxQueryMismatch, vRtrIgmplfMaxGrpsLimitExceeded, vRtrIgmplfMcacPlyDropped, vRtrIgmplfHostInstantiationFail, vRtrIgmplfHostMaxGrpsLimitExceeded, vRtrIgmplfHostMcacPlyDropped, vRtrIgmplfHostCModeRxQueryMismatch, vRtrIgmplfHostRxQueryVerMismatch, vRtrIgmplfHostMaxSrcsLimitExceeded, vRtrIgmplfMaxSrcsLimitExceeded, vRtrIgmplfGrpIfSapMaxGrpsLimExceed,

vRtrIgmPGrpIfSapMaxSrcsLimExceed, vRtrIgmPGrpIfSapMcacPlcyDropped,
vRtrIgmPGrpIfSapCModeRxQueryMism, vRtrIgmPGrpIfSapRxQueryVerMism,
vRtrIgmPHostMaxGrpSrcsLimitExcd, vRtrIgmPMaxGrpSrcsLimitExceeded,
vRtrIgmPGrpIfSapMaxGrpSrcLimExcd, vRtrIgmPHostQryIntervalConflict,
vRtrIgmPNotifyNumOfIPseclfLowWm, vRtrIgmPNotifyNumOfIPseclfHighWm,
vRtrIgmPNotifyNumOfIPseclfMaxRch, vRtrIgmPSlaProfInstMcacPlcyDrop

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger igmp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger igmp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger igmp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger igmp event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger igmp event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger igmp event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger igmp event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds

Introduced 16.0.R1
Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure log event-trigger igmp event** *keyword entry number debounce value number*
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure log event-trigger igmp event** *keyword entry number description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure log event-trigger igmp event** *keyword entry number filter reference*
Tree [filter](#)
Reference **configure log filter** *string*
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure log event-trigger igmp event** *keyword entry number handler reference*
Tree [handler](#)

Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

igmp-snooping [event](#) *keyword*

Synopsis	Enter the igmp-snooping list instance
Context	configure log event-trigger igmp-snooping event <i>keyword</i>
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger igmp-snooping event <i>keyword</i>
Tree	igmp-snooping
Options	sapIgmPsnPgGrpLimitExceeded, sapIgmPsnPgMcacPlcyDropped, sdpBndIgmPsnPgGrpLimitExceeded, sdpBndIgmPsnPgMcacPlcyDropped, sapIgmPsnPgMcsFailure, sapIgmPsnPgSrcLimitExceeded, sdpBndIgmPsnPgSrcLimitExceeded, sdpBndIgmPsnPgGrpSrcLimitExceed, sapIgmPsnPgGrpSrcLimitExceeded, eMplIgmPsnPgMfibFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger igmp-snooping event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger igmp-snooping event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger igmp-snooping event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger igmp-snooping event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger igmp-snooping event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger igmp-snooping event keyword entry number debounce**
Tree [debounce](#)
Introduced 16.0.R1
Platforms All

time number

Synopsis Time window for events for EHS to trigger a response
Context **configure log event-trigger igmp-snooping event keyword entry number debounce time number**
Tree [time](#)
Range 1 to 604800
Units seconds
Introduced 16.0.R1
Platforms All

value number

Synopsis Occurrences in time interval to trigger EHS response
Context **configure log event-trigger igmp-snooping event keyword entry number debounce value number**
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description string

Synopsis Text description

Context	configure log event-trigger igmp-snooping event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger igmp-snooping event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger igmp-snooping event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

ip event keyword

Synopsis	Enter the ip list instance
Context	configure log event-trigger ip event <i>keyword</i>
Tree	ip
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ip event <i>keyword</i>
Tree	ip
Options	clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface, ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ip event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger ip event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ip event <i>keyword</i> entry <i>number</i>
Tree	entry

Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure log event-trigger ip event** *keyword entry number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure log event-trigger ip event** *keyword entry number admin-state keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger ip event** *keyword entry number debounce*
Tree [debounce](#)
Introduced 16.0.R1
Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure log event-trigger ip event** *keyword entry number debounce time number*

Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ip event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger ip event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ip event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ip event <i>keyword</i> entry number handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

ipsec [event](#) *keyword*

Synopsis	Enter the ipsec list instance
Context	configure log event-trigger ipsec event <i>keyword</i>
Tree	ipsec
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ipsec event <i>keyword</i>
Tree	ipsec
Options	tIPsecRUTnIFailToCreate, tIPsecRUSAFailToAddRoute, tIPsecBfdIntfSessStateChgd, tIPsecRadAcctPlyFailure, tIPsecTrustAnchorPrfOprChg, tIPsecTunnelEncapIpMtuTooSmall, tIPsecRuTnIEncapIpMtuTooSmall, tmnxSecNotifCmptdCertHashChngd, tmnxSecNotifCmptdCertChnChngd, tmnxSecNotifSendChnNotInCmptChn, tmnxIPsecTunnelOperStateChange, tmnxIPsecGWOperStateChange, tIPsecRUTnIRemoved, tIPsecTunnelProtocolFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ipsec event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger ipsec event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger ipsec event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ipsec event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ipsec event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isis event *keyword*

Synopsis	Enter the isis list instance
Context	configure log event-trigger isis event <i>keyword</i>
Tree	isis
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger isis event keyword
Tree	isis
Options	vRtrIsisSpbNbrMultAdjExists, vRtrIsisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIsisDatabaseOverload, tmnxIsisManualAddressDrops, tmnxIsisCorruptedLSPDetected, tmnxIsisMaxSeqExceedAttempt, tmnxIsisIDLenMismatch, tmnxIsisMaxAreaAdrsMismatch, tmnxIsisOwnLSPPurge, tmnxIsisSequenceNumberSkip, tmnxIsisAutTypeFail, tmnxIsisAuthFail, tmnxIsisVersionSkew, tmnxIsisAreaMismatch, tmnxIsisRejectedAdjacency, tmnxIsisLSPTooLargeToPropagate, tmnxIsisOrigLSPBufSizeMismatch, tmnxIsisProtoSuppMismatch, tmnxIsisAdjacencyChange, tmnxIsisCirclDExhausted, tmnxIsisAdjRestartStatusChange, tmnxIsisLdpSyncTimerStarted, tmnxIsisLdpSyncExit, tmnxIsisExportLimitReached, tmnxIsisExportLimitWarning, tmnxIsisRoutesExpLmtDropped, tmnxIsisFailureDisabled, tmnxIsisSidError, tmnxIsisSidNotInLabelRange, tmnxIsisRejectedAdjacencySid, tmnxIsisLSPPurge, tmnxIsisPfxLimitOverloadWarning, tmnxIsisAdjBfdSessionSetupFail, tmnxIsisSrgbBadLabelRange, tmnxIsisCircMtuTooLow, tmnxIsisRejectedAdjacencySet, tmnxIsisCorruptRemainingLifetime, tmnxIsisSidStatsIndexAlloc, tmnxIsisFaOperParticipationDown, tmnxIsisRejectedEndXSid, tmnxIsisRejectedPglD, tmnxIsisSrv6LocError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger isis event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger isis event keyword description string
Tree	description

String Length 1 to 80

Introduced 16.0.R1

Platforms All

entry [id] *number*

Synopsis Enter the **entry** list instance

Context **configure log event-trigger isis event** *keyword entry number*

Tree [entry](#)

Introduced 16.0.R1

Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure log event-trigger isis event** *keyword entry number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure log event-trigger isis event** *keyword entry number admin-state keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms All

debounce

Synopsis Enter the **debounce** context

Context	configure log event-trigger isis event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger isis event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger isis event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger isis event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger isis event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger isis event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

l2tp event *keyword*

Synopsis	Enter the l2tp list instance
Context	configure log event-trigger l2tp event <i>keyword</i>
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger l2tp event <i>keyword</i>
Tree	l2tp
Options	tmnxL2tpPeerUnreachable , tmnxL2tpIlsaMdaVRtrStateChange , tmnxL2tpLnsSePppSessionFailure , tmnxL2tpVappVRtrStateChange , tmnxL2tpTunnelBlacklisted , tmnxL2tpTunnelSelBlacklistFull , tmnxL2tpLnsPppNcpFailure , tmnxL2tpApFailure
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger l2tp event](#) *keyword* **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [log event-trigger l2tp event](#) *keyword* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger l2tp event](#) *keyword* **entry** *number*
Tree [entry](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger l2tp event](#) *keyword* **entry** *number*
Tree [entry](#)

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger l2tp event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger l2tp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger l2tp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger l2tp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure log event-trigger l2tp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger l2tp event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger l2tp event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag event *keyword*

Synopsis	Enter the lag list instance
Context	configure log event-trigger lag event <i>keyword</i>
Tree	lag
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger lag event <i>keyword</i>
Tree	lag
Options	DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger lag event <i>keyword admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger lag event <i>keyword description</i> <i>string</i>
Tree	description
String Length	1 to 80

Introduced 16.0.R1
Platforms All

entry [id] *number*

Synopsis Enter the **entry** list instance
Context **configure log event-trigger lag event** *keyword entry number*
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure log event-trigger lag event** *keyword entry number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure log event-trigger lag event** *keyword entry number admin-state keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger lag event** *keyword entry number debounce*

Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger lag event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger lag event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger lag event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
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Context	configure log event-trigger lag event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger lag event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

ldap event *keyword*

Synopsis	Enter the ldap list instance
Context	configure log event-trigger ldap event <i>keyword</i>
Tree	ldap
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ldap event <i>keyword</i>
Tree	ldap
Options	tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ldap event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger ldap event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ldap event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ldap event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ldap event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ldap event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ldap event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ldap event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger ldap event](#) *keyword entry number description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger ldap event](#) *keyword entry number filter reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger ldap event](#) *keyword entry number handler reference*
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 16.0.R1
Platforms All

ldp event *keyword*

Synopsis Enter the **ldp** list instance
Context **configure** [log event-trigger ldap event](#) *keyword*
Tree [ldp](#)
Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger ldp event keyword](#)

Tree [ldp](#)

Options vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged, vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger ldp event keyword admin-state keyword](#)

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger ldp event keyword description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

entry [id] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ldp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ldp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ldp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ldp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ldp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ldp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger ldp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ldp event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1

Platforms All

handler reference

Synopsis Event handler for EHS event trigger entry
 Context **configure** log event-trigger ldp event keyword entry number handler reference
 Tree handler
 Reference **configure** log event-handling handler string
 Introduced 16.0.R1
 Platforms All

li event keyword

Synopsis Enter the li list instance
 Context **configure** log event-trigger li event keyword
 Tree li
 Introduced 16.0.R1
 Platforms All

event keyword

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** log event-trigger li event keyword
 Tree li
 Options sbiBootLiConfig, sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceSapChange, sourceSubscriberChange, tMirrorSourceIPFtrChangeReject, tMirrorSourceMacFtrChangeReject, tMirrorSourceFilterAssignReject, tMirrorDestinationChangeReject, tMirrorSourceFilterOverruled, tMirrorSourceFilterAssignWarn, tMirrorFilterAssignToSapWarn, tMirrorFilterAssignToSdpWarn, tMirrorFilterAssignToIrfWarn, tMirrorSourceLiFilterChanged, tMirrorSourceLiSubProblem, tMirrorSourceIPv6FtrChangeRej, tMirrorLiNatLsnSubOperStateCh, tMirrorLiNatL2awSubOperStateCh, tMirrorLiNat64SubOperStateCh, tMirrorLiX2Alarm, tFtrLiRsvdBlockRangeChangeEvent, tMirrorLiSrcPortLicInvalid, tMirrorLiXIfLicenseInvalid, cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts,

host_snmp_attempts, radiusFailed, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, ssiSaveConfigSucceeded, ssiSaveConfigFailed, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, mdLiConfigChange, ssiSyncConfigOK, ssiSyncConfigFailed, md_cli_io, md_cli_unauth_io, tmnxClear, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger li event](#) *keyword* **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger li event](#) *keyword* **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger li event](#) *keyword* **entry** *number*

Tree [entry](#)

Introduced 16.0.R1

Platforms All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger li event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger li event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger li event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger li event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds

Introduced 16.0.R1
Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure** [log event-trigger li event keyword entry number debounce value number](#)
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger li event keyword entry number description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger li event keyword entry number filter reference](#)
Tree [filter](#)
Reference **configure** [log filter string](#)
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger li event keyword entry number handler reference](#)
Tree [handler](#)

Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

lldp event *keyword*

Synopsis	Enter the lldp list instance
Context	configure log event-trigger lldp event <i>keyword</i>
Tree	lldp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger lldp event <i>keyword</i>
Tree	lldp
Options	lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger lldp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger lldp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger lldp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger lldp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger lldp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger lldp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger lldp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger lldp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger lldp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger lldp event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger lldp event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

Imp event keyword

Synopsis	Enter the Imp list instance
Context	configure log event-trigger Imp event <i>keyword</i>
Tree	Imp
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger Imp event <i>keyword</i>
Tree	Imp
Options	tmnxLmpVRtrTeLinkPropMismatch, tmnxLmpVRtrTeLinkPropMismatchClr, tmnxLmpVRtrDbLinkPropMismatch, tmnxLmpVRtrDbLinkPropMismatchClr, tmnxLmpVRtrControlChannelState, tmnxLmpVRtrTeLinkState
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger](#) [Imp event](#) *keyword* **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** [log event-trigger](#) [Imp event](#) *keyword* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger](#) [Imp event](#) *keyword* **entry** *number*
Tree [entry](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger](#) [Imp event](#) *keyword* **entry** *number*
Tree [entry](#)

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger lmp event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger lmp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger lmp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger lmp event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis	Text description
Context	configure log event-trigger lmp event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger lmp event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger lmp event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

logger event *keyword*

Synopsis	Enter the logger list instance
Context	configure log event-trigger logger event <i>keyword</i>
Tree	logger
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger logger event <i>keyword</i>
Tree	logger
Options	STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger logger event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger logger event <i>keyword</i> description <i>string</i>

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger logger event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger logger event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger logger event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger logger event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger logger event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger logger event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

macsec event keyword

Synopsis	Enter the macsec list instance
Context	configure log event-trigger macsec event <i>keyword</i>
Tree	macsec
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger macsec event <i>keyword</i>
Tree	macsec
Options	tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx,

	tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger macsec event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger macsec event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger macsec event keyword entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
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Context	configure log event-trigger macsec event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger macsec event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger macsec event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger macsec event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger macsec event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger macsec event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger macsec event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger macsec event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1

Platforms All

mc-redundancy event *keyword*

Synopsis Enter the **mc-redundancy** list instance
 Context **configure log event-trigger mc-redundancy event** *keyword*
 Tree [mc-redundancy](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure log event-trigger mc-redundancy event** *keyword*
 Tree [mc-redundancy](#)
 Options tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared, tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared, tmnxSrrpInstanceIdMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch, tmnxSrrpRedIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged, tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged, tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd, tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared, tmnxSrrpDuplicateSubIfAddress, tmnxMcPeerRingsOperStateChanged, tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded, tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen, tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp, tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp, tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled, tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg, tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh, tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear, tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg, tMcIPsecDomainProtStatusChg
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mc-redundancy event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mc-redundancy event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mc-redundancy event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mc-redundancy event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mc-redundancy event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mc-redundancy event keyword entry number debounce value number
Tree	value

Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mc-redundancy event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mc-redundancy event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mc-redundancy event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

mcpath [event keyword](#)

Synopsis	Enter the mcpath list instance
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Context	configure log event-trigger mcpath event keyword
Tree	mcpath
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mcpath event keyword
Tree	mcpath
Options	tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mcpath event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger mcpath event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mcpath event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mcpath event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mcpath event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mcpath event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mcpath event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mcpath event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mcpath event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mcpath event keyword entry number filter reference
Tree	filter
Reference	configure log filter string

Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger mcpath event keyword entry number handler reference](#)
Tree [handler](#)
Reference **configure** [log event-handling handler string](#)
Introduced 16.0.R1
Platforms All

mgmt-core [event keyword](#)

Synopsis Enter the **mgmt-core** list instance
Context **configure** [log event-trigger mgmt-core event keyword](#)
Tree [mgmt-core](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger mgmt-core event keyword](#)
Tree [mgmt-core](#)
Options none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger mgmt-core event keyword admin-state keyword](#)

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mgmt-core event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15

Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger mgmt-core event](#) *keyword entry number description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger mgmt-core event](#) *keyword entry number filter reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger mgmt-core event](#) *keyword entry number handler reference*
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 16.0.R1
Platforms All

mirror [event](#) *keyword*

Synopsis Enter the **mirror** list instance
Context **configure** [log event-trigger mirror event](#) *keyword*
Tree [mirror](#)

Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger mirror event](#) *keyword*
Tree [mirror](#)
Options sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIpv6FilterChange
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger mirror event](#) *keyword* [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger mirror event](#) *keyword* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [id] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mirror event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mirror event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mirror event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mirror event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger mirror event](#) *keyword* [entry number handler reference](#)
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms All

mld [event](#) *keyword*

Synopsis Enter the **mld** list instance
 Context **configure** [log event-trigger mld event](#) *keyword*
 Tree [mld](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger mld event](#) *keyword*
 Tree [mld](#)
 Options vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPlyDropped, vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded, vRtrMldHostMcacPlyDropped, vRtrMldHostCModeRxQueryMismatch, vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded, vRtrMldMaxSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpsLimExceed, vRtrMldGrpIfSapMaxSrcsLimExceed, vRtrMldGrpIfSapMcacPlyDropped, vRtrMldGrpIfSapCModeRxQueryMism, vRtrMldGrpIfSapRxQueryVerMism, vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict, vRtrMldSlaProfInstMcacPlyDrop
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mld event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mld event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger mld event keyword entry number admin-state keyword](#)
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure** [log event-trigger mld event keyword entry number debounce](#)
Tree [debounce](#)
Introduced 16.0.R1
Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure** [log event-trigger mld event keyword entry number debounce time number](#)
Tree [time](#)
Range 1 to 604800
Units seconds
Introduced 16.0.R1
Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure** [log event-trigger mld event keyword entry number debounce value number](#)
Tree [value](#)

Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mld event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mld event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mld event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

mld-snooping [event keyword](#)

Synopsis	Enter the mld-snooping list instance
Context	configure log event-trigger mld-snooping event keyword

Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mld-snooping event <i>keyword</i>
Tree	mld-snooping
Options	sapMldSnpgGrpLimitExceeded, sdpBndMldSnpgGrpLimitExceeded, sapMldSnpgMcsFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mld-snooping event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mld-snooping event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mld-snooping event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mld-snooping event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mld-snooping event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mld-snooping event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>

Introduced 16.0.R1
Platforms All

handler reference

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger](#) [mld-snooping event](#) *keyword* [entry number handler reference](#)
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 16.0.R1
Platforms All

mpls event keyword

Synopsis Enter the **mpls** list instance
Context **configure** [log event-trigger](#) [mpls event](#) *keyword*
Tree [mpls](#)
Introduced 16.0.R1
Platforms All

event keyword

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger](#) [mpls event](#) *keyword*
Tree [mpls](#)
Options [mplsXCUp](#), [mplsXCDown](#), [mplsTunnelUp](#), [mplsTunnelDown](#), [mplsTunnelRerouted](#), [mplsTunnelReoptimized](#), [vRtrMplsStateChange](#), [vRtrMplsIfStateChange](#), [vRtrMplsLspUp](#), [vRtrMplsLspDown](#), [vRtrMplsLspPathUp](#), [vRtrMplsLspPathDown](#), [vRtrMplsLspPathRerouted](#), [vRtrMplsLspPathResignaled](#), [vRtrMplsP2mplInstanceUp](#), [vRtrMplsP2mplInstanceDown](#), [vRtrMplsS2ISubLspUp](#), [vRtrMplsS2ISubLspDown](#), [vRtrMplsS2ISubLspRerouted](#), [vRtrMplsS2ISubLspResignaled](#), [vRtrMplsLspPathSoftPreempted](#), [vRtrMplsLspPathLstFillReoptElig](#), [vRtrMplsP2mplInstanceResignaled](#), [vRtrMplsResignalTimerExpired](#), [vRtrMplsLspPathMbbStatusEvent](#), [vRtrMplsLspSwitchStbyFailure](#), [vRtrMplsLspActivePathChanged](#), [vRtrMplsXCBundleChange](#), [vRtrMplsNodeInIgpOverload](#), [vRtrMplsIPv6StateChange](#), [vRtrMplsIfIPv6StateChange](#), [vRtrMplsLspResourceExhaustion](#), [vRtrMplsLspManualSwitchFailure](#), [vRtrMplsLspPathManualDegStateChg](#), [vRtrMplsS2ISubLspPreempted](#)

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mpls event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mpls event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mpls event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mpls event <i>keyword</i> entry <i>number</i>

Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mpls event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mpls event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mpls event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mpls event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger mpls event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mpls event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mpls event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

mpls-tp event *keyword*

Synopsis	Enter the mpls-tp list instance
Context	configure log event-trigger mpls-tp event <i>keyword</i>
Tree	mpls-tp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mpls-tp event <i>keyword</i>
Tree	mpls-tp
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mpls-tp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mpls-tp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80

Introduced 16.0.R1
Platforms All

entry [id] *number*

Synopsis Enter the **entry** list instance
Context **configure log event-trigger mpls-tp event keyword entry number**
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure log event-trigger mpls-tp event keyword entry number**
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure log event-trigger mpls-tp event keyword entry number admin-state keyword**
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger mpls-tp event keyword entry number debounce**

Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mpls-tp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mpls-tp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger mpls-tp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
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Context	configure log event-trigger mpls-tp event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mpls-tp event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

msdp event keyword

Synopsis	Enter the msdp list instance
Context	configure log event-trigger msdp event keyword
Tree	msdp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger msdp event keyword
Tree	msdp
Options	msdpEstablished, msdpBackwardTransition, tmnxMsdpNgActSrcLimExcd, tmnxMsdpNgPeerActSrcLimExcd, tmnxMsdpNgRPFFailure, tmnxMsdpNgSourceSrcActMsgsExcd, tmnxMsdpNgGroupSrcActMsgsExcd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger msdp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger msdp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger msdp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger msdp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger msdp event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger msdp event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger msdp event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger msdp event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger msdp event](#) *keyword* [entry](#) *number* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger msdp event](#) *keyword* [entry](#) *number* [filter](#) *reference*

Tree [filter](#)

Reference **configure** [log filter](#) *string*

Introduced 16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger msdp event](#) *keyword* [entry](#) *number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *string*

Introduced 16.0.R1

Platforms All

nat event *keyword*

Synopsis Enter the **nat** list instance

Context **configure** [log event-trigger nat event](#) *keyword*

Tree [nat](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger nat event keyword](#)

Tree [nat](#)

Options tmnxNatPIL2AwBlockUsageHigh, tmnxNatIlsaMemberSessionUsageHigh, tmnxNatPILsnMemberBlockUsageHigh, tmnxNatL2AwSublcmpPortUsageHigh, tmnxNatL2AwSubUdpPortUsageHigh, tmnxNatL2AwSubTcpPortUsageHigh, tmnxNatL2AwSubSessionUsageHigh, tmnxNatPIBlockAllocationLsn, tmnxNatPIBlockAllocationL2Aw, tmnxNatResourceProblemDetected, tmnxNatResourceProblemCause, tmnxNatPIAddrFree, tmnxNatPILsnRedActiveChanged, tmnxNatPcpSrvStateChanged, tmnxNatMdaActive, tmnxNatLsnSubBlksFree, tmnxNatDetPclyChanged, tmnxNatMdaDetectsLoadSharingErr, tmnxNatIlsaGrpOperStateChanged, tmnxNatIlsaGrplsDegraded, tmnxNatLsnSublcmpPortUsgHigh, tmnxNatLsnSubUdpPortUsgHigh, tmnxNatLsnSubTcpPortUsgHigh, tmnxNatLsnSubSessionUsgHigh, tmnxNatInAddrPrefixBlksFree, tmnxNatFwd2EntryAdded, tmnxNatDetPclyOperStateChanged, tmnxNatDetMapOperStateChanged, tmnxNatFwd2OperStateChanged, tmnxNatVrtrOutDnatOnlyRoutesHigh, tmnxNatMapRuleChange, tmnxNatMaxNbrSubsOrHostsExceeded, tmnxNatNbrSubsOrHostsBelowThrsh, tmnxNatVappActive, tmnxNatVappDetectsLoadSharingErr, tmnxNatDetPfxMapOperStateChanged, tmnxNatDetMap2OperStateChanged, tmnxNatDynamicConfigMismatch, tmnxNatPIL2AwMembrBlockUsageHigh, tmnxNatPIMemberExtBlockUsageHigh

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger nat event keyword admin-state keyword](#)

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger nat event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger nat event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger nat event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger nat event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis Enter the **debounce** context

Context **configure log event-trigger nat event** *keyword* **entry number** **debounce**

Tree **debounce**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time number

Synopsis Time window for events for EHS to trigger a response

Context **configure log event-trigger nat event** *keyword* **entry number** **debounce time** **number**

Tree **time**

Range 1 to 604800

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis Occurrences in time interval to trigger EHS response

Context **configure log event-trigger nat event** *keyword* **entry number** **debounce value** **number**

Tree **value**

Range 2 to 15

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis Text description

Context **configure log event-trigger nat event** *keyword* **entry number** **description** **string**

Tree **description**

String Length 1 to 80

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger nat event](#) *keyword* [entry number](#) [filter](#) *reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger nat event](#) *keyword* [entry number](#) [handler](#) *reference*
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ntp event *keyword*

Synopsis Enter the **ntp** list instance
Context **configure** [log event-trigger ntp event](#) *keyword*
Tree [ntp](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger ntp event](#) *keyword*
Tree [ntp](#)

Options	tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ntp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger ntp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ntp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ntp event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ntp event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ntp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ntp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure** [log event-trigger ntp event keyword entry number debounce value number](#)
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger ntp event keyword entry number description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger ntp event keyword entry number filter reference](#)
Tree [filter](#)
Reference **configure** [log filter string](#)
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger ntp event keyword entry number handler reference](#)
Tree [handler](#)
Reference **configure** [log event-handling handler string](#)

Introduced 16.0.R1
Platforms All

oam event keyword

Synopsis Enter the **oam** list instance
Context **configure log event-trigger oam event** keyword
Tree **oam**
Introduced 16.0.R1
Platforms All

event keyword

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log event-trigger oam event** keyword
Tree **oam**
Options tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3,
tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted,
tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange,
tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svclInvalid, svclWrongType,
tmnxOamLdpTtraceAutoDiscState, tmnxOamLdpTtraceFecProbeState,
tmnxOamLdpTtraceFecDisStatus, tmnxOamLdpTtraceFecPFailUpdate,
tmnxOamSaaThreshold, tmnxOamDiagTestCompleted,
tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded,
tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded,
tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout,
tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted,
tmnxOamSathSvcStrmCompleted
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state keyword

Synopsis Administrative state of the EHS event trigger
Context **configure log event-trigger oam event** keyword **admin-state** keyword
Tree **admin-state**
Default disable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger oam event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger oam event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger oam event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger oam event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

openflow [event](#) *keyword*

Synopsis	Enter the openflow list instance
Context	configure log event-trigger openflow event <i>keyword</i>
Tree	openflow
Introduced	16.0.R2
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger openflow event <i>keyword</i>
Tree	openflow
Options	tmnxOFFlowEntryInsertFailed
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger openflow event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R2
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger openflow event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger openflow event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R2
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger openflow event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger openflow event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R2
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger openflow event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R2
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger openflow event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800

Units	seconds
Introduced	16.0.R2
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger openflow event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R2
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger openflow event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger openflow event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R2
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
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Context	configure log event-trigger openflow event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R2
Platforms	All

ospf event keyword

Synopsis	Enter the ospf list instance
Context	configure log event-trigger ospf event keyword
Tree	ospf
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ospf event keyword
Tree	ospf
Options	tmnxOspfVirtIfStateChange, tmnxOspfVirtNbrStateChange, tmnxOspfVirtIfConfigError, tmnxOspfVirtIfAuthFailure, tmnxOspfVirtIfRxBadPacket, tmnxOspfAreaOriginateLsa, tmnxOspfAreaMaxAgeLsa, tmnxOspfLsdbOverflow, tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning, tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError, tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning, tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail, tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet, tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate, tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger ospf event](#) *keyword* **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger ospf event](#) *keyword* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger ospf event](#) *keyword* **entry** *number*
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger ospf event](#) *keyword* **entry** *number*
Tree [entry](#)

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ospf event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ospf event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ospf event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ospf event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger ospf event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ospf event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ospf event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

pcap event *keyword*

Synopsis	Enter the pcap list instance
Context	configure log event-trigger pcap event keyword
Tree	pcap
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger pcap event keyword
Tree	pcap
Options	tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pcap event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger pcap event keyword description string
Tree	description
String Length	1 to 80

Introduced 16.0.R1
Platforms All

entry [id] *number*

Synopsis Enter the **entry** list instance
Context **configure log event-trigger pcap event keyword entry number**
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure log event-trigger pcap event keyword entry number**
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure log event-trigger pcap event keyword entry number admin-state keyword**
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger pcap event keyword entry number debounce**

Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pcap event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pcap event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger pcap event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
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Context	configure log event-trigger pcap event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger pcap event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

pcep event keyword

Synopsis	Enter the pcep list instance
Context	configure log event-trigger pcep event keyword
Tree	pcep
Introduced	22.2.R1
Platforms	All

event keyword

Synopsis	PCEP module events
Context	configure log event-trigger pcep event keyword
Tree	pcep
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pcep event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger pcep event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pcep event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	22.2.R1
Platforms	All

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pcep event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pcep event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	22.2.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pcep event keyword entry number debounce
Tree	debounce
Introduced	22.2.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pcep event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	22.2.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pcep event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	22.2.R1

Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger pcep event](#) *keyword* [entry](#) *number* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 22.2.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger pcep event](#) *keyword* [entry](#) *number* [filter](#) *reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 22.2.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger pcep event](#) *keyword* [entry](#) *number* [handler](#) *reference*
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 22.2.R1
Platforms All

pim event *keyword*

Synopsis Enter the **pim** list instance
Context **configure** [log event-trigger pim event](#) *keyword*
Tree [pim](#)
Introduced 16.0.R1

Platforms All

event keyword

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** log event-trigger pim event keyword

Tree pim

Options vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded, vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded, vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused, vRtrPimNgMcacPlyDropped, vRtrPimNgInvalidIPmsiTunnel, vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrId, vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri, vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state keyword

Synopsis Administrative state of the EHS event trigger

Context **configure** log event-trigger pim event keyword admin-state keyword

Tree admin-state

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

description string

Synopsis Text description

Context **configure** log event-trigger pim event keyword description string

Tree description

String Length 1 to 80

Introduced 16.0.R1

Platforms All

entry [id] *number*

Synopsis Enter the **entry** list instance
Context **configure log event-trigger pim event keyword entry number**
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure log event-trigger pim event keyword entry number**
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure log event-trigger pim event keyword entry number admin-state keyword**
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger pim event keyword entry number debounce**
Tree [debounce](#)

Introduced 16.0.R1
Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure** [log event-trigger pim event keyword entry number debounce time number](#)
Tree [time](#)
Range 1 to 604800
Units seconds
Introduced 16.0.R1
Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure** [log event-trigger pim event keyword entry number debounce value number](#)
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger pim event keyword entry number description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger pim event keyword entry number filter reference](#)

Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger pim event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

pim-snooping [event](#) *keyword*

Synopsis	Enter the pim-snooping list instance
Context	configure log event-trigger pim-snooping event <i>keyword</i>
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger pim-snooping event <i>keyword</i>
Tree	pim-snooping
Options	tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pim-snooping event <i>keyword admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger pim-snooping event <i>keyword description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pim-snooping event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pim-snooping event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry number debounce value number
Tree	value

Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger pim-snooping event <i>keyword entry number</i> description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger pim-snooping event <i>keyword entry number</i> filter reference
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger pim-snooping event <i>keyword entry number</i> handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

port [event](#) *keyword*

Synopsis	Enter the port list instance
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Context	configure log event-trigger port event keyword
Tree	port
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger port event keyword
Tree	port
Options	sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure, portError, yellowDiffDelayExceeded, redDiffDelayExceeded, bndlBadEndPtDiscriminator, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, bundleMlfrMemberLoopback, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulprit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued, tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified, tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset, tmnxCellularActiveSimCardChange, tmnxPortEtherLoopbackStart, tmnxPortEtherLoopbackStop, tmnxPortGnssStatusChange, tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected, tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered, tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown, tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber, tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm, tmnxCellularRssiAlarmClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger port event <i>keyword admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger port event <i>keyword description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger port event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger port event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger port event keyword entry number admin-state keyword](#)
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure** [log event-trigger port event keyword entry number debounce](#)
Tree [debounce](#)
Introduced 16.0.R1
Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure** [log event-trigger port event keyword entry number debounce time number](#)
Tree [time](#)
Range 1 to 604800
Units seconds
Introduced 16.0.R1
Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure** [log event-trigger port event keyword entry number debounce value number](#)
Tree [value](#)

Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger port event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger port event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger port event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

ppp event *keyword*

Synopsis	Enter the ppp list instance
Context	configure log event-trigger ppp event <i>keyword</i>

Tree	ppp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ppp event <i>keyword</i>
Tree	ppp
Options	tmnxPppCpUp, tmnxPppCpDown, tmnxPppNcpUp, tmnxPppNcpDown, tmnxPppKeepaliveFailure, tmnxPppLqmFailure, ipcpRemotelpUnknown, ipcpSameLocalAndRemotelp, ipcpPeerSuggestedDifferentlp, ipcpPeerRejectedOurlp, ipcpPeerOnDifferentSubnet, tmnxPppLoopback, tmnxPppLoopbackClear, ipv6cpRemotelpUnknown, ipv6cpSameLocalAndRemotelp, ipv6cpPeerSuggestedDiffIntld, ipv6cpPeerRejectedOurIntld, ipv6cpPeerOnDifferentSubnet
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ppp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger ppp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

entry [id] *number*

Synopsis Enter the **entry** list instance
Context **configure log event-trigger ppp event** *keyword entry number*
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure log event-trigger ppp event** *keyword entry number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure log event-trigger ppp event** *keyword entry number admin-state keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger ppp event** *keyword entry number debounce*
Tree [debounce](#)

Introduced 16.0.R1
Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure log event-trigger ppp event** *keyword entry number debounce time number*
Tree [time](#)
Range 1 to 604800
Units seconds
Introduced 16.0.R1
Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure log event-trigger ppp event** *keyword entry number debounce value number*
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure log event-trigger ppp event** *keyword entry number description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure log event-trigger ppp event** *keyword entry number filter reference*

Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ppp event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

pppoe event *keyword*

Synopsis	Enter the pppoe list instance
Context	configure log event-trigger pppoe event <i>keyword</i>
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger pppoe event <i>keyword</i>
Tree	pppoe
Options	tmnxPppoeSessionFailure, tmnxPppoeNcpFailure, tmnxMlpppBundleIndicatorsChange, tmnxPppoeLacSteeringActive, tmnxPppoeLacSteeringStopped, tmnxPppoeLacSteeringFailed, tmnxPppoeMaxSessionsOvrExceeded
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pppoe event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger pppoe event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pppoe event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pppoe event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pppoe event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pppoe event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pppoe event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pppoe event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [log event-trigger pppoe event](#) *keyword* [entry](#) *number* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger pppoe event](#) *keyword* [entry](#) *number* [filter](#) *reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger pppoe event](#) *keyword* [entry](#) *number* [handler](#) *reference*
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-clnt [event](#) *keyword*

Synopsis Enter the **pppoe-clnt** list instance
Context **configure** [log event-trigger pppoe-clnt event](#) *keyword*
Tree [pppoe-clnt](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger](#) [pppoe-clnt event](#) *keyword*
Tree [pppoe-clnt](#)
Options tmnxPppoeClientSetupFailure, tmnxPppoeClientEchoTimeout, tmnxPppoeClientNcpFailure
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger](#) [pppoe-clnt event](#) *keyword* [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [log event-trigger](#) [pppoe-clnt event](#) *keyword* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context	configure log event-trigger pppoe-clnt event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pppoe-clnt event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pppoe-clnt event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pppoe-clnt event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pppoe-clnt event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pppoe-clnt event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure log event-trigger pppoe-clnt event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger pppoe-clnt event keyword entry number filter reference
Tree	filter
Reference	configure log filter string

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger](#) [pppoe-clnt event](#) *keyword* [entry](#) *number* [handler](#) *reference*
Tree [handler](#)
Reference **configure** [log event-handling](#) [handler](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ptp event *keyword*

Synopsis Enter the **ptp** list instance
Context **configure** [log event-trigger](#) [ptp event](#) *keyword*
Tree [ptp](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger](#) [ptp event](#) *keyword*
Tree [ptp](#)
Options [tmnxPtpCardNotSupported](#), [tmnxPtpCardNotSupportedClear](#),
[tmnxPtpMasterClockChangedEvent](#), [tmnxPtpClockRecoveryStateChange](#),
[tmnxPtpOutOfResources](#), [tmnxPtpOutOfResourcesClear](#),
[tmnxPtpDynamicChange](#), [tmnxPtpPortNoTimestamping](#), [tmnxPtpPortPtsfUnusable](#),
[tmnxPtpRequiresSystemReboot](#), [tmnxPtpRequiresSystemRebootClear](#),
[tmnxPtpTimeRecoveryStateChange](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ptp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure log event-trigger ptp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** [log event-trigger](#) [ptp event](#) *keyword* [entry](#) *number* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger](#) [ptp event](#) *keyword* [entry](#) *number* [filter](#) *reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger](#) [ptp event](#) *keyword* [entry](#) *number* [handler](#) *reference*
Tree [handler](#)
Reference **configure** [log event-handling](#) [handler](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

radius [event](#) *keyword*

Synopsis Enter the **radius** list instance
Context **configure** [log event-trigger](#) [radius event](#) *keyword*
Tree [radius](#)
Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger](#) [radius event](#) *keyword*

Tree [radius](#)

Options tmnxRadSrvPlcySrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger](#) [radius event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger](#) [radius event](#) *keyword* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context	configure log event-trigger radius event keyword entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger radius event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger radius event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger radius event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger radius event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger radius event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger radius event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger radius event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger radius event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

rip event *keyword*

Synopsis	Enter the rip list instance
Context	configure log event-trigger rip event <i>keyword</i>
Tree	rip
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger rip event <i>keyword</i>
Tree	rip
Options	ripPacketDiscarded , vRtrRipAuthTypeMismatch , vRtrRipAuthTypeFailure , vRtrRipInstanceShuttingDown , vRtrRipInstanceRestarted , vRtrRipInstanceExpLmtReached , vRtrRipInstanceExpLmtWarning , vRtrRipInstanceRtsExpLmtDropped , vRtrRipPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger rip event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger rip event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger rip event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger rip event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger rip event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger rip event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger rip event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger rip event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

ripng event *keyword*

Synopsis	Enter the ripng list instance
Context	configure log event-trigger ripng event <i>keyword</i>
Tree	ripng
Introduced	16.0.R3
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ripng event keyword
Tree	ripng
Options	tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ripng event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R3
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger ripng event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R3
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ripng event keyword entry number
Tree	entry

Introduced 16.0.R3
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger ripng event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R3
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger ripng event](#) *keyword* [entry](#) *number* **admin-state** *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R3
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure** [log event-trigger ripng event](#) *keyword* [entry](#) *number* **debounce**
Tree [debounce](#)
Introduced 16.0.R3
Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure** [log event-trigger ripng event](#) *keyword* [entry](#) *number* **debounce** *time* *number*

Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R3
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ripng event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R3
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger ripng event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R3
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ripng event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R3
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ripng event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R3
Platforms	All

route-policy [event](#) *keyword*

Synopsis	Enter the route-policy list instance
Context	configure log event-trigger route-policy event <i>keyword</i>
Tree	route-policy
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger route-policy event <i>keyword</i>
Tree	route-policy
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger route-policy event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger route-policy event](#) *keyword* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger route-policy event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger route-policy event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger route-policy event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger route-policy event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger route-policy event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger route-policy event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger route-policy event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger route-policy event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger route-policy event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

rpki [event](#) *keyword*

Synopsis	Enter the rpki list instance
Context	configure log event-trigger rpki event <i>keyword</i>
Tree	rpki
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger rpki event keyword
Tree	rpki
Options	tmnxRpkiNotifySession, tmnxRpkiStateTimerExpiry
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger rpki event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger rpki event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger rpki event keyword entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger rpki event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger rpki event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger rpki event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger rpki event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds

Introduced 16.0.R1
Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure** [log event-trigger rpki event](#) *keyword* [entry number](#) [debounce value](#) *number*
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger rpki event](#) *keyword* [entry number](#) [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger rpki event](#) *keyword* [entry number](#) [filter](#) *reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger rpki event](#) *keyword* [entry number](#) [handler](#) *reference*
Tree [handler](#)

Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

rsvp event *keyword*

Synopsis	Enter the rsvp list instance
Context	configure log event-trigger rsvp event <i>keyword</i>
Tree	rsvp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger rsvp event <i>keyword</i>
Tree	rsvp
Options	vRtrRsvpStateChange, vRtrRsvplfStateChange, vRtrRsvplfNbrStateUp, vRtrRsvplfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger rsvp event <i>keyword admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger rsvp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger rsvp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger rsvp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger rsvp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger rsvp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

satellite event *keyword*

Synopsis	Enter the satellite list instance
Context	configure log event-trigger satellite event <i>keyword</i>
Tree	satellite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger satellite event <i>keyword</i>
Tree	satellite
Options	tmnxSatelliteOperStateChange, tmnxSatSynclfTimRefSwitch, tmnxSatSynclfTimSystemQuality, tmnxSatSynclfTimRef1Quality, tmnxSatSynclfTimRef2Quality, tmnxSatSynclfTimHoldover, tmnxSatSynclfTimHoldoverClear, tmnxSatSynclfTimRef1Alarm, tmnxSatSynclfTimRef1AlarmClear, tmnxSatSynclfTimRef2Alarm,

	tmnxSatSynclfTimRef2AlarmClear, tmnxSatLocalForwardStateChg, tmnxSatLocalForwardSapStateChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger satellite event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure log event-trigger satellite event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger satellite event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[id] *number*

Synopsis	ID of the EHS event trigger entry
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Context	configure log event-trigger satellite event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger satellite event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger satellite event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger satellite event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger satellite event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis	Text description
Context	configure log event-trigger satellite event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger satellite event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger satellite event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

security event *keyword*

Synopsis Enter the **security** list instance

Context **configure log event-trigger security event** *keyword*

Tree **security**

Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure log event-trigger security event** *keyword*

Tree **security**

Options cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, radiusOperStatusChange, user_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp_transfer_successful, ftp_transfer_failed, enable_admin, host_snmp_attempts, SSH_server_preserve_key_fail, tacplusInetSrvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolIf, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAProfileStateChange, tmnxCpmProtExcdSapIp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear, tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr, tmnxDcpCardVrtrIfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd, sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart, sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform, sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource, sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed, sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed, vRtrIfDcpStaticExcd, vRtrIfDcpDynamicExcd, vRtrIfDcpStaticHoldDownStart, vRtrIfDcpDynamicHoldDownStart, vRtrIfDcpStaticHoldDownEnd, vRtrIfDcpDynamicHoldDownEnd, vRtrIfDcpStaticConform, vRtrIfDcpDynamicConform, vRtrIfDcpLocMonExcd, vRtrIfDcpLocMonExcdDynResource, vRtrIfDcpLocMonExcdAllDynAlloc, vRtrIfDcpLocMonExcdAllDynFreed, vRtrIfDcpDynamicEnforceAlloc, vRtrIfDcpDynamicEnforceFreed, tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw,

tmnxDcpCardVrtrlfEventOvrflw, tmnxPkiCAProfActnStatusChg,
tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf,
sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp,
tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf,
tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid,
tmnxSysLicenseExpiresSoon, tmnxPkiCAProfRevokeChkWarning,
tmnxCAProfUpDueToRevokeChkCrlOpt, tmnxPkiCertBeforeExpWarning,
tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared,
tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning,
tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid,
tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed,
tmnxPkiCAProfCrlUpdateStart, tmnxPkiCAProfCrlUpdateSuccess,
tmnxPkiCAProfCrlUpdateUrlFail, tmnxPkiCAProfCrlUpdAllUrlsFail,
tmnxPkiFileWriteFailed, tmnxPkiCAProfCrlUpdNoNxtUpdTime,
tmnxUsrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded,
tmnxPkiCAProfCrlUpdLargPreUpdTm, tmnxPkiCertNotYetValid,
tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc_user_login,
grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts,
netconf_user_login, netconf_user_logout, netconf_user_login_failed,
netconf_user_login_max_attempts, tmnxSysLicenseActivated, tmnxConfigModify,
tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid,
tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md_cli_io,
md_cli_unauth_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired,
netconf_auth, netconf_unauth, grpc_auth, grpc_unauth, tmnxCertKeyPairGen,
tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved,
tmnxFileCopied, tmnxFileUnzip, tmnxPasswordHashingChanged,
tmnxUserPasswordChangedByAdmin, tmnxSSHSessionFailed,
tmnxPkiCertUpdUpdateStarted, tmnxPkiCertUpdUpdateFinished,
tmnxPkiCertUpdUpdateFailed, tmnxSystemPasswordChangedByAdmin

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** **log** **event-trigger** **security** **event** *keyword* **admin-state** *keyword*

Tree **admin-state**

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

description *string*

Synopsis	Text description
Context	configure log event-trigger security event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger security event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger security event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger security event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger security event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger security event](#) *keyword entry number filter reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger security event](#) *keyword entry number handler reference*
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 16.0.R1
Platforms All

sflow event *keyword*

Synopsis Enter the **sflow** list instance
Context **configure** [log event-trigger sflow event](#) *keyword*
Tree [sflow](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger sflow event](#) *keyword*
Tree [sflow](#)
Options none, tmnxSflowCpEntrySampling, tmnxSflowPacketTxFailure
Notes This element is part of a list key.

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger sflow event](#) *keyword* [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** [log event-trigger sflow event](#) *keyword* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-s, 7950 XRS

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger sflow event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-s, 7950 XRS

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger sflow event](#) *keyword* [entry](#) *number*
Tree [entry](#)

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger sflow event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger sflow event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger sflow event <i>keyword</i> entry <i>number</i> debounce <i>time</i> <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger sflow event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

description string

Synopsis	Text description
Context	configure log event-trigger sflow event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger sflow event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger sflow event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

snmp event *keyword*

Synopsis	Enter the snmp list instance
Context	configure log event-trigger snmp event <i>keyword</i>
Tree	snmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger snmp event <i>keyword</i>
Tree	snmp
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, snmpdError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger snmp event <i>keyword admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger snmp event <i>keyword description</i> <i>string</i>
Tree	description
String Length	1 to 80

Introduced 16.0.R1
Platforms All

entry [id] *number*

Synopsis Enter the **entry** list instance
Context **configure log event-trigger snmp event** *keyword entry number*
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure log event-trigger snmp event** *keyword entry number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure log event-trigger snmp event** *keyword entry number admin-state keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure log event-trigger snmp event** *keyword entry number debounce*

Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger snmp event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger snmp event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger snmp event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
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Context	configure log event-trigger snmp event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger snmp event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

sr-mpls [event](#) *keyword*

Synopsis	Enter the sr-mpls list instance
Context	configure log event-trigger sr-mpls event <i>keyword</i>
Tree	sr-mpls
Introduced	21.10.R1
Platforms	All

event *keyword*

Synopsis	SR MPLS event
Context	configure log event-trigger sr-mpls event <i>keyword</i>
Tree	sr-mpls
Options	tmnxSrMplsPfxSidFailure
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger sr-mpls event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger sr-mpls event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	21.10.R1
Platforms	All

[*id*] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.10.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	21.10.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	21.10.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15

Introduced 21.10.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger sr-mpls event](#) *keyword* [entry number](#) [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 21.10.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger sr-mpls event](#) *keyword* [entry number](#) [filter](#) *reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 21.10.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger sr-mpls event](#) *keyword* [entry number](#) [handler](#) *reference*
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 21.10.R1
Platforms All

srv6 [event](#) *keyword*

Synopsis Enter the **srv6** list instance
Context **configure** [log event-trigger srv6 event](#) *keyword*
Tree [srv6](#)

Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log event-trigger srv6 event** *keyword*
Tree [srv6](#)
Options vRtrSrv6FunctionExhaustion, vRtrSrv6SvcSidIndex, vRtrSrv6LocatorResExhaustion
Notes This element is part of a list key.
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure log event-trigger srv6 event** *keyword admin-state* *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis Text description
Context **configure log event-trigger srv6 event** *keyword description* *string*
Tree [description](#)
String Length 1 to 80
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context	configure log event-trigger srv6 event <i>keyword entry number</i>
Tree	entry
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger srv6 event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger srv6 event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger srv6 event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger srv6 event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger srv6 event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger srv6 event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger srv6 event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter string
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger srv6 event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

stp [event](#) *keyword*

Synopsis	Enter the stp list instance
Context	configure log event-trigger stp event <i>keyword</i>
Tree	stp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger stp event <i>keyword</i>
Tree	stp
Options	topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN, tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST, tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng, tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange, tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange, topologyChangePipMajorState, topologyChangePipState, tmnxPipStpExcepCondStateChng, pipActiveProtocolChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger stp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger stp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger stp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger stp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger stp event keyword entry number admin-state keyword](#)
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

debounce

Synopsis Enter the **debounce** context
Context **configure** [log event-trigger stp event keyword entry number debounce](#)
Tree [debounce](#)
Introduced 16.0.R1
Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure** [log event-trigger stp event keyword entry number debounce time number](#)
Tree [time](#)
Range 1 to 604800
Units seconds
Introduced 16.0.R1
Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure** [log event-trigger stp event keyword entry number debounce value number](#)
Tree [value](#)

Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger stp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger stp event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger stp event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

svcmgr [event keyword](#)

Synopsis	Enter the svcmgr list instance
Context	configure log event-trigger svcmgr event keyword

Tree	svcmgr
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger svcmgr event <i>keyword</i>
Tree	svcmgr
Options	<p> svcTlsMacPinningViolation, tmnxSubSlaacOverride, svcEvpnMplsMacMoveExceedNonBlock, svcTlsVxInstReplicatorChgd, svcArpHostOverride, svcEvpnMHEsEviDFStateChgd, svcEvpnMHEsIsidDFStateChgd, svcEvpnRcvdProtSrcMac, svcBgpEvpnBHDupMacAddrsDetected, svcEvpnEtreeBumLabelSysHiUsgSet, svcEvpnEtreeBumLabelSysHiUsgClr, svcVxlanEvpnMplsDestSysHiUsgSet, svcVxlanEvpnMplsDestSysHiUsgClr, svcStatusChanged, svcTlsFdbTableFullAlarmRaised, svcTlsFdbTableFullAlarmCleared, svcSysEvpnESDfPrefOperValChange, tmnxSvcSysFdbTableHighUsgSet, iesIfStatusChanged, tmnxEndPointTxActiveChanged, tmnxSvcSysFdbTableHighUsgClr, svcEvpnMHStandbyStatusChg, svcEvpnVxVTepLclBiasAddFailSet, svcEvpnESVxVTepLclBiasAddFailSet, svcEvpnVxVTepLclBiasAddFailClr, svcEvpnESVxVTepLclBiasAddFailClr, svcEvpnRcvdPbbProtSrcMac, svcTlsMrpAttrRegistrationFailed, svcTlsMrpAttrTbIFullAlarmRaised, svcTlsMrpAttrTbIFullAlarmCleared, svcEpipePbbOperStatusChanged, sapStatusChanged, sapTlsMacAddrLimitAlarmRaised, sapTlsMacAddrLimitAlarmCleared, hostConnectivityLost, hostConnectivityRestored, sapReceivedProtSrcMac, sapTlsMacMoveExceeded, sapPortStateChangeProcessed, sapCemPacketDefectAlarm, sapCemPacketDefectAlarmClear, msapStateChanged, msapCreationFailure, sapTlsMacMoveExceedNonBlock, sapEthLoopbackStarted, sapEthLoopbackStopped, sapTunnelEncapIpMtuTooSmall, tmnxIpTunnelOperStateChange, sapIfIgnorePortStateStart, sapIfIgnorePortStateStop, sapReceivedPbbProtSrcMac, sdpStatusChanged, sdpBindStatusChanged, sdpKeepAliveStarted, sdpKeepAliveStopped, sdpKeepAliveProbeFailure, sdpKeepAliveLateReply, sdpTlsMacAddrLimitAlarmRaised, sdpTlsMacAddrLimitAlarmCleared, sdpBindPwPeerStatusBitsChanged, sdpBindTlsMacMoveExceeded, sdpBindPwPeerFaultAddrChanged, sdpBindSdpStateChangeProcessed, sdpBandwidthOverbooked, sdpBindInsufficientBandwidth, dynamicSdpConfigChanged, dynamicSdpBindConfigChanged, dynamicSdpCreationFailed, dynamicSdpBindCreationFailed, sdpEgrIfsNetDomInconsCntChanged, sdpBindIpceIpAddressChange, sdpBindReceivedProtSrcMac, sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock, sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped, sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAddrsDetected, svcBgpEvpnDupMacAddrsCleared, svcTlsVTEPHiUsageAlarmRaised, svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet, svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet, svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised, </p>

svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg,
svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect,
svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet,
svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised,
svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet,
svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet,
svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet,
svcTlsProxyArpSysHiUsgClr, svcTlsProxyArpSvcHiUsgSet,
svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr,
svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg,
sdpBindReceivedPbbProtSrcMac, svcTlsMfibTableFullAlarmRaised,
svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated,
tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPclyFailure,
tmnxSubMcsRelatedProblem, tmnxSubAuthPclyRadSerOperStatChg,
tmnxSubAcctPclyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised,
svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError,
tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError,
tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError,
tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTblFullAlrm,
svcFdbMimDestTblFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr,
svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved,
svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive,
sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit,
svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit,
tmnxSubUserCategoryError, svcTlsSiteDesigFwdrChg, sapTlsDataSapInstStatusChgd,
svcTlsGroupOperStatusChanged, sapTunnelStateChange,
tmnxSubHostInconsistentAtmTdOvr, sapAtmPppSessionFailure, sapAtmPppNcpFailure,
svcMSPwRtMisconfig, svcOperGrpOperStatusChanged, sapIpipeCelpAddrChange,
svcMSPwRetryExpiredNotif, svcVIIISiteDesigFwdrChg, tmnxSubSlaacSetupFailure,
tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached,
tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi,
tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed,
tmnxSubIpoelInvalidSessionKey, tmnxSubIpoelInvalidCidRidChange,
tmnxSubIpoelSessionLimitReached, tmnxSubIpoelPersistenceRecovery,
tmnxSubIpoelMigrHostDeleted, tmnxSubMngdHostCreationFail,
tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPIBndFailed,
tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed,
tmnxSubBrgRadiusUpdateIpoelSeFail, tmnxSubBrgRadiusCoaError,
tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached,
tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected,
alulpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError,
tmnxSubIpoelSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed,
tmnxSubSVlanStatsReachedMaximum, svcTlsVxInstMacAdrLimitAlrmRsd,
svcTlsVxInstMacAdrLimitAlrmClrd, tmnxSubCupsUpSapCreationFailed,
tmnxSubCupsUpIpfCreationFailed, tmnxPfcPAssocPathMgmtStateChgd,
tmnxSubInfoEgrAggRateLimitLowReq, tmnxSubIpoelWppRegistrationFailed,
svcEvpnMplsTEPIpSysHiUsgSet, svcEvpnMplsTEPIpSysHiUsgClr,
svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict,
svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr,
svcSrv6FunctionExhaustion, svclFSubForwardingStatsDisNotify,
svclFSubForwardingStatsEnNotify, svcRoutedVplsEvpnGWDrStateChgd,

	svcSrv6TEPEgrBndSvcHiUsgSet, svcSrv6TEPEgrBndSvcHiUsgClr, tmnxSapMRtCpeChkStatusChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger svcmgr event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger svcmgr event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger svcmgr event keyword entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
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Context	configure log event-trigger svcmgr event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger svcmgr event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger svcmgr event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger svcmgr event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger svcmgr event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger svcmgr event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger svcmgr event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger svcmgr event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1

Platforms All

system event *keyword*

Synopsis Enter the **system** list instance
Context **configure log event-trigger system event** *keyword*
Tree **system**
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log event-trigger system event** *keyword*
Tree **system**
Options stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped, ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, sntpTimeDiffExceedsThreshold, tmnxSsiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted, tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysVsdServerAvailable, tmnxSysVsdServerUnavailable, tmnxSysXmppServerFunctional, tmnxSysXmppServerNotFunctional, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable, tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure, tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded,

	ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, mdCommitInProgress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger system event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger system event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger system event keyword entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
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Context	configure log event-trigger system event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger system event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger system event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger system event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger system event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger system event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger system event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger system event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1

Platforms All

tls event *keyword*

Synopsis Enter the **tls** list instance
Context **configure log event-trigger tls event** *keyword*
Tree **tls**
Introduced 20.5.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log event-trigger tls event** *keyword*
Tree **tls**
Options tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure
Notes This element is part of a list key.
Introduced 20.5.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure log event-trigger tls event** *keyword* **admin-state** *keyword*
Tree **admin-state**
Default disable
Options enable, disable
Introduced 20.5.R1
Platforms All

description *string*

Synopsis Text description
Context **configure log event-trigger tls event** *keyword* **description** *string*
Tree **description**

String Length 1 to 80

Introduced 20.5.R1

Platforms All

entry [id] *number*

Synopsis Enter the **entry** list instance

Context **configure log event-trigger tls event keyword entry number**

Tree **entry**

Introduced 20.5.R1

Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure log event-trigger tls event keyword entry number**

Tree **entry**

Range 1 to 1500

Notes This element is part of a list key.

Introduced 20.5.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure log event-trigger tls event keyword entry number admin-state keyword**

Tree **admin-state**

Default enable

Options enable, disable

Introduced 20.5.R1

Platforms All

debounce

Synopsis Enter the **debounce** context

Context	configure log event-trigger tls event keyword entry number debounce
Tree	debounce
Introduced	20.5.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger tls event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	20.5.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger tls event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	20.5.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger tls event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger tls event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	20.5.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger tls event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	20.5.R1
Platforms	All

tree-sid [event](#) *keyword*

Synopsis	Enter the tree-sid list instance
Context	configure log event-trigger tree-sid event <i>keyword</i>
Tree	tree-sid
Introduced	20.10.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger tree-sid event <i>keyword</i>
Tree	tree-sid
Options	vRtrTreeSidCdtPathChanged , vRtrTreeSidCdtPathActInsChanged , vRtrTreeSidInSidRegFailure , vRtrTreeSidTreIdAllocFailure , vRtrTreeSidRepSegResExhaustion , vRtrTreeSidRepSegResExhstCleared , vRtrTreeSidLabelRangeExhaustion , vRtrTreeSidLblRangeExhstCleared
Notes	This element is part of a list key.

Introduced 20.10.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger tree-sid event](#) *keyword* **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 20.10.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger tree-sid event](#) *keyword* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 20.10.R1
Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger tree-sid event](#) *keyword* **entry** *number*
Tree [entry](#)
Introduced 20.10.R1
Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger tree-sid event](#) *keyword* **entry** *number*
Tree [entry](#)

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger tree-sid event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger tree-sid event keyword entry number debounce
Tree	debounce
Introduced	20.10.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger tree-sid event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	20.10.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger tree-sid event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	20.10.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger tree-sid event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger tree-sid event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	20.10.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger tree-sid event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	20.10.R1
Platforms	All

user event *keyword*

Synopsis	Enter the user list instance
Context	configure log event-trigger user event <i>keyword</i>
Tree	user
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger user event <i>keyword</i>
Tree	user
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger user event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger user event <i>keyword</i> description <i>string</i>

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger user event <i>keyword entry number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger user event <i>keyword entry number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger user event <i>keyword entry number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger user event <i>keyword entry number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger user event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger user event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

video event *keyword*

Synopsis	Enter the video list instance
Context	configure log event-trigger video event <i>keyword</i>
Tree	video
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger video event <i>keyword</i>
Tree	video
Options	tmnxVdoDuplicateSsrcId, tmnxVdoMdaSessionsLimitExceeded, tmnxVdoMdaSGLimitExceeded, tmnxVdoMdaSessionsLimitCleared, tmnxVdoMdaSGLimitCleared, tmnxVdoAdSpliceAbort, tmnxVdoClientSessionsLmtExceeded, tmnxVdoClientSessionsLmtCleared, tmnxVdoGrpSrcAnlyzrErrState, tmnxVdoGrpSrcAnlyzrStClear,

tmnxVdoMdaFccBwLimitExceeded, tmnxVdoMdaFccBwLimitCleared,
tmnxVdoMdaRetBwLimitExceeded, tmnxVdoMdaRetBwLimitCleared,
tmnxVdoMdaFccRetTotBwLmtExceeded, tmnxVdoMdaFccRetTotBwLmtCleared,
tmnxVdoMdaFccSesLimitExceeded, tmnxVdoMdaFccSesLimitCleared,
tmnxVdoMdaRetSesLimitExceeded, tmnxVdoMdaRetSesLimitCleared,
tmnxVdoMdaFccRetTotSeLmtExceeded, tmnxVdoMdaFccRetTotSeLmtCleared,
tmnxVdoVappSessionsLimitExceeded, tmnxVdoVappSGLimitExceeded,
tmnxVdoVappSessionsLimitCleared, tmnxVdoVappSGLimitCleared,
tmnxVdoVappFccBwLimitExceeded, tmnxVdoVappFccBwLimitCleared,
tmnxVdoVappRetBwLimitExceeded, tmnxVdoVappRetBwLimitCleared,
tmnxVdoVappFccRetTotBwLmtExceeded, tmnxVdoVappFccRetTotBwLmtCleared,
tmnxVdoVappFccSesLimitExceeded, tmnxVdoVappFccSesLimitCleared,
tmnxVdoVappRetSesLimitExceeded, tmnxVdoVappRetSesLimitCleared,
tmnxVdoVappFccRetTotSeLmtExceeded, tmnxVdoVappFccRetTotSeLmtCleared

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger video event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure log event-trigger video event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

entry [id] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger video event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger video event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger video event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger video event <i>keyword entry number debounce</i>
Tree	debounce

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger video event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger video event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description string

Synopsis	Text description
Context	configure log event-trigger video event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger video event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger video event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vrrp event keyword

Synopsis	Enter the vrrp list instance
Context	configure log event-trigger vrrp event <i>keyword</i>
Tree	vrrp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger vrrp event <i>keyword</i>
Tree	vrrp
Options	vrrpTrapNewMaster, vrrpTrapAuthFailure, tmnxVrrpIPListMismatch, tmnxVrrpIPListMismatchClear, tmnxVrrpMultipleOwners, tmnxVrrpBecameBackup, vrrpPacketDiscarded, tmnxVrrpBfdIntfSessStateChgd, vrrpTrapProtoError, tVrrpBecameBackup, tVrrpTrapNewMaster, tVrrpIPListMismatch, tVrrpIPListMismatchClear, tVrrpMultipleOwners, tVrrpPacketDiscarded,

	tVrrpRouterAdvNotActivated, tVrrpRouterAdvNotActivatedClear, tVrrpOperDownInvalidMac, tVrrpOperDownInvalidMacClear, tmnxVrrpOperDownInvalidMac, tmnxVrrpOperDownInvalidMacClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger vrrp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger vrrp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger vrrp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger vrrp event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger vrrp event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger vrrp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger vrrp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure** [log event-trigger vrrp event](#) *keyword entry number* [debounce value number](#)
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger vrrp event](#) *keyword entry number* [description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger vrrp event](#) *keyword entry number* [filter reference](#)
Tree [filter](#)
Reference **configure** [log filter string](#)
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger vrrp event](#) *keyword entry number* [handler reference](#)
Tree [handler](#)
Reference **configure** [log event-handling handler string](#)

Introduced 16.0.R1
Platforms All

vrtr event keyword

Synopsis Enter the **vrtr** list instance
Context **configure log event-trigger vrtr event** keyword
Tree **vrtr**
Introduced 16.0.R1
Platforms All

event keyword

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log event-trigger vrtr event** keyword
Tree **vrtr**
Options tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrExportLimitReached, tmnxVRtrGrRoutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrV6ExportLimitReached, tmnxVRtrGrV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared, tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted, tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources, tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust, tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt, tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt, tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState, tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared, tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped, tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged, tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified, vRtrIfDhcpCIRtStatusChanged, vRtrIfDhcpCISStateDnsChanged, vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6CISStateDnsChanged,

tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped,
tmnxVRtrBfdExtNoFreeTxIntrvlSlot, tmnxVRtrFibVPNOccupancyThreshold

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger vrtr event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger vrtr event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger vrtr event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
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Context	configure log event-trigger vrtr event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger vrtr event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger vrtr event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger vrtr event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger vrtr event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger vrtr event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger vrtr event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger vrtr event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

wlan-gw event keyword

Synopsis	Enter the wlan-gw list instance
Context	configure log event-trigger wlan-gw event keyword
Tree	wlan-gw
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger wlan-gw event keyword
Tree	wlan-gw
Options	tmnxWlanGwResrcProblemDetected, tmnxWlanGwResrcProblemCause, tmnxWlanGwTuQosProblem, tmnxWlanGwGrpOperStateChanged, tmnxWlanGwlomActive, tmnxWlanGwMgwConnected, tmnxWlanGwMgwRestarted, tmnxWlanGwNumMgwHi, tmnxWlanGwMgwStateChanged, tmnxWlanGwQosRadiusGtpMismatch, tmnxWlanGwSubIfRedActiveChanged, tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPIReqFailed, tmnxWlanGwSubIfPmAddNewPIFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwGtpMessageDropped, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger wlan-gw event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger wlan-gw event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[\[id\]](#) *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

debounce

Synopsis Enter the **debounce** context
 Context **configure log event-trigger wlan-gw event keyword entry number debounce**
 Tree [debounce](#)
 Introduced 16.0.R1
 Platforms All

time number

Synopsis Time window for events for EHS to trigger a response
 Context **configure log event-trigger wlan-gw event keyword entry number debounce time number**
 Tree [time](#)
 Range 1 to 604800
 Units seconds
 Introduced 16.0.R1
 Platforms All

value number

Synopsis Occurrences in time interval to trigger EHS response
 Context **configure log event-trigger wlan-gw event keyword entry number debounce value number**
 Tree [value](#)
 Range 2 to 15
 Introduced 16.0.R1
 Platforms All

description string

Synopsis Text description
 Context **configure log event-trigger wlan-gw event keyword entry number description string**
 Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger wlan-gw event](#) *keyword* [entry](#) *number* [filter](#) *reference*

Tree [filter](#)

Reference **configure** [log filter](#) *string*

Introduced 16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger wlan-gw event](#) *keyword* [entry](#) *number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *string*

Introduced 16.0.R1

Platforms All

wpp event *keyword*

Synopsis Enter the **wpp** list instance

Context **configure** [log event-trigger wpp event](#) *keyword*

Tree [wpp](#)

Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger wpp event](#) *keyword*

Tree [wpp](#)

Options	tmnxWppPortalStatChanged, tmnxWppHostAuthenticationFailed, tmnxWppPortalUnreachable, tmnxWppPortalGroupStatChanged, tmnxWppPGHostAuthFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger wpp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger wpp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger wpp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger wpp event <i>keyword entry number</i>
Tree	<i>entry</i>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger wpp event <i>keyword entry number admin-state keyword</i>
Tree	<i>admin-state</i>
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger wpp event <i>keyword entry number debounce</i>
Tree	<i>debounce</i>
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger wpp event <i>keyword entry number debounce time number</i>
Tree	<i>time</i>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
Context **configure log event-trigger wpp event** *keyword entry number debounce value number*
Tree [value](#)
Range 2 to 15
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure log event-trigger wpp event** *keyword entry number description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure log event-trigger wpp event** *keyword entry number filter reference*
Tree [filter](#)
Reference **configure log filter** *string*
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure log event-trigger wpp event** *keyword entry number handler reference*
Tree [handler](#)
Reference **configure log event-handling handler** *string*

Introduced 16.0.R1
Platforms All

file [*file-policy-name*] *string*

Synopsis Enter the **file** list instance
Context **configure log file** *string*
Tree **file**
Max. Instances 99
Introduced 16.0.R1
Platforms All

[file-policy-name] *string*

Synopsis File ID for a log or accounting file
Context **configure log file** *string*
Tree **file**
Description This command specifies the identification name or number for a log or accounting file. If the name begins with a numerical digit (from 1 to 9), the name must be a number from 1 to 99.
String Length 1 to 64
Notes This element is part of a list key.
Introduced 22.2.R1
Platforms All

compact-flash-location

Synopsis Enter the **compact-flash-location** context
Context **configure log file** *string* **compact-flash-location**
Tree **compact-flash-location**
Introduced 16.0.R1
Platforms All

backup *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log file location
Context	configure log file <i>string</i> compact-flash-location backup <i>keyword</i>
Tree	backup
Default	cf-unspecified
Options	cf-unspecified, cf1, cf2, cf3, cf4
Introduced	16.0.R1
Platforms	All

primary *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log file location
Context	configure log file <i>string</i> compact-flash-location primary <i>keyword</i>
Tree	primary
Default	cf-unspecified
Options	cf-unspecified, cf1, cf2, cf3, cf4
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log file <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

retention number

Synopsis	Minimum time that a file is retained on the media
Context	configure log file string retention number
Tree	retention
Range	1 to 500
Default	12
Units	hours
Introduced	16.0.R1
Platforms	All

rollover number

Synopsis	Frequency at which a new log or accounting file is created
Context	configure log file string rollover number
Tree	rollover
Range	5 to 10080
Default	1440
Units	minutes
Introduced	16.0.R1
Platforms	All

filter [filter-name] string

Synopsis	Enter the filter list instance
Context	configure log filter string
Tree	filter
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

[filter-name] string

Synopsis	Filter name
Context	configure log filter string

Tree	filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

default-action *keyword*

Synopsis	Default action for the event filter
Context	configure log filter <i>string</i> default-action <i>keyword</i>
Tree	default-action
Options	drop, forward
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log filter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

named-entry [[entry-name](#)] *string*

Synopsis	Enter the named-entry list instance
Context	configure log filter <i>string</i> named-entry <i>string</i>
Tree	named-entry
Description	Commands in this context create or edit an event filter entry.
Max. Instances	999
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

[entry-name] *string*

Synopsis	Entry name
Context	configure log filter <i>string</i> named-entry <i>string</i>
Tree	named-entry
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

action *keyword*

Synopsis	Action for this event filter entry
Context	configure log filter <i>string</i> named-entry <i>string</i> action <i>keyword</i>
Tree	action
Options	drop, forward
Introduced	21.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log filter <i>string</i> named-entry <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.2.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure log filter <i>string</i> named-entry <i>string</i> match
Tree	match
Introduced	21.2.R1
Platforms	All

application

Synopsis	Enter the application context
Context	configure log filter <i>string</i> named-entry <i>string</i> match application
Tree	application
Introduced	21.2.R1
Platforms	All

eq keyword

Synopsis	Application to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match application eq <i>keyword</i>
Tree	eq
Options	application-assurance, aps, atm, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igh, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, ppp, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, gmpls, lmp, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

neq keyword

Synopsis	Application to be filtered out
Context	configure log filter <i>string</i> named-entry <i>string</i> match application neq <i>keyword</i>
Tree	neq
Options	application-assurance, aps, atm, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igh, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, ppp, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, gmpls, lmp, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls
Notes	The following elements are part of a choice: eq or neq .

Introduced 21.2.R1
Platforms All

event

Synopsis Enter the **event** context
Context **configure log filter** *string* **named-entry** *string* **match event**
Tree **event**
Introduced 21.2.R1
Platforms All

eq number

Synopsis Log event message to match
Context **configure log filter** *string* **named-entry** *string* **match event eq** *number*
Tree **eq**
Range 1 to 4294967295
Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced 21.2.R1
Platforms All

gt number

Synopsis Number of the log event to match
Context **configure log filter** *string* **named-entry** *string* **match event gt** *number*
Tree **gt**
Range 1 to 4294967295
Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced 21.2.R1
Platforms All

gte number

Synopsis Number of the log event to match
Context **configure log filter** *string* **named-entry** *string* **match event gte** *number*

Tree	gte
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

lt number

Synopsis	Number of the log event to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match event lt number
Tree	lt
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

lte number

Synopsis	Number of the log event to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match event lte number
Tree	lte
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

neq number

Synopsis	Log event message to filter out
Context	configure log filter <i>string</i> named-entry <i>string</i> match event neq number
Tree	neq
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1

Platforms All

message

Synopsis Enter the **message** context
Context **configure log filter** *string* **named-entry** *string* **match message**
Tree **message**
Introduced 21.2.R1
Platforms All

eq *string*

Synopsis Log event message to match
Context **configure log filter** *string* **named-entry** *string* **match message eq** *string*
Tree **eq**
String Length 1 to 400
Notes The following elements are part of a choice: **eq** or **neq**.
Introduced 21.2.R1
Platforms All

neq *string*

Synopsis Log event message to be filtered out
Context **configure log filter** *string* **named-entry** *string* **match message neq** *string*
Tree **neq**
String Length 1 to 400
Notes The following elements are part of a choice: **eq** or **neq**.
Introduced 21.2.R1
Platforms All

regexp *boolean*

Synopsis String comparison to determine if the log event matches the value of pattern
Context **configure log filter** *string* **named-entry** *string* **match message regexp** *boolean*
Tree **regexp**

Default	false
Introduced	21.2.R1
Platforms	All

severity

Synopsis	Enter the severity context
Context	configure log filter <i>string</i> named-entry <i>string</i> match severity
Tree	severity
Introduced	21.2.R1
Platforms	All

eq keyword

Synopsis	Log event severity level to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match severity eq <i>keyword</i>
Tree	eq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

gt keyword

Synopsis	Log event severity level
Context	configure log filter <i>string</i> named-entry <i>string</i> match severity gt <i>keyword</i>
Tree	gt
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

gte keyword

Synopsis	Log event severity level
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Context	configure log filter <i>string</i> named-entry <i>string</i> match severity gte <i>keyword</i>
Tree	gte
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

lt keyword

Synopsis	Log event severity level
Context	configure log filter <i>string</i> named-entry <i>string</i> match severity lt <i>keyword</i>
Tree	lt
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

lte keyword

Synopsis	Log event severity level
Context	configure log filter <i>string</i> named-entry <i>string</i> match severity lte <i>keyword</i>
Tree	lte
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

neq keyword

Synopsis	Log event severity level to filter out
Context	configure log filter <i>string</i> named-entry <i>string</i> match severity neq <i>keyword</i>
Tree	neq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .

Introduced 21.2.R1
Platforms All

subject

Synopsis Enter the **subject** context
Context **configure log filter string named-entry string match subject**
Tree **subject**
Introduced 21.2.R1
Platforms All

eq string

Synopsis Log event subject string to match
Context **configure log filter string named-entry string match subject eq string**
Tree **eq**
String Length 1 to 32
Notes The following elements are part of a choice: **eq** or **neq**.
Introduced 21.2.R1
Platforms All

neq string

Synopsis Log event subject string to filter out
Context **configure log filter string named-entry string match subject neq string**
Tree **neq**
String Length 1 to 32
Notes The following elements are part of a choice: **eq** or **neq**.
Introduced 21.2.R1
Platforms All

regexp boolean

Synopsis String comparison to determine if the log event matches the value of subject
Context **configure log filter string named-entry string match subject regexp boolean**

Tree	regex
Default	false
Introduced	21.2.R1
Platforms	All

vrtr-name

Synopsis	Enter the vrtr-name context
Context	configure log filter string named-entry string match vrtr-name
Tree	vrtr-name
Description	Commands in this context configure the criteria for the name of a router instance. The vrtr-name is a name for a router instance, in a special format, used in the logging system. Examples of names include Base and vprn101, where 101 is the service ID of the VPRN service. The name represents the router instance that generated the log event.
Introduced	21.2.R1
Platforms	All

eq string

Synopsis	Log event router instance to match
Context	configure log filter string named-entry string match vrtr-name eq string
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

neq string

Synopsis	Log event router instance to filter out
Context	configure log filter string named-entry string match vrtr-name neq string
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1

Platforms All

regex *boolean*

Synopsis Match the router instance string
Context **configure** [log filter](#) *string* [named-entry](#) *string* [match](#) [vrtr-name](#) [regex](#) *boolean*
Tree [regex](#)
Default false
Introduced 21.2.R1
Platforms All

log-events

Synopsis Enter the **log-events** context
Context **configure** [log](#) [log-events](#)
Tree [log-events](#)
Introduced 16.0.R1
Platforms All

adp event *keyword*

Synopsis Enter the **adp** list instance
Context **configure** [log](#) [log-events](#) [adp event](#) *keyword*
Tree [adp](#)
Introduced 16.0.R1
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log](#) [log-events](#) [adp event](#) *keyword*
Tree [adp](#)
Options [tmnxDiscoveryEndNotify](#), [tmnxDiscoveryCellularReq](#)
Notes This element is part of a list key.
Introduced 16.0.R1

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events adp event** keyword **generate** *boolean*
Tree **generate**
Introduced 16.0.R1
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events adp event** keyword **repeat** *boolean*
Tree **repeat**
Default false
Introduced 16.0.R4
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events adp event** keyword **severity** *keyword*
Tree **severity**
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events adp event** keyword **specific-throttle** *boolean*
Tree **specific-throttle**
Introduced 16.0.R1
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events adp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events adp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events adp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-s

application-assurance *event* *keyword*

Synopsis	Enter the application-assurance list instance
Context	configure log log-events application-assurance event <i>keyword</i>
Tree	application-assurance
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events application-assurance event <i>keyword</i>
Tree	application-assurance
Options	tmnxBsxIsaAaGrpFailureV2, tmnxBsxIsaAaGrpFailureClearV2, tmnxBsxIsaAaGrpNonRedundantV2, tmnxBsxIsaAaGrpSwitchover, tmnxBsxIsaAaGrpFlowFull, tmnxBsxIsaAaGrpFlowFullClear, tmnxBsxIsaAaSubLoadBalance, tmnxBsxIsaAaGrpCapCostThres, tmnxBsxIsaAaGrpCapCostThresClear, tmnxBsxAaSubscribersUnassigned, tmnxBsxAaSubscriberAcctDataLoss, tmnxBsxAaSubPolResExceeded, tmnxBsxAaSubPolResExceededClear, tmnxBsxIsaAaGrpFlowSetup, tmnxBsxIsaAaGrpFlowSetupClear, tmnxBsxIsaAaGrpPacketRate, tmnxBsxIsaAaGrpPacketRateClear, tmnxBsxIsaAaGrpBitRate, tmnxBsxIsaAaGrpBitRateClear, tmnxBsxTransIpPolAaSubCreated, tmnxBsxTransIpPolAaSubDeleted, tmnxBsxTransIpPolRadCoAAudit, tmnxBsxTransIpPolRadCoAError, tmnxBsxTransIpPolRadDiscError, tmnxBsxTransIpPolDhcpAddWarning, tmnxBsxTransIpPolDhcpDelWarning, tmnxBsxIsaAaGrpFmSbWaSBufOvld, tmnxBsxIsaAaGrpFmSbWaSBufOvldClr, tmnxBsxIsaAaGrpToSbWaSBufOvld, tmnxBsxIsaAaGrpToSbWaSBufOvldClr, tmnxBsxIsaAaGrpOvridCutthru, tmnxBsxIsaAaGrpOvridCutthruClr, tmnxBsxTransIpPersistenceWarn, tmnxBsxAarpInstOperStateChanged, tmnxBsxAarpInstStateChanged, tmnxBsxRadApFailure, tmnxBsxRadApServOperStateChange, tmnxBsxMobileSubModifyFailure, tmnxBsxRadApIntrmUpdateSkipped, tmnxBsxHttpUrlParamLimitExceeded, tmnxBsxUrlFilterOperStateChange, tmnxBsxSubModifyFailure, tmnxBsxDnsIpCacheFull, tmnxBsxDnsIpCacheFullClear, tmnxBsxUrlListUpdate, tmnxBsxUrlListFailure, tmnxBsxIsaAaTimFileProcFailure, tmnxBsxStatTcaThreshCrossed, tmnxBsxStatTcaThreshCrossedClear, tmnxBsxStatPolcrTcaThreshCrossed, tmnxBsxStatPolcrTcaThreshCrClear, tmnxBsxStatFtrTcaThreshCrossed, tmnxBsxStatFtrTcaThreshCrClear, tmnxBsxStatFtrEnTcaThreshCrossed, tmnxBsxStatFtrEnTcaThreshCrClear, tmnxBsxTransIpPolDiamGxError, tmnxBsxDatapathCpuUsage, tmnxBsxDatapathCpuUsageClear, tmnxBsxTcpValTcaCrossed, tmnxBsxTcpValTcaCrossedClear, tmnxBsxCertProfileOperStateChngd, tmnxBsxSubQuarantined, tmnxBsxSubQuarantinedClear, tmnxBsxUrlFiltrWebServOprStateChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events application-assurance event <i>keyword</i> generate <i>boolean</i>

Tree [generate](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log](#) [log-events](#) [application-assurance](#) [event](#) *keyword* [repeat](#) *boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log](#) [log-events](#) [application-assurance](#) [event](#) *keyword* [severity](#) *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [application-assurance](#) [event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [application-assurance](#) [event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)

Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events application-assurance event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events application-assurance event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aps **event** *keyword*

Synopsis	Enter the aps list instance
Context	configure log log-events aps event <i>keyword</i>
Tree	aps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events aps event <i>keyword</i>
Tree	aps

Options	apsEventSwitchover, apsEventModeMismatch, apsEventChannelMismatch, apsEventPSBF, apsEventFEPLF, tApsModeMismatchClear, tApsChannelMismatchClear, tApsPSBFClear, tApsFEPLFClear, tApsLocalSwitchCommandSet, tApsLocalSwitchCommandClear, tApsRemoteSwitchCommandSet, tApsRemoteSwitchCommandClear, tApsMcApsCtlLinkStateChange, tApsChanTxLaisStateChange, tApsPrimaryChannelChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events aps event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events aps event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events aps event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events aps event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events aps event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events aps event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events aps event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

atm event *keyword*

Synopsis	Enter the atm list instance
Context	configure log log-events atm event <i>keyword</i>
Tree	atm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events atm event <i>keyword</i>
Tree	atm
Options	tAtmTcSubLayerDown, tAtmTcSubLayerClear, atmVclStatusChange, atmVplStatusChange, atmVtlStatusChange, atmIfcStatusChange, tAtmPlcpSubLayerDown, tAtmPlcpSubLayerClear, tAtmEpOutOfPeerVpiOrVciRange, tAtmMaxPeerVccsExceeded, tAtmMaxPeerVpcsExceeded, tAtmIlliLinkStatusChange, atmIlliPeerVclStatusChange, atmIlliPeerVplStatusChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events atm event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events atm event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events atm event** *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events atm event** *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure log log-events atm event** *keyword specific-throttle-interval number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure log log-events atm event** *keyword specific-throttle-limit number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure log log-events atm event** *keyword throttle boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

auto-prov event *keyword*

Synopsis Enter the **auto-prov** list instance
Context **configure log log-events auto-prov event** *keyword*
Tree [auto-prov](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log log-events auto-prov event** *keyword*
Tree [auto-prov](#)
Options autoNodeProv
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events auto-prov event** *keyword generate boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events auto-prov event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events auto-prov event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events auto-prov event keyword specific-throttle boolean
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events auto-prov event keyword specific-throttle-interval number
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events auto-prov event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events auto-prov event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

bfd [event](#) *keyword*

Synopsis	Enter the bfd list instance
Context	configure log log-events bfd event <i>keyword</i>
Tree	bfd
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events bfd event <i>keyword</i>
Tree	bfd
Options	tmnxBfdOnLspSessDown , tmnxBfdOnLspSessUp , tmnxBfdOnLspSessDeleted , tmnxBfdOnLspSessProtChange , tmnxBfdOnLspSessNoCpmNpResources , tmnxBfdOnLspSessNoTailResources , tmnxBfdOnLspExtSessDown , tmnxBfdOnLspExtSessUp , tmnxBfdOnLspExtSessDeleted , tmnxBfdOnLspExtSessProtChange , tmnxBfdOnLspExtSessNoCpmNpResrcs
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log log-events bfd event keyword generate boolean](#)
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log log-events bfd event keyword repeat boolean](#)
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log log-events bfd event keyword severity keyword](#)
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log log-events bfd event keyword specific-throttle boolean](#)
Tree [specific-throttle](#)
Introduced 16.0.R1

Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [bfd](#) [event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [bfd](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [bfd](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

bgp [event](#) *keyword*

Synopsis Enter the **bgp** list instance
Context **configure** [log](#) [log-events](#) [bgp](#) [event](#) *keyword*
Tree [bgp](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events bgp event <i>keyword</i>
Tree	bgp
Options	sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError, tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tmnxBmpSessionStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events of this type and increment the event counter
Context	configure log log-events bgp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events bgp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events bgp event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events bgp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events bgp event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Times that this event can be logged within the specific throttle interval
Context	configure log log-events bgp event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events bgp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

bier event *keyword*

Synopsis	Enter the bier list instance
Context	configure log log-events bier event <i>keyword</i>
Tree	bier
Introduced	19.5.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events bier event <i>keyword</i>
Tree	bier
Options	vRtrBierBfrldCollision, vRtrBierMtMismatch, vRtrBierSubDomainMismatch, vRtrBierUnsupportedNhop
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events bier event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	19.5.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events bier event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	19.5.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events bier event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	19.5.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events bier event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	19.5.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events bier event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	19.5.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events bier event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	19.5.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events bier event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	19.5.R1
Platforms	All

calltrace **event** *keyword*

Synopsis	Enter the calltrace list instance
Context	configure log log-events calltrace event <i>keyword</i>
Tree	calltrace
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events calltrace event <i>keyword</i>
Tree	calltrace
Options	tmnxCallTraceMaxFilesNumReached, tmnxCallTraceLocSizeLimitReached, calltraceDebugEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events calltrace event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events calltrace event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events calltrace event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events calltrace event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events calltrace event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events calltrace event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events calltrace event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd [event](#) *keyword*

Synopsis	Enter the cflowd list instance
Context	configure log log-events cflowd event <i>keyword</i>
Tree	cflowd
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events cflowd event <i>keyword</i>
Tree	cflowd
Options	tmnCflowdCreateFailure, tmnCflowdStateChange, tmnCflowdFlowCreateFailure, tmnCflowdPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events cflowd event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events cflowd event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events cflowd event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events cflowd event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events cflowd event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events cflowd event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events cflowd event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

chassis event keyword

Synopsis	Enter the chassis list instance
Context	configure log log-events chassis event keyword
Tree	chassis
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events chassis event keyword
Tree	chassis
Options	tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSynclftimingHoldover, tmnxEqSynclftimingHoldoverClear, tmnxEqSynclftimingRef1Alarm, tmnxEqSynclftimingRef1AlarmClear, tmnxEqSynclftimingRef2Alarm, tmnxEqSynclftimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSynclftimingBITSAlarm, tmnxEqSynclftimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded, tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete, tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange, tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent, tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm, tmnxEqMdaSyncENotCompatible, tmnxIPseclsaGrpActivesaChgd, tmnxEqCardPChipMemoryEvent, tmnxIPseclsaGrpUnableToSwitch, tmnxIPseclsaGrpTnlLowWMark, tmnxIPseclsaGrpTnlHighWMark, tmnxIPseclsaGrpTnlMax, tmnxEqSynclftimingRef1Quality, tmnxEqSynclftimingRef2Quality, tmnxEqSynclftimingBITSQuality, tmnxEqSynclftimingBITS2Quality, tmnxEqSynclftimingRefSwitch, tmnxEqSynclftimingBITS2Alarm, tmnxEqSynclftimingBITS2AlarmClr, tmnxEqSynclftimingBITSOutRefChg, tmnxEqCardPChipCamEvent, tmnxEqSynclftimingSystemQuality, tmnxEqHwEnhancedCapability, tmnxEqSynclftimingPTPQuality, tmnxEqSynclftimingPTPAlarm, tmnxEqSynclftimingPTPAlarmClr, tmnxPeFirmwareVersionWarning, tmnxMDAIsaTunnelGroupChange, tmnxEqPowerCapacityExceeded, tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity, tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState, tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent, tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent, tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent, tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear, tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear,

tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear,
tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm,
tmnxEqProvPowerCapacityAlmClr, tmnxPlyAcctStatsPoolExcResource,
tmnxPlyAcctStatsPoolLowResource, tmnxPlyAcctStatsEventOvrflwClr,
tmnxPlyAcctStatsEventOvrflw, tmnxlomResHighLimitReached,
tmnxlomResExhausted, tmnxlomResStateClr, tmnxlomEventOverflow,
tmnxlomEventOverflowClr, tmnxEqDataPathFailureProtImpact,
tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail,
tmnxEqMdalngrXplError, tmnxSynclfTimBITS2048khzUnsup,
tmnxSynclfTimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise,
tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp,
tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail,
tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail,
tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail,
tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail,
tmnxEqPhysChassPowerSupOutFailCl, tmnxEqPhysChassisFanFailure,
tmnxEqPhysChassisFanFailureClear, tIPseclsaMemLowWatermark,
tIPseclsaMemHighWatermark, tIPseclsaMemMax, tmnxCpmMemSizeMismatch,
tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir,
tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect,
tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed,
tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail,
tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear,
tmnxPhysChassisPCMInputFeed, tmnxPhysChassisPCMInputFeedClr,
tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear,
tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload,
tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload,
tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload,
tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload,
tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload,
tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload,
tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload,
tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload,
tmnxIPv6CpmFilterOverloadClear, tmnxBluetoothModuleConnectionChg,
tmnxGnssAcquiringFix, tmnxGnssAcquiredFix, tmnxPhysChassisPMOutFail,
tmnxPhysChassisPMOutFailClr, tmnxPhysChassisPMInputFeed,
tmnxPhysChassisPMInputFeedClr, tmnxPhysChassisFilterDoorOpen,
tmnxPhysChassisFilterDoorClosed, tmnxPhysChassisPMOverTemp,
tmnxPhysChassisPMOverTempClr, tmnxEqFpgaSoftError,
tmnxEqSynclfTimingSyncEQuality, tmnxEqSynclfTimingSyncE2Quality,
tmnxEqSynclfTimingSyncEAlarm, tmnxEqSynclfTimingSyncEAlarmClr,
tmnxEqSynclfTimingSyncE2Alarm, tmnxEqSynclfTimingSyncE2AlarmClr,
tmnxEqHwEventDetected, tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered,
tmnxEsaConnected, tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared,
tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved,
tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark,
tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch,
tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr,
tmnxEqSynclfTimingGnssQuality, tmnxEqSynclfTimingGnss2Quality,
tmnxEqSynclfTimingGnssAlarm, tmnxEqSynclfTimingGnss2Alarm,
tmnxEqSynclfTimingGnssAlarmClr, tmnxEqSynclfTimingGnss2AlarmClr,

tmnxEsaFirmwareUpgradeStarted, tmnxPlcyAcctPlcrPoolExcResource,
tmnxPlcyAcctPlcrPoolLowResource, tChassisAirflowDirMismatch,
tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch,
tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup,
tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw,
tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared,
tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear,
tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear,
tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull,
tmnxIPv6FilterEgrNearFullClear, tmnxEsaHwStatusDegraded,
tmnxEsaHwStatusDegradedClr, tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr,
tmnxEsaHwPwrSup1Degraded, tmnxEsaHwPwrSup1DegradedClr,
tmnxEsaHwPwrSup1Failed, tmnxEsaHwPwrSup1FailedClr,
tmnxEsaHwPwrSup2Degraded, tmnxEsaHwPwrSup2DegradedClr,
tmnxEsaHwPwrSup2Failed, tmnxEsaHwPwrSup2FailedClr,
tmnxEsaHwFanBankNonRedun, tmnxEsaHwFanBankNonRedunClr,
tmnxEsaHwFanBankFailRedun, tmnxEsaHwFanBankFailRedunClr,
tmnxEsaHwFanStatusDegraded, tmnxEsaHwFanStatusDegradedClr,
tmnxEsaHwFanStatusFailed, tmnxEsaHwFanStatusFailedClr,
tmnxEsaHwPwrSupMismatch, tmnxEsaHwPwrSupMismatchClr,
tmnxEsaHwPwrSupBankNonRedun, tmnxEsaHwPwrSupBankNonRedunClr,
tmnxEsaHwPwrSupBankFailRedun, tmnxEsaHwPwrSupBankFailRedunClr,
tmnxEsaHwTemperatureDegraded, tmnxEsaHwTemperatureDegradedClr,
tmnxEsaHwTemperatureFailed, tmnxEsaHwTemperatureFailedClr,
tmnxSasAlarminput1StateChanged, tmnxSasAlarminput2StateChanged,
tmnxSasAlarminput3StateChanged, tmnxSasAlarminput4StateChanged,
tmnxAlarmInputVoltageFailure, tmnxlomRsrcUsageHighLimitReached,
tmnxlomRsrcUsageExhausted, tmnxlomRsrcUsageRecovered,
tmnxlomRsrcUserOversubscribed, tmnxlomRsrcUserOversubscribedClr,
tmnxlomRsrcEventOverflow, tmnxlomRsrcEventOverflowClr,
tmnxlomRsrcOwnerOversubscribed, tmnxlomRsrcOwnerOversubscrbdClr,
tmnxInterChassisCommsDown, tmnxInterChassisCommsUp,
tmnxCpmlcPortDown, tmnxCpmlcPortUp, tmnxCpmlcPortSFFInserted,
tmnxCpmlcPortSFFRemoved, tmnxCpmANoLocallcPort, tmnxCpmBNoLocallcPort,
tmnxCpmALocallcPortAvail, tmnxCpmBLocallcPortAvail, CpmlcPortSFFStatusFailure,
CpmlcPortSFFStatusDDMCorrupt, CpmlcPortSFFStatusReadError,
CpmlcPortSFFStatusUnsupported, tmnxCpmlcPortDDMFailure,
tmnxCpmlcPortDDMClear, tmnxSfmlcPortDown, tmnxSfmlcPortUp,
tmnxSfmlcPortSFFInserted, tmnxSfmlcPortSFFRemoved, SfmlcPortSFFStatusFailure,
SfmlcPortSFFStatusDDMCorrupt, SfmlcPortSFFStatusReadError,
SfmlcPortSFFStatusUnsupported, tmnxSfmlcPortDDMFailure,
tmnxSfmlcPortDDMClear, tmnxSfmlcPortDegraded, tmnxSfmlcPortDegradedClear,
tmnxCardResMacFdbHighUsgSet, tmnxCardResMacFdbHighUsgClr,
tmnxPowerShelfInputPwrModeSwitch, tmnxPowerShelfCommsDown,
tmnxPowerShelfCommsUp, tmnxPowerShelfOutputStatusSwitch,
tmnxPowerShelfOutputStatusDown, tmnxPowerShelfOutputStatusUp

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events chassis event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events chassis event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events chassis event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events chassis event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events chassis event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events chassis event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events chassis event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

debug [event](#) *keyword*

Synopsis	Enter the debug list instance
Context	configure log log-events debug event <i>keyword</i>
Tree	debug
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events debug event <i>keyword</i>
Tree	debug
Options	traceEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events debug event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events debug event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events debug event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events debug event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events debug event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events debug event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events debug event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

dhcp event *keyword*

Synopsis	Enter the dhcp list instance
Context	configure log log-events dhcp event <i>keyword</i>
Tree	dhcp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events dhcp event <i>keyword</i>
Tree	dhcp
Options	svcDHCPLeaseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLeaseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLeaseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLeaseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLeaseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError, tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError, tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded, tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni, tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet, tmnxVRtrDHCP6ClientMacUnresolved, sapDHCPLeaseStateMobilityError, sdpBindDHCPLeaseStateMobilityErr, svcDHCPMiscellaneousProblem, sapStatHost6DynMacConflict
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events dhcp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events dhcp event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events dhcp event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events dhcp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events dhcp event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events dhcp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dhcp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

dhcps *event* *keyword*

Synopsis	Enter the dhcps list instance
Context	configure log log-events dhcps event <i>keyword</i>
Tree	dhcps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events dhcps event <i>keyword</i>
Tree	dhcps
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange, tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong,

tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange,
tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPIThTooLowV6,
tmnxDhcpSvrPIThDepletedV6, tmnxDhcpSvrPfxThTooLowV6,
tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired,
tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events dhcp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events dhcp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events dhcp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events dhcp event keyword specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events dhcp event keyword specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events dhcp event keyword specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dhcp event keyword throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter event keyword

Synopsis	Enter the diameter list instance
Context	configure log log-events diameter event keyword
Tree	diameter
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events diameter event keyword
Tree	diameter
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events diameter event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events diameter event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events diameter event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events diameter event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events diameter event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events diameter event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events diameter event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

dot1x [event](#) *keyword*

Synopsis	Enter the dot1x list instance
Context	configure log log-events dot1x event <i>keyword</i>
Tree	dot1x
Introduced	21.2.R1
Platforms	All

event *keyword*

Synopsis	Events for dynsvc module.
Context	configure log log-events dot1x event <i>keyword</i>
Tree	dot1x
Options	alxDot1xHostAuthEvent
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events dot1x event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	21.2.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events dot1x event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	21.2.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events dot1x event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.2.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events dot1x event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	21.2.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events dot1x event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.2.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events dot1x event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	21.2.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dot1x event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	21.2.R1
Platforms	All

dynsvc [event](#) *keyword*

Synopsis	Enter the dynsvc list instance
Context	configure log log-events dynsvc event <i>keyword</i>
Tree	dynsvc
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events dynsvc event <i>keyword</i>
Tree	dynsvc
Options	tmnxDynSvcSapFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events dynsvc event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events dynsvc event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events dynsvc event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events dynsvc event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events dynsvc event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events dynsvc event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dynsvc event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

efm-oam [event](#) *keyword*

Synopsis	Enter the efm-oam list instance
Context	configure log log-events efm-oam event <i>keyword</i>
Tree	efm-oam
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events efm-oam event <i>keyword</i>
Tree	efm-oam
Options	tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected, tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent, tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr, tmnxDot3OamNonThresholdEventClr
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events efm-oam event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events efm-oam event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events efm-oam event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events efm-oam event** *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure log log-events efm-oam event** *keyword specific-throttle-interval number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure log log-events efm-oam event** *keyword specific-throttle-limit number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure log log-events efm-oam event** *keyword throttle boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

elmi event *keyword*

Synopsis	Enter the elmi list instance
Context	configure log log-events elmi event <i>keyword</i>
Tree	elmi
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events elmi event <i>keyword</i>
Tree	elmi
Options	tmnxElmilfStatusChangeEvent, tmnxElmiEVCStatusChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events elmi event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events elmi event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events elmi event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events elmi event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events elmi event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events elmi event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events elmi event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

ering **event** *keyword*

Synopsis	Enter the ering list instance
Context	configure log log-events ering event <i>keyword</i>
Tree	ering
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ering event <i>keyword</i>
Tree	ering
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsnRaiseAlarm, tmnxEthRingApsPrvsnClearAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ering event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ering event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ering event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ering event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ering event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ering event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ering event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

eth-cfm [event](#) *keyword*

Synopsis	Enter the eth-cfm list instance
Context	configure log log-events eth-cfm event <i>keyword</i>
Tree	eth-cfm
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events eth-cfm event <i>keyword</i>
Tree	eth-cfm
Options	dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFcltyFaultRaise, tmnxDot1agCfmMepFcltyFaultClear
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log log-events eth-cfm event](#) *keyword generate boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log log-events eth-cfm event](#) *keyword repeat boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log log-events eth-cfm event](#) *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log log-events eth-cfm event](#) *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1

Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

etun [event](#) *keyword*

Synopsis Enter the **etun** list instance
Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword*
Tree [etun](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events etun <i>event</i> <i>keyword</i>
Tree	etun
Options	tmnxEthTunnelApsCfgRaiseAlarm, tmnxEthTunnelApsCfgClearAlarm, tmnxEthTunnelApsPrvsnRaiseAlarm, tmnxEthTunnelApsPrvsnClearAlarm, tmnxEthTunnelApsNoRspRaiseAlarm, tmnxEthTunnelApsNoRspClearAlarm, tmnxEthTunnelApsSwitchoverAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events etun <i>event</i> <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events etun <i>event</i> <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events etun <i>event</i> <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1

Platforms All

filter *event* *keyword*

Synopsis Enter the **filter** list instance
 Context **configure** **log** **log-events** **filter** *event* *keyword*
 Tree **filter**
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** **log** **log-events** **filter** *event* *keyword*
 Tree **filter**
 Options tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped, tFilterBgpFlowSpecProblem, tFilterApplyPathProblem, tFilterRadSharedFltrAlarmRaised, tFilterRadSharedFltrAlarmClear, tFilterEmbeddingOperStateChange, tFilterEmbedOpenflowOperStateChg, tFilterOpenflowRequestRejected, tFilterEmbedFlowspecOperStateChg, tFilterEmbedVsdOperStateChg, tFilterRPActiveDestChangeEvent
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
 Context **configure** **log** **log-events** **filter** *event* *keyword* **generate** *boolean*
 Tree **generate**
 Introduced 16.0.R1
 Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context	configure log log-events filter event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity keyword

Synopsis	Severity level associated with event type
Context	configure log log-events filter event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle boolean

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events filter event keyword specific-throttle boolean
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval number

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events filter event keyword specific-throttle-interval number
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit number

Synopsis	Throttle limit within which events can be logged
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Context	configure log log-events filter event keyword specific-throttle-limit number
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle boolean

Synopsis	Throttle log events of this type
Context	configure log log-events filter event keyword throttle boolean
Tree	throttle
Introduced	16.0.R1
Platforms	All

gmpls event keyword

Synopsis	Enter the gmpls list instance
Context	configure log log-events gmpls event keyword
Tree	gmpls
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events gmpls event keyword
Tree	gmpls
Options	vRtrGmplsLspPathStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
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Context	configure log log-events gmpls event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events gmpls event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events gmpls event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events gmpls event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events gmpls event <i>keyword specific-throttle-interval number</i>

Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events gmps event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events gmps event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

gsmp [event](#) *keyword*

Synopsis	Enter the gsmp list instance
Context	configure log log-events gsmp event <i>keyword</i>
Tree	gsmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events gsmp event <i>keyword</i>
Tree	gsmp

Options	tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL, tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL, tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected, tmnxAncpStringRejected
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events gsm event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events gsm event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events gsm event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events gsmp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events gsmp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events gsmp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events gsmp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

igh event *keyword*

Synopsis	Enter the igh list instance
Context	configure log log-events igh event <i>keyword</i>
Tree	igh
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events igh event <i>keyword</i>
Tree	igh
Options	tmnxIfGroupHandlerProtoOprChange, tmnxIfGroupHdlrMbrProtoOprChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events igh event <i>keyword generate</i> <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events igh event <i>keyword repeat</i> <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events igh event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events igh event keyword specific-throttle boolean
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events igh event keyword specific-throttle-interval number
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events igh event keyword specific-throttle-limit number
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events igh event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

igmp [event](#) *keyword*

Synopsis	Enter the igmp list instance
Context	configure log log-events igmp event <i>keyword</i>
Tree	igmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events igmp event <i>keyword</i>
Tree	igmp
Options	vRtrIgmplfRxQueryVerMismatch, vRtrIgmplfCModeRxQueryMismatch, vRtrIgmplfMaxGrpsLimitExceeded, vRtrIgmplfMcacPlyDropped, vRtrIgmplfHostInstantiationFail, vRtrIgmplfHostMaxGrpsLimitExceeded, vRtrIgmplfHostMcacPlyDropped, vRtrIgmplfHostCModeRxQueryMismatch, vRtrIgmplfHostRxQueryVerMismatch, vRtrIgmplfHostMaxSrcsLimitExceeded, vRtrIgmplfMaxSrcsLimitExceeded, vRtrIgmplfGrplfSapMaxGrpsLimExceed, vRtrIgmplfGrplfSapMaxSrcsLimExceed, vRtrIgmplfGrplfSapMcacPlyDropped, vRtrIgmplfGrplfSapCModeRxQueryMism, vRtrIgmplfGrplfSapRxQueryVerMism, vRtrIgmplfHostMaxGrpSrcsLimitExcd, vRtrIgmplfMaxGrpSrcsLimitExceeded, vRtrIgmplfGrplfSapMaxGrpSrcLimExcd, vRtrIgmplfHostQryIntervalConflict, vRtrIgmplfNotifyNumOfIPsecIfLowWm, vRtrIgmplfNotifyNumOfIPsecIfHighWm, vRtrIgmplfNotifyNumOfIPsecIfMaxRch, vRtrIgmplfSlaProfInstMcacPlyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events igmp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events igmp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events igmp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events igmp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events igmp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events igmp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events igmp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

igmp-snooping [event](#) *keyword*

Synopsis	Enter the igmp-snooping list instance
Context	configure log log-events igmp-snooping event <i>keyword</i>
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events igmp-snooping event <i>keyword</i>
Tree	igmp-snooping
Options	saplgmpSnpGGrpLimitExceeded, saplgmpSnpGMacPlyDropped, sdpBndlgmpSnpGGrpLimitExceeded, sdpBndlgmpSnpGMacPlyDropped, saplgmpSnpGMcsFailure, saplgmpSnpGSrcLimitExceeded, sdpBndlgmpSnpGSrcLimitExceeded, sdpBndlgmpSnpGGrpSrcLimitExceed, saplgmpSnpGGrpSrcLimitExceeded, eMplsIlgmpSnpGMfibFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events igmp-snooping event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events igmp-snooping event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events igmp-snooping event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [igmp-snooping event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [igmp-snooping event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [igmp-snooping event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [igmp-snooping event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1

Platforms All

ip event *keyword*

Synopsis Enter the **ip** list instance
Context **configure log log-events ip event keyword**
Tree **ip**
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log log-events ip event keyword**
Tree **ip**
Options clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface, ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events ip event keyword generate boolean**
Tree **generate**
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events ip event keyword repeat boolean**
Tree **repeat**

Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ip event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ip event keyword specific-throttle boolean
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ip event keyword specific-throttle-interval number
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ip event keyword specific-throttle-limit number
Tree	specific-throttle-limit

Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ip event <i>keyword throttle boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

ipsec event *keyword*

Synopsis	Enter the ipsec list instance
Context	configure log log-events ipsec event <i>keyword</i>
Tree	ipsec
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ipsec event <i>keyword</i>
Tree	ipsec
Options	tIPsecRUTnlFailToCreate, tIPsecRUSAFailToAddRoute, tIPsecBfdIntfSessStateChgd, tIPsecRadAcctPlyFailure, tIPsecTrustAnchorPrfOprChg, tIPsecTunnelEncapIpMtuTooSmall, tIPsecRuTnlEncapIpMtuTooSmall, tmnxSecNotifCmptedCertHashChngd, tmnxSecNotifCmptedCertChnChngd, tmnxSecNotifSendChnNotInCmptChn, tmnxIPsecTunnelOperStateChange, tmnxIPsecGWOperStateChange, tIPsecRUTnlRemoved, tIPsecTunnelProtocolFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ipsec event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ipsec event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ipsec event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ipsec event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ipsec event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ipsec event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ipsec event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isis *event* *keyword*

Synopsis	Enter the isis list instance
Context	configure log log-events isis event <i>keyword</i>
Tree	isis
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events isis event <i>keyword</i>
Tree	isis
Options	vRtrIsisSpbNbrMultAdjExists, vRtrIsisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIsisDatabaseOverload, tmnxIsisManualAddressDrops, tmnxIsisCorruptedLSPDetected, tmnxIsisMaxSeqExceedAttempt, tmnxIsisIDLenMismatch, tmnxIsisMaxAreaAdrsMismatch, tmnxIsisOwnLSPPurge, tmnxIsisSequenceNumberSkip, tmnxIsisAutTypeFail, tmnxIsisAuthFail, tmnxIsisVersionSkew, tmnxIsisAreaMismatch, tmnxIsisRejectedAdjacency, tmnxIsisLSPTooLargeToPropagate, tmnxIsisOrigLSPBufSizeMismatch, tmnxIsisProtoSuppMismatch, tmnxIsisAdjacencyChange, tmnxIsisCirclDExhausted, tmnxIsisAdjRestartStatusChange, tmnxIsisLdpSyncTimerStarted, tmnxIsisLdpSyncExit, tmnxIsisExportLimitReached, tmnxIsisExportLimitWarning, tmnxIsisRoutesExpLmtDropped, tmnxIsisFailureDisabled, tmnxIsisSidError, tmnxIsisSidNotInLabelRange, tmnxIsisRejectedAdjacencySid, tmnxIsisLSPPurge, tmnxIsisPfxLimitOverloadWarning, tmnxIsisAdjBfdSessionSetupFail, tmnxIsisSrgbBadLabelRange, tmnxIsisCircMtuTooLow, tmnxIsisRejectedAdjacencySet, tmnxIsisCorruptRemainingLifetime, tmnxIsisSidStatsIndexAlloc, tmnxIsisFaOperParticipationDown, tmnxIsisRejectedEndXSid, tmnxIsisRejectedPglD, tmnxIsisSrv6LocError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events isis event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events isis event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log](#) [log-events](#) [isis](#) [event](#) *keyword* **severity** *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [isis](#) [event](#) *keyword* **specific-throttle** *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [isis](#) [event](#) *keyword* **specific-throttle-interval** *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [isis](#) [event](#) *keyword* **specific-throttle-limit** *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1

Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [isis](#) [event](#) *keyword* **throttle** *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

l2tp [event](#) *keyword*

Synopsis Enter the **l2tp** list instance
Context **configure** [log](#) [log-events](#) [l2tp](#) [event](#) *keyword*
Tree [l2tp](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log](#) [log-events](#) [l2tp](#) [event](#) *keyword*
Tree [l2tp](#)
Options [tmnxL2tpPeerUnreachable](#), [tmnxL2tpIlsaMdaVRtrStateChange](#),
[tmnxL2tpLnsSePppSessionFailure](#), [tmnxL2tpVappVRtrStateChange](#),
[tmnxL2tpTunnelBlacklisted](#), [tmnxL2tpTunnelSelBlacklistFull](#),
[tmnxL2tpLnsPppNcpFailure](#), [tmnxL2tpApFailure](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log](#) [log-events](#) [l2tp](#) [event](#) *keyword* **generate** *boolean*
Tree [generate](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events l2tp event** keyword **repeat** *boolean*
Tree **repeat**
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events l2tp event** keyword **severity** *keyword*
Tree **severity**
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events l2tp event** keyword **specific-throttle** *boolean*
Tree **specific-throttle**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure log log-events l2tp event** keyword **specific-throttle-interval** *number*
Tree **specific-throttle-interval**
Range 1 to 1200

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure log log-events l2tp event** *keyword specific-throttle-limit number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure log log-events l2tp event** *keyword throttle boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag event *keyword*

Synopsis Enter the **lag** list instance
Context **configure log log-events lag event** *keyword*
Tree [lag](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log log-events lag event** *keyword*
Tree [lag](#)
Options DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events lag event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events lag event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events lag event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events lag event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle

Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** **log log-events lag event** *keyword* **specific-throttle-interval** *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** **log log-events lag event** *keyword* **specific-throttle-limit** *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** **log log-events lag event** *keyword* **throttle** *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

ldap event *keyword*

Synopsis Enter the **ldap** list instance
Context **configure** **log log-events ldap event** *keyword*
Tree [ldap](#)
Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log](#) [log-events](#) [ldap](#) [event](#) *keyword*
Tree [ldap](#)
Options tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log](#) [log-events](#) [ldap](#) [event](#) *keyword* [generate](#) *boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log](#) [log-events](#) [ldap](#) [event](#) *keyword* [repeat](#) *boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log](#) [log-events](#) [ldap](#) [event](#) *keyword* [severity](#) *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log log-events ldap event keyword specific-throttle boolean](#)
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log log-events ldap event keyword specific-throttle-interval number](#)
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log log-events ldap event keyword specific-throttle-limit number](#)
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log log-events ldap event keyword throttle boolean](#)
Tree [throttle](#)
Introduced 16.0.R1

Platforms All

ldp event *keyword*

Synopsis Enter the **ldp** list instance
Context **configure log log-events ldp event** *keyword*
Tree **ldp**
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log log-events ldp event** *keyword*
Tree **ldp**
Options vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged, vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events ldp event** *keyword generate* *boolean*
Tree **generate**
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events ldp event** *keyword repeat* *boolean*

Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ldp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ldp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ldp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ldp event <i>keyword</i> specific-throttle-limit <i>number</i>

Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ldp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

li *event keyword*

Synopsis	Enter the li list instance
Context	configure log log-events li event <i>keyword</i>
Tree	li
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events li event <i>keyword</i>
Tree	li
Options	sbiBootLiConfig, sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceSapChange, sourceSubscriberChange, tMirrorSourceIPFtrChangeReject, tMirrorSourceMacFtrChangeReject, tMirrorSourceFilterAssignReject, tMirrorDestinationChangeReject, tMirrorSourceFilterOverruled, tMirrorSourceFilterAssignWarn, tMirrorFilterAssignToSapWarn, tMirrorFilterAssignToSdpWarn, tMirrorFilterAssignToIrfWarn, tMirrorSourceLiFilterChanged, tMirrorSourceLiSubProblem, tMirrorSourceIPv6FtrChangeRej, tMirrorLiNatLsnSubOperStateCh, tMirrorLiNatL2awSubOperStateCh, tMirrorLiNat64SubOperStateCh, tMirrorLiX2Alarm, tFtrLiRsvdBlockRangeChangeEvent, tMirrorLiSrcPortLicInvalid, tMirrorLiXlflLicenseInvalid, cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout,

ssh_user_login_failed, ssh_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, host_snmp_attempts, radiusFailed, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, ssiSaveConfigSucceeded, ssiSaveConfigFailed, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, mdLiConfigChange, ssiSyncConfigOK, ssiSyncConfigFailed, md_cli_io, md_cli_unauth_io, tmnxClear, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events li event](#) *keyword generate boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events li event](#) *keyword repeat boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events li event](#) *keyword severity keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [li](#) [event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [li](#) [event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [li](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [li](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

lldp event *keyword*

Synopsis	Enter the lldp list instance
Context	configure log log-events lldp event <i>keyword</i>
Tree	lldp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events lldp event <i>keyword</i>
Tree	lldp
Options	lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events lldp event <i>keyword generate</i> <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events lldp event <i>keyword repeat</i> <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log](#) [log-events](#) [lldp event](#) *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [lldp event](#) *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [lldp event](#) *keyword specific-throttle-interval number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [lldp event](#) *keyword specific-throttle-limit number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1

Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure log log-events lldp event** *keyword throttle boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

Imp event *keyword*

Synopsis Enter the **Imp** list instance
Context **configure log log-events Imp event** *keyword*
Tree [Imp](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log log-events Imp event** *keyword*
Tree [Imp](#)
Options tmnxLmpVRtrTeLinkPropMismatch, tmnxLmpVRtrTeLinkPropMismatchClr, tmnxLmpVRtrDbLinkPropMismatch, tmnxLmpVRtrDbLinkPropMismatchClr, tmnxLmpVRtrControlChannelState, tmnxLmpVRtrTeLinkState
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events Imp event** *keyword generate boolean*
Tree [generate](#)
Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure log log-events Imp event** keyword **repeat** *boolean*

Tree **repeat**

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

severity *keyword*

Synopsis Severity level associated with event type

Context **configure log log-events Imp event** keyword **severity** *keyword*

Tree **severity**

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event

Context **configure log log-events Imp event** keyword **specific-throttle** *boolean*

Tree **specific-throttle**

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure log log-events Imp event** keyword **specific-throttle-interval** *number*

Tree **specific-throttle-interval**

Range 1 to 1200

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure log log-events Imp event** *keyword specific-throttle-limit number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure log log-events Imp event** *keyword throttle boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

logger [event](#) *keyword*

Synopsis Enter the **logger** list instance
Context **configure log log-events logger** [event](#) *keyword*
Tree [logger](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log log-events logger** [event](#) *keyword*
Tree [logger](#)
Options STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events logger event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events logger event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events logger event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events logger event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle

Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure log log-events logger event** *keyword* **specific-throttle-interval** *number*
Tree **specific-throttle-interval**
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure log log-events logger event** *keyword* **specific-throttle-limit** *number*
Tree **specific-throttle-limit**
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure log log-events logger event** *keyword* **throttle** *boolean*
Tree **throttle**
Introduced 16.0.R1
Platforms All

macsec event *keyword*

Synopsis Enter the **macsec** list instance
Context **configure log log-events macsec event** *keyword*
Tree **macsec**
Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [macsec](#) [event](#) *keyword*

Tree [macsec](#)

Options tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx, tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [macsec](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [macsec](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events macsec event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events macsec event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events macsec event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events macsec event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events macsec event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mc-redundancy [event](#) *keyword*

Synopsis	Enter the mc-redundancy list instance
Context	configure log log-events mc-redundancy event <i>keyword</i>
Tree	mc-redundancy
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mc-redundancy event <i>keyword</i>
Tree	mc-redundancy
Options	tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared, tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared, tmnxSrrpInstanceIdMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch, tmnxSrrpRedIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged, tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged, tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd, tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared, tmnxSrrpDuplicateSubIfAddress, tmnxMcPeerRingsOperStateChanged, tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded, tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen, tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp, tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp, tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled, tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg, tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh, tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear, tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg, tMcIPsecDomainProtStatusChg
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log log-events mc-redundancy event](#) *keyword generate boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log log-events mc-redundancy event](#) *keyword repeat boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log log-events mc-redundancy event](#) *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log log-events mc-redundancy event](#) *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1

Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [mc-redundancy](#) [event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [mc-redundancy](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [mc-redundancy](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

mcpath [event](#) *keyword*

Synopsis Enter the **mcpath** list instance
Context **configure** [log](#) [log-events](#) [mcpath](#) [event](#) *keyword*
Tree [mcpath](#)
Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log log-events mcpath event keyword**
Tree [mcpath](#)
Options tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events mcpath event keyword generate boolean**
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events mcpath event keyword repeat boolean**
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events mcpath event keyword severity keyword**
Tree [severity](#)

Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mcpath event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mcpath event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mcpath event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mcpath event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle

Introduced 16.0.R1
Platforms All

mgmt-core *event keyword*

Synopsis Enter the **mgmt-core** list instance
Context **configure log log-events mgmt-core event keyword**
Tree [mgmt-core](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log log-events mgmt-core event keyword**
Tree [mgmt-core](#)
Options none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events mgmt-core event keyword generate boolean**
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events mgmt-core event keyword repeat boolean**
Tree [repeat](#)

Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mgmt-core event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mgmt-core event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mgmt-core event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mgmt-core event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit

Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mgmt-core event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mirror [event](#) *keyword*

Synopsis	Enter the mirror list instance
Context	configure log log-events mirror event <i>keyword</i>
Tree	mirror
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mirror event <i>keyword</i>
Tree	mirror
Options	sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIppv6FilterChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mirror event <i>keyword</i> generate <i>boolean</i>

Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mirror event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mirror event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mirror event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mirror event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval

Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mirror event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mirror event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mld **event** *keyword*

Synopsis	Enter the mld list instance
Context	configure log log-events mld event <i>keyword</i>
Tree	mld
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mld event <i>keyword</i>
Tree	mld
Options	vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPlcyDropped,

vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded,
vRtrMldHostMcacPlcyDropped, vRtrMldHostCModeRxQueryMismatch,
vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded,
vRtrMldMaxSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpsLimExceed,
vRtrMldGrpIfSapMaxSrcsLimExceed, vRtrMldGrpIfSapMcacPlcyDropped,
vRtrMldGrpIfSapCModeRxQueryMism, vRtrMldGrpIfSapRxQueryVerMism,
vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded,
vRtrMldGrpIfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict,
vRtrMldSlaProfInstMcacPlcyDrop

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** log log-events mld event *keyword generate boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** log log-events mld event *keyword repeat boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** log log-events mld event *keyword severity keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mld event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mld event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mld event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mld event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mld-snooping event keyword

Synopsis	Enter the mld-snooping list instance
Context	configure log log-events mld-snooping event keyword
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mld-snooping event keyword
Tree	mld-snooping
Options	sapMldSnpgGrpLimitExceeded, sdpBndMldSnpgGrpLimitExceeded, sapMldSnpgMcsFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events mld-snooping event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mld-snooping event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mld-snooping event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mld-snooping event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mld-snooping event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mld-snooping event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mld-snooping event <i>keyword throttle boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mpls event *keyword*

Synopsis	Enter the mpls list instance
Context	configure log log-events mpls event <i>keyword</i>
Tree	mpls
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mpls event <i>keyword</i>
Tree	mpls
Options	mplsXCUp, mplsXCDown, mplsTunnelUp, mplsTunnelDown, mplsTunnelRerouted, mplsTunnelReoptimized, vRtrMplsStateChange, vRtrMplsIfStateChange, vRtrMplsLspUp, vRtrMplsLspDown, vRtrMplsLspPathUp, vRtrMplsLspPathDown, vRtrMplsLspPathRerouted, vRtrMplsLspPathResigned, vRtrMplsP2mpInstanceUp, vRtrMplsP2mpInstanceDown, vRtrMplsS2ISubLspUp, vRtrMplsS2ISubLspDown, vRtrMplsS2ISubLspRerouted, vRtrMplsS2ISubLspResigned, vRtrMplsLspPathSoftPreempted, vRtrMplsLspPathLstFillReoptElig, vRtrMplsP2mpInstanceResigned, vRtrMplsResignalTimerExpired, vRtrMplsLspPathMbbStatusEvent, vRtrMplsLspSwitchStbyFailure, vRtrMplsLspActivePathChanged, vRtrMplsXCBundleChange, vRtrMplsNodeInlgpOverload, vRtrMplsIPv6StateChange, vRtrMplsIfIPv6StateChange, vRtrMplsLspResourceExhaustion, vRtrMplsLspManualSwitchFailure, vRtrMplsLspPathManualDegStateChg, vRtrMplsS2ISubLspPreempted
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mpls event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mpls event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mpls event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mpls event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mpls event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mpls event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mpls event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mpls-tp [event](#) *keyword*

Synopsis	Enter the mpls-tp list instance
Context	configure log log-events mpls-tp event <i>keyword</i>
Tree	mpls-tp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mpls-tp event <i>keyword</i>
Tree	mpls-tp
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mpls-tp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mpls-tp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mpls-tp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [mpls-tp event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [mpls-tp event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [mpls-tp event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [mpls-tp event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

msdp event *keyword*

Synopsis	Enter the msdp list instance
Context	configure log log-events msdp event <i>keyword</i>
Tree	msdp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events msdp event <i>keyword</i>
Tree	msdp
Options	msdpEstablished, msdpBackwardTransition, tmnxMsdpNgActSrcLimExcd, tmnxMsdpNgPeerActSrcLimExcd, tmnxMsdpNgRPFFailure, tmnxMsdpNgSourceSrcActMsgsExcd, tmnxMsdpNgGroupSrcActMsgsExcd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events msdp event <i>keyword generate</i> <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events msdp event <i>keyword repeat</i> <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log](#) [log-events](#) [msdp event](#) *keyword* **severity** *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [msdp event](#) *keyword* **specific-throttle** *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [msdp event](#) *keyword* **specific-throttle-interval** *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [msdp event](#) *keyword* **specific-throttle-limit** *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1

Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
 Context **configure** [log](#) [log-events](#) [msdp event](#) *keyword* [throttle](#) *boolean*
 Tree [throttle](#)
 Introduced 16.0.R1
 Platforms All

nat event *keyword*

Synopsis Enter the **nat** list instance
 Context **configure** [log](#) [log-events](#) [nat event](#) *keyword*
 Tree [nat](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log](#) [log-events](#) [nat event](#) *keyword*
 Tree [nat](#)
 Options tmnxNatPIL2AwBlockUsageHigh, tmnxNatIlsaMemberSessionUsageHigh, tmnxNatPILsnMemberBlockUsageHigh, tmnxNatL2AwSublcmpPortUsageHigh, tmnxNatL2AwSubUdpPortUsageHigh, tmnxNatL2AwSubTcpPortUsageHigh, tmnxNatL2AwSubSessionUsageHigh, tmnxNatPIBlockAllocationLsn, tmnxNatPIBlockAllocationL2Aw, tmnxNatResourceProblemDetected, tmnxNatResourceProblemCause, tmnxNatPIAddrFree, tmnxNatPILsnRedActiveChanged, tmnxNatPcpSrvStateChanged, tmnxNatMdaActive, tmnxNatLsnSubBlksFree, tmnxNatDetPlcyChanged, tmnxNatMdaDetectsLoadSharingErr, tmnxNatIlsaGrpOperStateChanged, tmnxNatIlsaGrplsDegraded, tmnxNatLsnSublcmpPortUsgHigh, tmnxNatLsnSubUdpPortUsgHigh, tmnxNatLsnSubTcpPortUsgHigh, tmnxNatLsnSubSessionUsgHigh, tmnxNatInAddrPrefixBlksFree, tmnxNatFwd2EntryAdded, tmnxNatDetPlcyOperStateChanged, tmnxNatDetMapOperStateChanged, tmnxNatFwd2OperStateChanged, tmnxNatVrtrOutDnatOnlyRoutesHigh, tmnxNatMapRuleChange, tmnxNatMaxNbrSubsOrHostsExceeded, tmnxNatNbrSubsOrHostsBelowThrsh, tmnxNatVappActive, tmnxNatVappDetectsLoadSharingErr, tmnxNatDetPfxMapOperStateChanged, tmnxNatDetMap2OperStateChanged,

	tmnxNatDynamicConfigMismatch, tmnxNatPIL2AwMembrBlockUsageHigh, tmnxNatPIMemberExtBlockUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events nat event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events nat event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events nat event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events nat event <i>keyword</i> specific-throttle <i>boolean</i>

Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log log-events nat event keyword specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log log-events nat event keyword specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log log-events nat event keyword throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ntp event *keyword*

Synopsis Enter the **ntp** list instance
Context **configure** [log log-events ntp event keyword](#)
Tree [ntp](#)

Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log log-events ntp event** *keyword*
Tree [ntp](#)
Options tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events ntp event** *keyword generate* *boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events ntp event** *keyword repeat* *boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events ntp event** *keyword severity* *keyword*

Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ntp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ntp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ntp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ntp event <i>keyword</i> throttle <i>boolean</i>

Tree	throttle
Introduced	16.0.R1
Platforms	All

oam event *keyword*

Synopsis	Enter the oam list instance
Context	configure log log-events oam event <i>keyword</i>
Tree	oam
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events oam event <i>keyword</i>
Tree	oam
Options	tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3, tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted, tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange, tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svcldInvalid, svcldWrongType, tmnxOamLdpTtraceAutoDiscState, tmnxOamLdpTtraceFecProbeState, tmnxOamLdpTtraceFecDisStatus, tmnxOamLdpTtraceFecPFailUpdate, tmnxOamSaaThreshold, tmnxOamDiagTestCompleted, tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded, tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded, tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout, tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted, tmnxOamSathSvcStrmCompleted
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events oam event <i>keyword</i> generate <i>boolean</i>
Tree	generate

Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events oam event** keyword **repeat** *boolean*
Tree **repeat**
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events oam event** keyword **severity** *keyword*
Tree **severity**
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events oam event** keyword **specific-throttle** *boolean*
Tree **specific-throttle**
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure log log-events oam event** keyword **specific-throttle-interval** *number*
Tree **specific-throttle-interval**
Range 1 to 1200

Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

openflow [event](#) *keyword*

Synopsis Enter the **openflow** list instance
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword*
Tree [openflow](#)
Introduced 16.0.R2
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword*
Tree [openflow](#)
Options `tmnxOFFlowEntryInsertFailed`
Notes This element is part of a list key.

Introduced 16.0.R2
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword generate boolean*
Tree [generate](#)
Introduced 16.0.R2
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword repeat boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R2
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R2

Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R2
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R2
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R2
Platforms All

ospf [event](#) *keyword*

Synopsis Enter the **ospf** list instance
Context **configure** [log](#) [log-events](#) [ospf](#) [event](#) *keyword*
Tree [ospf](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ospf event <i>keyword</i>
Tree	ospf
Options	tmnxOspfVirtIfStateChange, tmnxOspfVirtNbrStateChange, tmnxOspfVirtIfConfigError, tmnxOspfVirtIfAuthFailure, tmnxOspfVirtIfRxBadPacket, tmnxOspfAreaOriginateLsa, tmnxOspfAreaMaxAgeLsa, tmnxOspfLsdbOverflow, tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning, tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError, tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning, tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail, tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet, tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate, tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ospf event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
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Context	configure log log-events ospf event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity keyword

Synopsis	Severity level associated with event type
Context	configure log log-events ospf event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle boolean

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ospf event keyword specific-throttle boolean
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval number

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ospf event keyword specific-throttle-interval number
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit number

Synopsis	Throttle limit within which events can be logged
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Context	configure log log-events ospf event keyword specific-throttle-limit number
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle boolean

Synopsis	Throttle log events of this type
Context	configure log log-events ospf event keyword throttle boolean
Tree	throttle
Introduced	16.0.R1
Platforms	All

pcap event keyword

Synopsis	Enter the pcap list instance
Context	configure log log-events pcap event keyword
Tree	pcap
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events pcap event keyword
Tree	pcap
Options	tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pcap event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pcap event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pcap event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events pcap event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pcap event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pcap event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pcap event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

pcep **event** *keyword*

Synopsis	Enter the pcep list instance
Context	configure log log-events pcep event <i>keyword</i>
Tree	pcep
Introduced	22.2.R1
Platforms	All

event *keyword*

Synopsis	PCEP module events
Context	configure log log-events pcep event <i>keyword</i>
Tree	pcep
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pcep event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	22.2.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pcep event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	22.2.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pcep event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	22.2.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events pcep event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	22.2.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pcep event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	22.2.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pcep event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	22.2.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pcep event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	22.2.R1
Platforms	All

pfcp event keyword

Synopsis	Enter the pfcp list instance
Context	configure log log-events pfcp event keyword
Tree	pfcp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis	PFCP events
Context	configure log log-events pfcp event keyword
Tree	pfcp
Options	tmnxPfcplInvalidle
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events pfcp event keyword generate boolean
Tree	generate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pfcp event keyword repeat boolean
Tree	repeat
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pfcpc event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events pfcpc event keyword specific-throttle boolean
Tree	specific-throttle
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pfcpc event keyword specific-throttle-interval number
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pfcpc event keyword specific-throttle-limit number
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pfc event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim event *keyword*

Synopsis	Enter the pim list instance
Context	configure log log-events pim event <i>keyword</i>
Tree	pim
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events pim event <i>keyword</i>
Tree	pim
Options	vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded, vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded, vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused, vRtrPimNgMcacPlyDropped, vRtrPimNgInvalidIPmsiTunnel, vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrld, vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri, vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pim event <i>keyword</i> generate <i>boolean</i>

Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pim event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pim event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events pim event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pim event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval

Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pim event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pim event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

pim-snooping [event](#) *keyword*

Synopsis	Enter the pim-snooping list instance
Context	configure log log-events pim-snooping event <i>keyword</i>
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events pim-snooping event <i>keyword</i>
Tree	pim-snooping

Options	tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pim-snooping event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pim-snooping event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pim-snooping event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
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Context	configure log log-events pim-snooping event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pim-snooping event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pim-snooping event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pim-snooping event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

port event *keyword*

Synopsis	Enter the port list instance
Context	configure log log-events port event <i>keyword</i>

Tree	port
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events port event <i>keyword</i>
Tree	port
Options	sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure, portError, yellowDiffDelayExceeded, redDiffDelayExceeded, bndlBadEndPtDiscriminator, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, bundleMlfrMemberLoopback, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulprit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued, tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified, tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset, tmnxCellularActiveSimCardChange, tmnxPortEtherLoopbackStart, tmnxPortEtherLoopbackStop, tmnxPortGnssStatusChange, tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected, tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered, tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown, tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber, tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm, tmnxCellularRssiAlarmClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events of this type and increment the event counter
Context	configure log log-events port event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events port event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events port event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events port event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events port event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Times that this event can be logged within the specific throttle interval
Context	configure log log-events port event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events port event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

ppp event *keyword*

Synopsis	Enter the ppp list instance
Context	configure log log-events ppp event <i>keyword</i>
Tree	ppp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ppp event <i>keyword</i>
Tree	ppp
Options	tmnxPppCpUp, tmnxPppCpDown, tmnxPppNcpUp, tmnxPppNcpDown, tmnxPppKeepaliveFailure, tmnxPppLqmFailure, ipcpRemotelpUnknown, ipcpSameLocalAndRemotelp, ipcpPeerSuggestedDifferentIpl, ipcpPeerRejectedOurIpl, ipcpPeerOnDifferentSubnet, tmnxPppLoopback, tmnxPppLoopbackClear, ipv6cpRemotelpUnknown, ipv6cpSameLocalAndRemotelp, ipv6cpPeerSuggestedDiffIpl, ipv6cpPeerRejectedOurIpl, ipv6cpPeerOnDifferentSubnet
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ppp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ppp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ppp event <i>keyword</i> severity <i>keyword</i>
Tree	severity

Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ppp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ppp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ppp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ppp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle

Introduced 16.0.R1
Platforms All

pppoe event *keyword*

Synopsis Enter the **pppoe** list instance
Context **configure log log-events pppoe event** *keyword*
Tree [pppoe](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log log-events pppoe event** *keyword*
Tree [pppoe](#)
Options tmnxPppoeSessionFailure, tmnxPppoeNcpFailure, tmnxMlpppBundleIndicatorsChange, tmnxPppoeLacSteeringActive, tmnxPppoeLacSteeringStopped, tmnxPppoeLacSteeringFailed, tmnxPppoeMaxSessionsOvrExceeded
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events pppoe event** *keyword generate boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events pppoe event** *keyword repeat boolean*
Tree [repeat](#)

Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pppoe event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events pppoe event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pppoe event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pppoe event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit

Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pppoe event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-clnt [event](#) *keyword*

Synopsis	Enter the pppoe-clnt list instance
Context	configure log log-events pppoe-clnt event <i>keyword</i>
Tree	pppoe-clnt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events pppoe-clnt event <i>keyword</i>
Tree	pppoe-clnt
Options	tmnxPppoeClientSetupFailure, tmnxPppoeClientEchoTimeout, tmnxPppoeClientNcpFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pppoe-clnt event <i>keyword</i> generate <i>boolean</i>

Tree [generate](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log log-events pppoe-clnt event](#) *keyword* [repeat](#) *boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log log-events pppoe-clnt event](#) *keyword* [severity](#) *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log log-events pppoe-clnt event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log log-events pppoe-clnt event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)

Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pppoe-clnt event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pppoe-clnt event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ptp event *keyword*

Synopsis	Enter the ptp list instance
Context	configure log log-events ptp event <i>keyword</i>
Tree	ptp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ptp event <i>keyword</i>
Tree	ptp
Options	tmnxPtpCardNotSupported, tmnxPtpCardNotSupportedClear, tmnxPtpMasterClockChangedEvent, tmnxPtpClockRecoveryStateChange,

tmnxPtpOutOfResources, tmnxPtpOutOfResourcesClear,
tmnxPtpDynamicChange, tmnxPtpPortNoTimestamping, tmnxPtpPortPtsfUnusable,
tmnxPtpRequiresSystemReboot, tmnxPtpRequiresSystemRebootClear,
tmnxPtpTimeRecoveryStateChange

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ptp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ptp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ptp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ptp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ptp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ptp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ptp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

python event *keyword*

Synopsis	Enter the python list instance
Context	configure log log-events python event <i>keyword</i>
Tree	python
Introduced	21.2.R1
Platforms	All

event *keyword*

Synopsis	Python module events
Context	configure log log-events python event <i>keyword</i>
Tree	python
Options	tmnxPythonInterpreterRestarted
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events python event <i>keyword generate</i> <i>boolean</i>
Tree	generate
Introduced	21.2.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events python event <i>keyword repeat</i> <i>boolean</i>
Tree	repeat
Default	false
Introduced	21.2.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events python event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.2.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events python event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	21.2.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events python event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.2.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events python event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	21.2.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events python event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	21.2.R1
Platforms	All

radius [event](#) *keyword*

Synopsis	Enter the radius list instance
Context	configure log log-events radius event <i>keyword</i>
Tree	radius
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events radius event <i>keyword</i>
Tree	radius
Options	tmnxRadSrvPlySrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events radius event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events radius event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events radius event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events radius event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events radius event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events radius event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events radius event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

rip **event** *keyword*

Synopsis	Enter the rip list instance
Context	configure log log-events rip event <i>keyword</i>
Tree	rip
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events rip event <i>keyword</i>
Tree	rip
Options	ripPacketDiscarded , vRtrRipAuthTypeMismatch , vRtrRipAuthTypeFailure , vRtrRipInstanceShuttingDown , vRtrRipInstanceRestarted , vRtrRipInstanceExpLmtReached , vRtrRipInstanceExpLmtWarning , vRtrRipInstanceRtsExpLmtDropped , vRtrRipPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events rip event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events rip event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events rip event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events rip event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events rip event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events rip event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events rip event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

ripng event *keyword*

Synopsis	Enter the ripng list instance
Context	configure log log-events ripng event <i>keyword</i>
Tree	ripng
Introduced	16.0.R3
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ripng event <i>keyword</i>
Tree	ripng
Options	tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ripng event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R3
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ripng event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ripng event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R3

Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [ripng](#) [event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R3
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [ripng](#) [event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R3
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [ripng](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R3
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [ripng](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R3
Platforms All

route-policy event keyword

Synopsis	Enter the route-policy list instance
Context	configure log log-events route-policy event keyword
Tree	route-policy
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events route-policy event keyword
Tree	route-policy
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events route-policy event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events route-policy event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events route-policy event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events route-policy event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events route-policy event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events route-policy event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events route-policy event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

rpki event *keyword*

Synopsis	Enter the rpki list instance
Context	configure log log-events rpki event <i>keyword</i>
Tree	rpki
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events rpki event <i>keyword</i>
Tree	rpki
Options	tmnxRpkiNotifySession, tmnxRpkiStaleTimerExpiry
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events rpki event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events rpk event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events rpk event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events rpk event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events rpk event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events rпки event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events rпки event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

rsvp **event** *keyword*

Synopsis	Enter the rsvp list instance
Context	configure log log-events rsvp event <i>keyword</i>
Tree	rsvp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events rsvp event <i>keyword</i>
Tree	rsvp
Options	vRtrRsvpStateChange, vRtrRsvplfStateChange, vRtrRsvplfNbrStateUp, vRtrRsvplfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events rsvp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events rsvp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events rsvp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events rsvp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events rsvp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events rsvp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events rsvp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

satellite [event](#) *keyword*

Synopsis	Enter the satellite list instance
Context	configure log log-events satellite event <i>keyword</i>
Tree	satellite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events satellite event <i>keyword</i>
Tree	satellite
Options	tmnxSatelliteOperStateChange, tmnxSatSynclfTimRefSwitch, tmnxSatSynclfTimSystemQuality, tmnxSatSynclfTimRef1Quality, tmnxSatSynclfTimRef2Quality, tmnxSatSynclfTimHoldover, tmnxSatSynclfTimHoldoverClear, tmnxSatSynclfTimRef1Alarm, tmnxSatSynclfTimRef1AlarmClear, tmnxSatSynclfTimRef2Alarm, tmnxSatSynclfTimRef2AlarmClear, tmnxSatLocalForwardStateChg, tmnxSatLocalForwardSapStateChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events satellite event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events satellite event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events satellite event <i>keyword</i> severity <i>keyword</i>
Tree	severity

Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events satellite event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events satellite event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events satellite event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events satellite event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

security event keyword

Synopsis	Enter the security list instance
Context	configure log log-events security event keyword
Tree	security
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events security event keyword
Tree	security
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, radiusOperStatusChange, user_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp_transfer_successful, ftp_transfer_failed, enable_admin, host_snmp_attempts, SSH_server_preserve_key_fail, tacplusInetSrvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolF, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAProfileStateChange, tmnxCpmProtExcdSapIp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear, tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr, tmnxDcpCardVrtrIfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd, sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart, sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform, sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource, sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed, sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed, vRtrIfDcpStaticExcd, vRtrIfDcpDynamicExcd, vRtrIfDcpStaticHoldDownStart, vRtrIfDcpDynamicHoldDownStart, vRtrIfDcpStaticHoldDownEnd, vRtrIfDcpDynamicHoldDownEnd, vRtrIfDcpStaticConform, vRtrIfDcpDynamicConform, vRtrIfDcpLocMonExcd, vRtrIfDcpLocMonExcdDynResource, vRtrIfDcpLocMonExcdAllDynAlloc, vRtrIfDcpLocMonExcdAllDynFreed, vRtrIfDcpDynamicEnforceAlloc, vRtrIfDcpDynamicEnforceFreed,

tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw,
tmnxDcpCardVrtrlfEventOvrflw, tmnxPkiCAProfActnStatusChg,
tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf,
sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp,
tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf,
tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid,
tmnxSysLicenseExpiresSoon, tmnxPkiCAProfRevokeChkWarning,
tmnxCAProfUpDueToRevokeChkCrlOpt, tmnxPkiCertBeforeExpWarning,
tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared,
tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning,
tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid,
tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed,
tmnxPkiCAProfCrlUpdateStart, tmnxPkiCAProfCrlUpdateSuccess,
tmnxPkiCAProfCrlUpdateUrlFail, tmnxPkiCAProfCrlUpdAllUrlsFail,
tmnxPkiFileWriteFailed, tmnxPkiCAProfCrlUpdNoNxtUpdTime,
tmnxUsrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded,
tmnxPkiCAProfCrlUpdLargPreUpdTm, tmnxPkiCertNotYetValid,
tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc_user_login,
grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts,
netconf_user_login, netconf_user_logout, netconf_user_login_failed,
netconf_user_login_max_attempts, tmnxSysLicenseActivated, tmnxConfigModify,
tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid,
tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md_cli_io,
md_cli_unauth_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired,
netconf_auth, netconf_unauth, grpc_auth, grpc_unauth, tmnxCertKeyPairGen,
tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved,
tmnxFileCopied, tmnxFileUnzip, tmnxPasswordHashingChanged,
tmnxUserPasswordChangedByAdmin, tmnxSSHSessionFailed,
tmnxPkiCertUpdUpdateStarted, tmnxPkiCertUpdUpdateFinished,
tmnxPkiCertUpdUpdateFailed, tmnxSystemPasswordChangedByAdmin

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events](#) [security event](#) *keyword generate boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events security event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events security event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events security event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events security event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events security event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events security event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

sflow event *keyword*

Synopsis	Enter the sflow list instance
Context	configure log log-events sflow event <i>keyword</i>
Tree	sflow
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events sflow event <i>keyword</i>
Tree	sflow
Options	none, tmnxSflowCpEntrySampling, tmnxSflowPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events sflow event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events sflow event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-s, 7950 XRS

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events sflow event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events sflow event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events sflow event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events sflow event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events sflow event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

snmp *event* *keyword*

Synopsis	Enter the snmp list instance
Context	configure log log-events snmp event <i>keyword</i>
Tree	snmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events snmp event <i>keyword</i>
Tree	snmp
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, snmpdError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events snmp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events snmp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events snmp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events snmp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events snmp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events snmp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events snmp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

sr-mpls event keyword

Synopsis	Enter the sr-mpls list instance
Context	configure log log-events sr-mpls event keyword
Tree	sr-mpls
Introduced	21.10.R1
Platforms	All

event keyword

Synopsis	SR MPLS event
Context	configure log log-events sr-mpls event keyword
Tree	sr-mpls
Options	tmnxSrMplsPfxSidFailure
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events sr-mpls event keyword generate boolean
Tree	generate
Introduced	21.10.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events sr-mpls event keyword repeat boolean
Tree	repeat
Default	false
Introduced	21.10.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events sr-mpls event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.10.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events sr-mpls event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	21.10.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events sr-mpls event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.10.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events sr-mpls event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	21.10.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events sr-mpls event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	21.10.R1
Platforms	All

srv6 **event** *keyword*

Synopsis	Enter the srv6 list instance
Context	configure log log-events srv6 event <i>keyword</i>
Tree	srv6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events srv6 event <i>keyword</i>
Tree	srv6
Options	vRtrSrv6FunctionExhaustion, vRtrSrv6SvcSidIndex, vRtrSrv6LocatorResExhaustion
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events srv6 event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events srv6 event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events srv6 event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events srv6 event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events srv6 event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events srv6 event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events srv6 event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

stp *event* *keyword*

Synopsis	Enter the stp list instance
Context	configure log log-events stp event <i>keyword</i>
Tree	stp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events stp event <i>keyword</i>
Tree	stp
Options	topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN, tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST, tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng,

tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange,
tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange,
topologyChangePipMajorState, topologyChangePipState,
tmnxPipStpExcepCondStateChng, pipActiveProtocolChange

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events stp event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events stp event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events stp event](#) *keyword* [severity](#) *keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events stp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events stp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events stp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events stp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

svcmgr event keyword

Synopsis	Enter the svcmgr list instance
Context	configure log log-events svcmgr event keyword
Tree	svcmgr
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events svcmgr event keyword
Tree	svcmgr
Options	<p>svcTlsMacPinningViolation, tmnxSubSlaacOverride, svcEvpnMplsMacMoveExceedNonBlock, svcTlsVxInstReplicatorChgd, svcArpHostOverride, svcEvpnMHEsEviDFStateChgd, svcEvpnMHEsIsidDFStateChgd, svcEvpnRcvdProtSrcMac, svcBgpEvpnBHDupMacAddrsDetected, svcEvpnEtreeBumLabelSysHiUsgSet, svcEvpnEtreeBumLabelSysHiUsgClr, svcVxlanEvpnMplsDestSysHiUsgSet, svcVxlanEvpnMplsDestSysHiUsgClr, svcStatusChanged, svcTlsFdbTableFullAlarmRaised, svcTlsFdbTableFullAlarmCleared, svcSysEvpnESDfPrefOperValChange, tmnxSvcSysFdbTableHighUsgSet, ieslfStatusChanged, tmnxEndPointTxActiveChanged, tmnxSvcSysFdbTableHighUsgClr, svcEvpnMHStandbyStatusChg, svcEvpnVxVTepLclBiasAddFailSet, svcEvpnESVxVTepLclBiasAddFailSet, svcEvpnVxVTepLclBiasAddFailClr, svcEvpnESVxVTepLclBiasAddFailClr, svcEvpnRcvdPbbProtSrcMac, svcTlsMrpAttrRegistrationFailed, svcTlsMrpAttrTbIFullAlarmRaised, svcTlsMrpAttrTbIFullAlarmCleared, svcEpipePbbOperStatusChanged, sapStatusChanged, sapTlsMacAddrLimitAlarmRaised, sapTlsMacAddrLimitAlarmCleared, hostConnectivityLost, hostConnectivityRestored, sapReceivedProtSrcMac, sapTlsMacMoveExceeded, sapPortStateChangeProcessed, sapCemPacketDefectAlarm, sapCemPacketDefectAlarmClear, msapStateChanged, msapCreationFailure, sapTlsMacMoveExceedNonBlock, sapEthLoopbackStarted, sapEthLoopbackStopped, sapTunnelEncapIpMtuTooSmall, tmnxIpTunnelOperStateChange, sapIfIgnorePortStateStart, sapIfIgnorePortStateStop, sapReceivedPbbProtSrcMac, sdpStatusChanged, sdpBindStatusChanged, sdpKeepAliveStarted, sdpKeepAliveStopped, sdpKeepAliveProbeFailure, sdpKeepAliveLateReply, sdpTlsMacAddrLimitAlarmRaised, sdpTlsMacAddrLimitAlarmCleared, sdpBindPwPeerStatusBitsChanged, sdpBindTlsMacMoveExceeded, sdpBindPwPeerFaultAddrChanged, sdpBindSdpStateChangeProcessed, sdpBandwidthOverbooked, sdpBindInsufficientBandwidth, dynamicSdpConfigChanged, dynamicSdpBindConfigChanged, dynamicSdpCreationFailed, dynamicSdpBindCreationFailed, sdpEgrIfsNetDomInconsCntChanged, sdpBindPipeCelpAddressChange, sdpBindReceivedProtSrcMac, sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock, sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped,</p>

sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAddrsDetected,
svcBgpEvpnDupMacAddrsCleared, svcTlsVTEPHiUsageAlarmRaised,
svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet,
svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet,
svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised,
svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg,
svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect,
svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet,
svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised,
svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet,
svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet,
svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet,
svcTlsProxyArpSysHiUsgClr, svcTlsProxyArpSvcHiUsgSet,
svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr,
svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg,
sdpBindReceivedPbbProtSrcMac, svcTlsMfibTableFullAlarmRaised,
svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated,
tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPclyFailure,
tmnxSubMcsRelatedProblem, tmnxSubAuthPclyRadSerOperStatChg,
tmnxSubAcctPclyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised,
svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError,
tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError,
tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError,
tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTblFullAlrm,
svcFdbMimDestTblFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr,
svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved,
svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive,
sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit,
svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit,
tmnxSubUserCategoryError, svcTlsSiteDesigFwdrChg, sapTlsDataSapInstStatusChgd,
svcTlsGroupOperStatusChanged, sapTunnelStateChange,
tmnxSubHostInconsistentAtmTdOvr, sapAtmPppSessionFailure, sapAtmPppNcpFailure,
svcMSPwRtMisconfig, svcOperGrpOperStatusChanged, sapIpipeCelpAddrChange,
svcMSPwRetryExpiredNotif, svcVlSiteDesigFwdrChg, tmnxSubSlaacSetupFailure,
tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached,
tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi,
tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed,
tmnxSublpoeInvalidSessionKey, tmnxSublpoeInvalidCidRidChange,
tmnxSublpoeSessionLimitReached, tmnxSublpoePersistenceRecovery,
tmnxSublpoeMigrHostDeleted, tmnxSubMngdHostCreationFail,
tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPIBndFailed,
tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed,
tmnxSubBrgRadiusUpdatelpoeSeFail, tmnxSubBrgRadiusCoaError,
tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached,
tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected,
alulpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError,
tmnxSublpoeSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed,
tmnxSubSVlanStatsReachedMaximum, svcTlsVxInstMacAdrLimitAlrmRsd,
svcTlsVxInstMacAdrLimitAlrmClrd, tmnxSubCupsUpSapCreationFailed,
tmnxSubCupsUpIfCreationFailed, tmnxPfcPAssocPathMgmtStateChgd,
tmnxSubInfoEgrAggRateLimitLowReq, tmnxSublpoeWppRegistrationFailed,

svcEvpnMplsTEPIpSysHiUsgSet, svcEvpnMplsTEPIpSysHiUsgClr,
svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict,
svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr,
svcSrv6FunctionExhaustion, svclFSubForwardingStatsDisNotify,
svclFSubForwardingStatsEnNotify, svcRoutedVplsEvpnGWDrStateChgd,
svcSrv6TEPEgrBndSvcHiUsgSet, svcSrv6TEPEgrBndSvcHiUsgClr,
tmnxSapMRtCpeChkStatusChange

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events svcmgr event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events svcmgr event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events svcmgr event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events svcmgr event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events svcmgr event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events svcmgr event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events svcmgr event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

system event keyword

Synopsis	Enter the system list instance
Context	configure log log-events system event keyword
Tree	system
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events system event keyword
Tree	system
Options	stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped, ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, sntpTimeDiffExceedsThreshold, tmnxSssiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted, tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysVsdServerAvailable, tmnxSysVsdServerUnavailable, tmnxSysXmppServerFunctional, tmnxSysXmppServerNotFunctional, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable, tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure, tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded, ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, mdCommitInProgress
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log log-events system event](#) *keyword* [generate](#) *boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log log-events system event](#) *keyword* [repeat](#) *boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log log-events system event](#) *keyword* [severity](#) *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log log-events system event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1

Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [system](#) [event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [system](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [system](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

tls [event](#) *keyword*

Synopsis Enter the **tls** list instance
Context **configure** [log](#) [log-events](#) [tls](#) [event](#) *keyword*
Tree [tls](#)
Introduced 20.5.R1
Platforms All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events tls event <i>keyword</i>
Tree	tls
Options	tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events tls event <i>keyword generate</i> <i>boolean</i>
Tree	generate
Introduced	20.5.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events tls event <i>keyword repeat</i> <i>boolean</i>
Tree	repeat
Default	false
Introduced	20.5.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events tls event <i>keyword severity</i> <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	20.5.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events tls event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	20.5.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events tls event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	20.5.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events tls event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	20.5.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events tls event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	20.5.R1
Platforms	All

tree-sid event keyword

Synopsis	Enter the tree-sid list instance
Context	configure log log-events tree-sid event keyword
Tree	tree-sid
Introduced	20.10.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events tree-sid event keyword
Tree	tree-sid
Options	vRtrTreeSidCdtPathChanged, vRtrTreeSidCdtPathActInsChanged, vRtrTreeSidInSidRegFailure, vRtrTreeSidTreIdAllocFailure, vRtrTreeSidRepSegResExhaustion, vRtrTreeSidRepSegResExhstCleared, vRtrTreeSidLabelRangeExhaustion, vRtrTreeSidLblRangeExhstCleared
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events tree-sid event keyword generate boolean
Tree	generate
Introduced	20.10.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events tree-sid event keyword repeat boolean
Tree	repeat
Default	false
Introduced	20.10.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events tree-sid event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	20.10.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events tree-sid event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	20.10.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events tree-sid event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	20.10.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events tree-sid event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	20.10.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events tree-sid event <i>keyword throttle boolean</i>
Tree	throttle
Introduced	20.10.R1
Platforms	All

user event *keyword*

Synopsis	Enter the user list instance
Context	configure log log-events user event <i>keyword</i>
Tree	user
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events user event <i>keyword</i>
Tree	user
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events user event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log](#) [log-events](#) [user](#) [event](#) *keyword* **repeat** *boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log](#) [log-events](#) [user](#) [event](#) *keyword* **severity** *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [user](#) [event](#) *keyword* **specific-throttle** *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [user](#) [event](#) *keyword* **specific-throttle-interval** *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1

Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [user event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [user event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

video event *keyword*

Synopsis Enter the **video** list instance
Context **configure** [log](#) [log-events](#) [video event](#) *keyword*
Tree [video](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log](#) [log-events](#) [video event](#) *keyword*
Tree [video](#)
Options tmnxVdoDuplicateSsrclId, tmnxVdoMdaSessionsLimitExceeded,
tmnxVdoMdaSGLimitExceeded, tmnxVdoMdaSessionsLimitCleared,
tmnxVdoMdaSGLimitCleared, tmnxVdoAdSpliceAbort,
tmnxVdoClientSessionsLmtExceeded, tmnxVdoClientSessionsLmtCleared,

tmnxVdoGrpSrcAnlyzrErrState, tmnxVdoGrpSrcAnlyzrStClear,
tmnxVdoMdaFccBwLimitExceeded, tmnxVdoMdaFccBwLimitCleared,
tmnxVdoMdaRetBwLimitExceeded, tmnxVdoMdaRetBwLimitCleared,
tmnxVdoMdaFccRetTotBwLmtExceeded, tmnxVdoMdaFccRetTotBwLmtCleared,
tmnxVdoMdaFccSesLimitExceeded, tmnxVdoMdaFccSesLimitCleared,
tmnxVdoMdaRetSesLimitExceeded, tmnxVdoMdaRetSesLimitCleared,
tmnxVdoMdaFccRetTotSeLmtExceeded, tmnxVdoMdaFccRetTotSeLmtCleared,
tmnxVdoVappSessionsLimitExceeded, tmnxVdoVappSGLimitExceeded,
tmnxVdoVappSessionsLimitCleared, tmnxVdoVappSGLimitCleared,
tmnxVdoVappFccBwLimitExceeded, tmnxVdoVappFccBwLimitCleared,
tmnxVdoVappRetBwLimitExceeded, tmnxVdoVappRetBwLimitCleared,
tmnxVdoVappFccRetTotBwLmtExceded, tmnxVdoVappFccRetTotBwLmtCleared,
tmnxVdoVappFccSesLimitExceeded, tmnxVdoVappFccSesLimitCleared,
tmnxVdoVappRetSesLimitExceeded, tmnxVdoVappRetSesLimitCleared,
tmnxVdoVappFccRetTotSeLmtExceded, tmnxVdoVappFccRetTotSeLmtCleared

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events video event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events video event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events video event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events video event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events video event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events video event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

throttle *boolean*

Synopsis Throttle log events of this type
 Context **configure** [log](#) [log-events](#) [video event](#) *keyword* **throttle** *boolean*
 Tree [throttle](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vrrp event *keyword*

Synopsis Enter the **vrrp** list instance
 Context **configure** [log](#) [log-events](#) [vrrp event](#) *keyword*
 Tree [vrrp](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log](#) [log-events](#) [vrrp event](#) *keyword*
 Tree [vrrp](#)
 Options vrrpTrapNewMaster, vrrpTrapAuthFailure, tmnxVrrpIPListMismatch, tmnxVrrpIPListMismatchClear, tmnxVrrpMultipleOwners, tmnxVrrpBecameBackup, vrrpPacketDiscarded, tmnxVrrpBfdIntfSessStateChgd, vrrpTrapProtoError, tVrrpBecameBackup, tVrrpTrapNewMaster, tVrrpIPListMismatch, tVrrpIPListMismatchClear, tVrrpMultipleOwners, tVrrpPacketDiscarded, tVrrpRouterAdvNotActivated, tVrrpRouterAdvNotActivatedClear, tVrrpOperDownInvalidMac, tVrrpOperDownInvalidMacClear, tmnxVrrpOperDownInvalidMac, tmnxVrrpOperDownInvalidMacClear
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events vrrp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events vrrp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events vrrp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events vrrp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events vrrp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events vrrp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events vrrp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

vrtr [event](#) *keyword*

Synopsis	Enter the vrtr list instance
Context	configure log log-events vrtr event <i>keyword</i>
Tree	vrtr
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events vrtr event <i>keyword</i>
Tree	vrtr
Options	tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrExportLimitReached, tmnxVRtrGrRoutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrV6ExportLimitReached, tmnxVRtrGrV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared, tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted, tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources, tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust, tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt, tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt, tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState, tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared, tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped, tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged, tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified, vRtrIfDhcpCIRtStatusChanged, vRtrIfDhcpCIRtStateDnsChanged, vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6CIRtStateDnsChanged, tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped, tmnxVRtrBfdExtNoFreeTxIntrvlSlot, tmnxVRtrFibVPNOccupancyThreshold
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events vrtr event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events vrtr event keyword repeat boolean**
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events vrtr event keyword severity keyword**
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events vrtr event keyword specific-throttle boolean**
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure log log-events vrtr event keyword specific-throttle-interval number**
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1

Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [vrtr](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [vrtr](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

wlan-gw [event](#) *keyword*

Synopsis Enter the **wlan-gw** list instance
Context **configure** [log](#) [log-events](#) [wlan-gw](#) [event](#) *keyword*
Tree [wlan-gw](#)
Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log](#) [log-events](#) [wlan-gw](#) [event](#) *keyword*
Tree [wlan-gw](#)
Options `tmnxWlanGwResrcProblemDetected`, `tmnxWlanGwResrcProblemCause`,
`tmnxWlanGwTuQosProblem`, `tmnxWlanGwGrpOperStateChanged`,
`tmnxWlanGwlomActive`, `tmnxWlanGwMgwConnected`, `tmnxWlanGwMgwRestarted`,
`tmnxWlanGwNumMgwHi`, `tmnxWlanGwMgwStateChanged`,
`tmnxWlanGwQosRadiusGtpMismatch`, `tmnxWlanGwSubIfRedActiveChanged`,

tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPIReqFailed, tmnxWlanGwSubIfPmAddNewPIFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwGtpMessageDropped, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events wlan-gw event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events wlan-gw event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events wlan-gw event](#) *keyword* [severity](#) *keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events wlan-gw event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events wlan-gw event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events wlan-gw event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events wlan-gw event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

wpp event *keyword*

Synopsis	Enter the wpp list instance
Context	configure log log-events wpp event <i>keyword</i>
Tree	wpp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events wpp event <i>keyword</i>
Tree	wpp
Options	tmnxWppPortalStatChanged, tmnxWppHostAuthenticationFailed, tmnxWppPortalUnreachable, tmnxWppPortalGroupStatChanged, tmnxWppPGHostAuthFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events wpp event <i>keyword generate</i> <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events wpp event <i>keyword repeat</i> <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events wpp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events wpp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events wpp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events wpp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events wpp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

log-id [[name](#)] *string*

Synopsis	Enter the log-id list instance
Context	configure log log-id <i>string</i>
Tree	log-id
Max. Instances	30
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Log ID
Context	configure log log-id <i>string</i>
Tree	log-id
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the log
Context	configure log log-id <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure log log-id string description string**
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

destination

Synopsis Enter the **destination** context
Context **configure log log-id string destination**
Tree [destination](#)
Introduced 16.0.R1
Platforms All

cli

Synopsis Enable the **cli** context
Context **configure log log-id string destination cli**
Tree [cli](#)
Notes The following elements are part of a choice: **cli**, **console**, **file**, **memory**, **netconf**, **snmp**, or **syslog**.
Introduced 16.0.R1
Platforms All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this CLI log
Context	configure log log-id string destination cli max-entries number
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

console



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log events to send to the system console port
Context	configure log log-id string destination console
Tree	console
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

file reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log events to send to the specified file ID
Context	configure log log-id string destination file reference
Tree	file
Reference	configure log file string
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

memory

Synopsis	Enable the memory context
Context	configure log log-id string destination memory
Tree	memory
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this memory log
Context	configure log log-id string destination memory max-entries number
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

netconf

Synopsis	Enable the netconf context
Context	configure log log-id string destination netconf
Tree	netconf
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this NETCONF log
Context	configure log log-id string destination netconf max-entries number
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

snmp

Synopsis	Enable the snmp context
Context	configure log log-id string destination snmp
Tree	snmp
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this SNMP log
Context	configure log log-id string destination snmp max-entries number
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

syslog *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log events to send to the specified syslog ID
Context	configure log log-id string destination syslog reference
Tree	syslog
Reference	configure log syslog string
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Event filter policy with the log destination
Context	configure log log-id string filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

netconf-stream *string*

Synopsis	Destination NETCONF stream name
Context	configure log log-id string netconf-stream string
Tree	netconf-stream
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
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Context	configure log log-id string python-policy reference
Tree	python-policy
Reference	configure python python-policy string
Introduced	16.0.R1
Platforms	All

source

Synopsis	Enter the source context
Context	configure log log-id string source
Tree	source
Introduced	16.0.R1
Platforms	All

change boolean

Synopsis	Collect log events from change event stream
Context	configure log log-id string source change boolean
Tree	change
Introduced	16.0.R1
Platforms	All

debug boolean

Synopsis	Collect log events from the debug event stream
Context	configure log log-id string source debug boolean
Tree	debug
Default	false
Introduced	16.0.R1
Platforms	All

main boolean

Synopsis	Collect log events from the main event stream
Context	configure log log-id string source main boolean

Tree	main
Introduced	16.0.R1
Platforms	All

security boolean

Synopsis	Collect log events from the security event stream
Context	configure log log-id string source security boolean
Tree	security
Introduced	16.0.R1
Platforms	All

time-format keyword

Synopsis	Time zone output for file log contents and syslog
Context	configure log log-id string time-format keyword
Tree	time-format
Default	utc
Options	utc, local
Introduced	16.0.R1
Platforms	All

route-preference

Synopsis	Enter the route-preference context
Context	configure log route-preference
Tree	route-preference
Introduced	16.0.R1
Platforms	All

primary keyword

Synopsis	Primary routing preference for traffic that is generated for SNMP notifications and syslog messages
Context	configure log route-preference primary keyword
Tree	primary

Default	outband
Options	inband, outband
Introduced	16.0.R1
Platforms	All

secondary *keyword*

Synopsis	Secondary route preference for SNMP and syslog traffic
Context	configure log route-preference secondary <i>keyword</i>
Tree	secondary
Default	inband
Options	inband, outband, none
Introduced	16.0.R1
Platforms	All

services-all-events

Synopsis	Enter the services-all-events context
Context	configure log services-all-events
Tree	services-all-events
Introduced	19.10.R1
Platforms	All

service [[service-name](#)] *reference*

Synopsis	Add a list entry for service
Context	configure log services-all-events service <i>reference</i>
Tree	service
Introduced	19.10.R1
Platforms	All

[service-name] *reference*

Synopsis	Administrative service name
Context	configure log services-all-events service <i>reference</i>

Tree	service
Reference	configure service vprn <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

snmp-trap-group [[log-name](#)] *string*

Synopsis	Enter the snmp-trap-group list instance
Context	configure log snmp-trap-group <i>string</i>
Tree	snmp-trap-group
Max. Instances	15
Introduced	16.0.R1
Platforms	All

[log-name] *string*

Synopsis	Log ID
Context	configure log snmp-trap-group <i>string</i>
Tree	snmp-trap-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log snmp-trap-group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

trap-target [*name*] *string*

Synopsis	Enter the trap-target list instance
Context	configure log snmp-trap-group <i>string</i> trap-target <i>string</i>
Tree	trap-target
Max. Instances	25
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Trap target name
Context	configure log snmp-trap-group <i>string</i> trap-target <i>string</i>
Tree	trap-target
String Length	1 to 28
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the trap receiver
Context	configure log snmp-trap-group <i>string</i> trap-target <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log snmp-trap-group <i>string</i> trap-target <i>string</i> description <i>string</i>
Tree	description

String Length 1 to 80
Introduced 16.0.R1
Platforms All

notify-community *string*

Synopsis SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification
Context **configure** [log snmp-trap-group](#) *string* [trap-target](#) *string* **notify-community** *string*
Tree [notify-community](#)
String Length 1 to 31
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

port *number*

Synopsis UDP port number to send messages to this remote SNMP notification collector
Context **configure** [log snmp-trap-group](#) *string* [trap-target](#) *string* **port** *number*
Tree [port](#)
Range 0 | 1 to 65535
Default 162
Introduced 16.0.R1
Platforms All

replay *boolean*

Synopsis Retransmit missed notifications
Context **configure** [log snmp-trap-group](#) *string* [trap-target](#) *string* **replay** *boolean*
Tree [replay](#)
Default false
Introduced 16.0.R1
Platforms All

security-level *keyword*

Synopsis	Security level at which SNMP notification messages are sent to SNMP notification collector
Context	configure log snmp-trap-group <i>string</i> trap-target <i>string</i> security-level <i>keyword</i>
Tree	security-level
Default	no-auth-no-privacy
Options	no-auth-no-privacy, auth-no-privacy, privacy
Introduced	16.0.R1
Platforms	All

version *keyword*

Synopsis	SNMP version to format notification messages sent to this SNMP notification collector
Context	configure log snmp-trap-group <i>string</i> trap-target <i>string</i> version <i>keyword</i>
Tree	version
Default	snmpv3
Options	snmpv1, snmpv2c, snmpv3
Introduced	16.0.R1
Platforms	All

syslog [[syslog-name](#)] *string*

Synopsis	Enter the syslog list instance
Context	configure log syslog <i>string</i>
Tree	syslog
Max. Instances	10
Introduced	16.0.R1
Platforms	All

[[syslog-name](#)] *string*

Synopsis	Syslog name
Context	configure log syslog <i>string</i>
Tree	syslog

String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the Syslog target host
Context	configure log syslog <i>string address</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log syslog <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

facility *keyword*

Synopsis	Facility code for messages
Context	configure log syslog <i>string facility keyword</i>
Tree	facility
Default	local7
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Introduced	16.0.R1
Platforms	All

log-prefix (*keyword* | *string*)

Synopsis	String that is prepended to every log message sent to this target syslog host
Context	configure log syslog <i>string</i> log-prefix (<i>keyword</i> <i>string</i>)
Tree	log-prefix
String Length	1 to 32
Default	TMNX
Options	no-prefix
Introduced	16.0.R1
Platforms	All

port number

Synopsis	Destination port when sending syslog over UDP
Context	configure log syslog <i>string</i> port number
Tree	port
Range	0 1 to 65535
Default	514
Introduced	16.0.R1
Platforms	All

severity keyword

Synopsis	Severity level threshold for the syslog message
Context	configure log syslog <i>string</i> severity keyword
Tree	severity
Default	info
Options	emergency, alert, critical, error, warning, notice, info, debug
Introduced	16.0.R1
Platforms	All

tls-client-profile *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TLS client profile used to encrypt syslog communication
Context	configure log syslog <i>string</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Description	<p>This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS.</p> <p>Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages.</p> <p>When this command is unconfigured, the syslog messages are sent over UDP.</p>
Reference	configure system security tls client-tls-profile <i>string</i>
Introduced	21.10.R1
Platforms	All

throttle-rate

Synopsis	Enter the throttle-rate context
Context	configure log throttle-rate
Tree	throttle-rate
Introduced	16.0.R1
Platforms	All

interval number

Synopsis	Duration of an event throttling interval
Context	configure log throttle-rate interval <i>number</i>
Tree	interval
Range	1 to 1200
Default	1
Introduced	16.0.R1
Platforms	All

limit number

Synopsis	Number of log events within the throttle interval
Context	configure log throttle-rate limit <i>number</i>
Tree	limit

Range	1 to 20000
Default	2000
Introduced	16.0.R1
Platforms	All

3.24 macsec commands

```
configure
- macsec
  - apply-groups reference
  - apply-groups-exclude reference
  - connectivity-association string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cipher-suite keyword
    - clear-tag-mode keyword
    - delay-protection boolean
    - description string
    - encryption-offset number
    - macsec-encrypt boolean
    - replay-protection boolean
    - replay-window-size number
  - static-cak
    - active-psk number
    - apply-groups reference
    - apply-groups-exclude reference
    - mka-hello-interval keyword
    - mka-key-server-priority number
    - pre-shared-key number
      - apply-groups reference
      - apply-groups-exclude reference
      - cak string
      - cak-name string
      - encryption-type keyword
  - mac-policy number
    - apply-groups reference
    - apply-groups-exclude reference
    - destination-mac-address string
```

3.24.1 macsec command descriptions

macsec

Synopsis	Enter the macsec context
Context	configure macsec
Tree	macsec
Introduced	16.0.R1
Platforms	All

connectivity-association [[ca-name](#)] *string*

Synopsis	Enter the connectivity-association list instance
Context	configure macsec connectivity-association string
Tree	connectivity-association
Introduced	16.0.R1
Platforms	All

[\[ca-name\]](#) *string*

Synopsis	Connectivity association name
Context	configure macsec connectivity-association string
Tree	connectivity-association
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the connectivity association
Context	configure macsec connectivity-association string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
Platforms All

cipher-suite *keyword*

Synopsis Data path encryption algorithm
Context **configure** **macsec** **connectivity-association** *string cipher-suite keyword*
Tree [cipher-suite](#)
Default gcm-aes-128
Options gcm-aes-128, gcm-aes-256, gcm-aes-xpn-128, gcm-aes-xpn-256
Introduced 16.0.R1
Platforms All

clear-tag-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear tag mode for clear text before the SecTAG
Context **configure** **macsec** **connectivity-association** *string clear-tag-mode keyword*
Tree [clear-tag-mode](#)
Default none
Options none, single-tag, dual-tag
Introduced 16.0.R1
Platforms All

delay-protection *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable delay protection
Context **configure** **macsec** **connectivity-association** *string delay-protection boolean*
Tree [delay-protection](#)
Default false

Introduced 20.10.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [macsec connectivity-association](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

encryption-offset *number*

Synopsis Confidentiality (encryption) offset
Context **configure** [macsec connectivity-association](#) *string* [encryption-offset](#) *number*
Tree [encryption-offset](#)
Range 0 | 30 | 50
Default 0
Introduced 16.0.R1
Platforms All

macsec-encrypt *boolean*

Synopsis Encrypt and authenticate all PDUs
Context **configure** [macsec connectivity-association](#) *string* [macsec-encrypt](#) *boolean*
Tree [macsec-encrypt](#)
Description When configured to **true**, all PDUs are encrypted and authenticated.
When configured to **false**, all PDUs are transmitted in clear text, however, they are still authenticated and have the trailing ICV.
Default true
Introduced 16.0.R1
Platforms All

replay-protection *boolean*

Synopsis	Discard packet when not within the replay window size
Context	configure macsec connectivity-association <i>string</i> replay-protection <i>boolean</i>
Tree	replay-protection
Description	<p>When configured to true, replay protection is enabled and packets are discarded when they are not within the replay window size.</p> <p>With replay protection, the sequence of the ID number of received packets is checked. If a packet arrives out of sequence and the difference between the packet IDs exceeds the replay protection window size, the packet is counted by the receiving port and discarded. For example if the replay protection window size is configured to five and a packet with an ID of 1006 arrives on the receiving link immediately following the packet assigned an ID of 1000, the packet with ID 1006 is counted and discarded because it is outside the parameter of the window size.</p> <p>Replay protection is particularly useful for addressing man-in-the-middle attacks. A packet that is replayed by a man-in-the-middle attacker on the Ethernet link that arrives on the receiving link out of sequence will be detected and dropped instead of forwarded through the network.</p> <p>Replay protection should not be enabled in cases where packets are expected to arrive out of order.</p> <p>When configured to false, replay protection is not enabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

replay-window-size *number*

Synopsis	Replay protection window size
Context	configure macsec connectivity-association <i>string</i> replay-window-size <i>number</i>
Tree	replay-window-size
Range	0 to 4294967294
Default	0
Introduced	16.0.R1
Platforms	All

static-cak

Synopsis	Enter the static-cak context
Context	configure macsec connectivity-association <i>string</i> static-cak

Tree	static-cak
Description	Commands in this context configure the Connectivity Association Key (CAK) to manage the MACsec Key Agreement (MKA).
Introduced	16.0.R1
Platforms	All

active-psk *number*

Synopsis	Active pre-shared-key (PSK)
Context	configure macsec connectivity-association <i>string</i> static-cak active-psk <i>number</i>
Tree	active-psk
Description	This command specifies the active transmitting PSK. If two PSKs are configured, the arriving MACsec MKA can be decrypted via CAKs using either PSK; however, only the active PSK is used for TX encryption of MKA PDUs.
Range	1 to 2
Default	1
Introduced	16.0.R1
Platforms	All

mka-hello-interval *keyword*

Synopsis	MKA hello interval
Context	configure macsec connectivity-association <i>string</i> static-cak mka-hello-interval <i>keyword</i>
Tree	mka-hello-interval
Description	This command configures the interval at which MKA hello packets are sent or received for the connectivity association.
Default	2
Options	1, 2, 3, 4, 5, 6, 500ms
Introduced	19.5.R1
Platforms	All

mka-key-server-priority *number*

Synopsis	Key server priority used by the MKA protocol
Context	configure macsec connectivity-association <i>string</i> static-cak mka-key-server-priority <i>number</i>

Tree	mka-key-server-priority
Description	This command specifies the key server priority used by the MACsec Key Agreement (MKA) protocol to select the key server when MACsec is enabled using static connectivity association key (CAK) security mode.
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

pre-shared-key [[psk-id](#)] *number*

Synopsis	Enter the pre-shared-key list instance
Context	configure macsec connectivity-association <i>string static-cak pre-shared-key number</i>
Tree	pre-shared-key
Description	<p>Commands in this context configure pre-shared key attributes to enable MACsec using static connectivity association key (CAK) security mode.</p> <p>A pre-shared key includes a connectivity association key name (CKN) and a connectivity association key (CAK). The pre-shared key, the CKN and the CAK, must match on both ends of a link.</p> <p>A pre-shared key is configured on both devices at each end of a point-to-point link to enable MACsec via static CAK security mode. The MACsec Key Agreement (MKA) protocol is enabled after the successful MKA liveness negotiation.</p> <p>The encryption type is used to encrypt the SAK and authenticate the MKA packet. The symmetric encryption key SAK (Security Association Key) must be encrypted (wrapped) via the MKA protocols. The AES key is derived from the pre-shared-key.</p>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[psk-id] *number*

Synopsis	Pre-shared-key (PSK) ID
Context	configure macsec connectivity-association <i>string static-cak pre-shared-key number</i>
Tree	pre-shared-key
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

cak string

Synopsis Connectivity association key (CAK) for the PSK

Context **configure macsec connectivity-association string static-cak pre-shared-key number cak string**

Tree **cak**

Description This command specifies the connectivity association key (CAK) for the pre-shared key. Two values are derived from the CAK:

- Key Encryption Key (KEK), used to encrypt the MKA and SAK (symmetric key used for data path PDUs) distributed between all members
- Integrity Check Value (ICV), used to authenticate the MKA and SAK PDUs distributed between all members

String Length 1 to 71

Introduced 16.0.R1

Platforms All

cak-name string

Synopsis Connectivity association key name (CKN) for the PSK

Context **configure macsec connectivity-association string static-cak pre-shared-key number cak-name string**

Tree **cak-name**

Description This command specifies the connectivity association key name (CKN) for the pre-shared key. The CKN is appended to the MKA for identification of the appropriate CAK by the peer.

String Length 1 to 64

Introduced 16.0.R1

Platforms All

encryption-type keyword

Synopsis Encryption for authentication of the MKA packet

Context **configure macsec connectivity-association string static-cak pre-shared-key number encryption-type keyword**

Tree **encryption-type**

Options	aes-128-cmac, aes-256-cmac
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mac-policy [[mac-policy-id](#)] *number*

Synopsis	Enter the mac-policy list instance
Context	configure macsec mac-policy <i>number</i>
Tree	mac-policy
Introduced	16.0.R5
Platforms	All

[mac-policy-id] *number*

Synopsis	MAC address policy ID
Context	configure macsec mac-policy <i>number</i>
Tree	mac-policy
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

destination-mac-address [[dest-mac-addr](#)] *string*

Synopsis	Add a list entry for destination-mac-address
Context	configure macsec mac-policy <i>number</i> destination-mac-address <i>string</i>
Tree	destination-mac-address
Max. Instances	5
Introduced	16.0.R5
Platforms	All

[dest-mac-addr] *string*

Synopsis	Destination MAC address added to the MAC policy
Context	configure macsec mac-policy <i>number</i> destination-mac-address <i>string</i>
Tree	destination-mac-address
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

3.25 mcac commands

```

configure
- mcac
  - apply-groups reference
  - apply-groups-exclude reference
  - interface-policy string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - description string
  - policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - bundle string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
      - channel start (ipv4-address-no-zone | ipv6-address-no-zone) end (ipv4-address-
no-zone | ipv6-address-no-zone) source (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
      - priority-class keyword
      - type keyword
    - description string
  - mc-constraints
    - lag-port-down string number-down number
      - apply-groups reference
      - apply-groups-exclude reference
      - level number
    - level number
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
      - use-lag-port-weight boolean
  - default-action keyword
  - description string

```

3.25.1 mcac command descriptions

mcac

Synopsis	Enter the mcac context
Context	configure mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

interface-policy [[policy-name](#)] *string*

Synopsis	Enter the interface-policy list instance
Context	configure mcac interface-policy <i>string</i>
Tree	interface-policy
Introduced	16.0.R1
Platforms	All

[policy-name] *string*

Synopsis	MCAC interface policy name
Context	configure mcac interface-policy <i>string</i>
Tree	interface-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MCAC interface policy
Context	configure mcac interface-policy <i>string admin-state</i> <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced 16.0.R1
Platforms All

bandwidth

Synopsis Enter the **bandwidth** context
Context **configure mcac interface-policy string bandwidth**
Tree [bandwidth](#)
Introduced 16.0.R1
Platforms All

mandatory (*number | keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels
Context **configure mcac interface-policy string bandwidth mandatory** (*number | keyword*)
Tree [mandatory](#)
Range 0 to 2147483647
Default unlimited
Options unlimited
Introduced 16.0.R1
Platforms All

total (*number | keyword*)

Synopsis Maximum allowed bandwidth
Context **configure mcac interface-policy string bandwidth total** (*number | keyword*)
Tree [total](#)
Range 0 to 2147483647
Default unlimited
Options unlimited
Introduced 16.0.R1
Platforms All

description *string*

Synopsis	Text description
Context	configure mcac interface-policy <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

policy [[policy-name](#)] *string*

Synopsis	Enter the policy list instance
Context	configure mcac policy <i>string</i>
Tree	policy
Introduced	16.0.R1
Platforms	All

[[policy-name](#)] *string*

Synopsis	Name of the global MCAC channel definition policy
Context	configure mcac policy <i>string</i>
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bundle [[bundle-name](#)] *string*

Synopsis	Enter the bundle list instance
Context	configure mcac policy <i>string bundle string</i>
Tree	bundle
Max. Instances	64
Introduced	16.0.R1
Platforms	All

[bundle-name] *string*

Synopsis	Multicast policy bundle name
Context	configure mcac policy string bundle string
Tree	bundle
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the policy bundle
Context	configure mcac policy string bundle string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Maximum bandwidth for the MCAC policy bundle
Context	configure mcac policy string bundle string bandwidth number
Tree	bandwidth
Range	1 to 4294967295
Default	100
Units	kilobps
Introduced	16.0.R1
Platforms	All

channel start (*ipv4-address-no-zone | ipv6-address-no-zone*) **end** (*ipv4-address-no-zone | ipv6-address-no-zone*) **source** (*ipv4-prefix | ipv6-prefix*)

Synopsis	Enter the channel list instance
----------	--

Context	configure mcac policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	channel
Introduced	16.0.R1
Platforms	All

start (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Starting multicast IP address for a multicast stream
Context	configure mcac policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Ending multicast IP address for a multicast stream
Context	configure mcac policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source prefix for the multicast IP stream
Context	configure mcac policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	channel
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth required by the channel
Context	configure mcac policy string bundle string channel start (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) source (<i>ipv4-prefix ipv6-prefix</i>) bandwidth <i>number</i>
Tree	bandwidth
Range	10 to 10000000
Default	10
Units	kilobps
Introduced	16.0.R1
Platforms	All

priority-class *keyword*

Synopsis	Channel classification for when LAG ports change state
Context	configure mcac policy string bundle string channel start (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) source (<i>ipv4-prefix ipv6-prefix</i>) priority-class <i>keyword</i>
Tree	priority-class
Default	low
Options	low, high
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Channel type
Context	configure mcac policy string bundle string channel start (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) source (<i>ipv4-prefix ipv6-prefix</i>) type <i>keyword</i>
Tree	type
Default	optional
Options	optional, mandatory

Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure mcac policy** *string bundle string description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

mc-constraints

Synopsis Enter the **mc-constraints** context
Context **configure mcac policy** *string bundle string mc-constraints*
Tree [mc-constraints](#)
Introduced 16.0.R1
Platforms All

lag-port-down [**lag-name**] *string number-down number*

Synopsis Enter the **lag-port-down** list instance
Context **configure mcac policy** *string bundle string mc-constraints lag-port-down string number-down number*
Tree [lag-port-down](#)
Introduced 16.0.R1
Platforms All

[lag-name] *string*

Synopsis LAG name
Context **configure mcac policy** *string bundle string mc-constraints lag-port-down string number-down number*
Tree [lag-port-down](#)
String Length 1 to 27

Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

number-down *number*

Synopsis	Number of LAG ports that are down
Context	configure mcac policy <i>string bundle string mc-constraints lag-port-down string number-down number</i>
Tree	lag-port-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	configure mcac policy <i>string bundle string mc-constraints lag-port-down string number-down number level number</i>
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

level [[level-id](#)] *number*

Synopsis	Enter the level list instance
Context	configure mcac policy <i>string bundle string mc-constraints level number</i>
Tree	level
Introduced	16.0.R1
Platforms	All

[level-id] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure mcac policy <i>string</i> bundle <i>string</i> mc-constraints level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure mcac policy <i>string</i> bundle <i>string</i> mc-constraints level <i>number</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	configure mcac policy <i>string</i> bundle <i>string</i> mc-constraints use-lag-port-weight <i>boolean</i>
Tree	use-lag-port-weight
Description	When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

default-action *keyword*

Synopsis	Default action for the MCAC policy
Context	configure mcac policy <i>string</i> default-action <i>keyword</i>
Tree	default-action
Default	discard
Options	accept, discard
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure mcac policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

3.26 mirror commands

```
configure
- mirror
- apply-groups reference
- apply-groups-exclude reference
- global-sampling-rate number
- mirror-dest string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- encap
- layer-3-encap
- apply-groups reference
- apply-groups-exclude reference
- direction-bit boolean
- gateway
- apply-groups reference
- apply-groups-exclude reference
- ip-address
- destination string
- source string
- udp-port
- destination number
- source number
- header-type keyword
- router-instance string
- endpoint string
- apply-groups reference
- apply-groups-exclude reference
- description string
- revert-time (number | keyword)
- fc keyword
- include-port-id boolean
- pcap string
- apply-groups reference
- apply-groups-exclude reference
- file-url string
- remote-source
- far-end string
- apply-groups reference
- apply-groups-exclude reference
- icb boolean
- ing-vc-label number
- label-signaling keyword
- vc-id number
- spoke-sdp string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- control-word boolean
- egress
- vc-label number
- endpoint
- icb boolean
- name reference
- ingress
- l2tpv3
- cookie
- cookie1 string
```

configure mirror mirror-dest remote-source spoke-sdp ingress l2tpv3 cookie cookie2

```

    - cookie2 string
      - vc-label number
- sampling-rate number
- sap string
  - apply-groups reference
  - apply-groups-exclude reference
- egress
  - ip-mirror
    - mac
      - destination string
      - source string
    - qos
      - sap-egress
        - policy-name reference
        - port-redirect-group
          - group-name reference
          - instance number
      - endpoint reference
- service-id number
- slice-size number
- spoke-sdp string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - control-word boolean
  - egress
    - l2tpv3
      - cookie string
      - vc-label number
    - endpoint
      - icb boolean
      - name reference
      - precedence (number | keyword)
  - ingress
    - vc-label number
- type keyword
- use-global-sampling-rate boolean
- mirror-source string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - ipv6-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - mac-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - port string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress boolean
    - ingress boolean
  - sap string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress boolean
    - ingress boolean
- subscriber string

```

configure mirror mirror-source subscriber apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **egress** *boolean*
- **fc** *keyword*
- **host-type** *keyword*
- **ingress** *boolean*
- **ip-address** *string*
- **ip-family** *keyword*
- **mac-address** *string*
- **sap-id** *string*
- **sla-profile** *string*

3.26.1 mirror command descriptions

mirror

Synopsis	Enter the mirror context
Context	configure mirror
Tree	mirror
Introduced	16.0.R1
Platforms	All

global-sampling-rate *number*

Synopsis	System wide global sampling rate
Context	configure mirror global-sampling-rate <i>number</i>
Tree	global-sampling-rate
Description	<p>This command configures the global sampling rate. The global sampling rate provides a higher sampling rate than the sampling rate specified on the mirror destination. When set, this command applies to all mirror destination services that have the use-global-sampling-rate command configured.</p> <p>The global sampling rate takes precedence over the rate specified on the mirror destination. This means that when this command and the configure mirror mirror-dest sampling-rate are configured under the same mirror destination, the system automatically samples using the higher rate configured with this command and ignores the lower rate configured with the sampling-rate command.</p> <p>When unconfigured, no mirror destinations are associated to a global sampling rate and all mirror destinations mirror at the full rate, which means every packet is mirrored unless a mirror destination rate is specified.</p>
Range	0 2 to 255
Default	0
Introduced	22.10.R1
Platforms	All

mirror-dest [[service-name](#)] *string*

Synopsis	Enter the mirror-dest list instance
Context	configure mirror mirror-dest <i>string</i>
Tree	mirror-dest

Max. Instances	255
Introduced	16.0.R1
Platforms	All

[service-name] *string*

Synopsis	Administrative service name
Context	configure mirror mirror-dest <i>string</i>
Tree	mirror-dest
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service
Context	configure mirror mirror-dest <i>string admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure mirror mirror-dest <i>string description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

encap

Synopsis	Enter the encap context
Context	configure mirror mirror-dest string encap
Tree	encap
Introduced	16.0.R1
Platforms	All

layer-3-encap

Synopsis	Enable the layer-3-encap context
Context	configure mirror mirror-dest string encap layer-3-encap
Tree	layer-3-encap
Introduced	16.0.R1
Platforms	All

direction-bit *boolean*

Synopsis	Use the highest bit to specify traffic flow direction
Context	configure mirror mirror-dest string encap layer-3-encap direction-bit <i>boolean</i>
Tree	direction-bit
Default	false
Introduced	16.0.R1
Platforms	All

gateway

Synopsis	Enable the gateway context
Context	configure mirror mirror-dest string encap layer-3-encap gateway
Tree	gateway
Introduced	16.0.R1
Platforms	All

ip-address

Synopsis	Enter the ip-address context
----------	-------------------------------------

Context	configure mirror mirror-dest string encap layer-3-encap gateway ip-address
Tree	ip-address
Introduced	16.0.R1
Platforms	All

destination string

Synopsis	IPv4 destination address for the gateway
Context	configure mirror mirror-dest string encap layer-3-encap gateway ip-address destination string
Tree	destination
Introduced	16.0.R1
Platforms	All

source string

Synopsis	IPv4 source address for the gateway
Context	configure mirror mirror-dest string encap layer-3-encap gateway ip-address source string
Tree	source
Introduced	16.0.R1
Platforms	All

udp-port

Synopsis	Enter the udp-port context
Context	configure mirror mirror-dest string encap layer-3-encap gateway udp-port
Tree	udp-port
Introduced	16.0.R1
Platforms	All

destination number

Synopsis	UDP destination port to use with the gateway
Context	configure mirror mirror-dest string encap layer-3-encap gateway udp-port destination number

Tree	destination
Range	0 1 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

source number

Synopsis	UDP source port to use with the gateway
Context	configure mirror mirror-dest <i>string</i> encap layer-3-encap gateway udp-port source <i>number</i>
Tree	source
Range	0 1 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

header-type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Header type for Layer 3 encapsulation
Context	configure mirror mirror-dest <i>string</i> encap layer-3-encap header-type <i>keyword</i>
Tree	header-type
Options	ip-udp-shim, ip-gre, ip-udp-shim-sampled
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

router-instance string

Synopsis	Router instance to use with routed encapsulation
Context	configure mirror mirror-dest <i>string</i> encap layer-3-encap router-instance <i>string</i>
Tree	router-instance

Default	Base
Introduced	16.0.R1
Platforms	All

endpoint *[name]* *string*

Synopsis	Enter the endpoint list instance
Context	configure mirror mirror-dest <i>string</i> endpoint <i>string</i>
Tree	endpoint
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Service endpoint name
Context	configure mirror mirror-dest <i>string</i> endpoint <i>string</i>
Tree	endpoint
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure mirror mirror-dest <i>string</i> endpoint <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

revert-time (*number* | *keyword*)

Synopsis	Time to wait before reverting back to primary spoke SDP
Context	configure mirror mirror-dest <i>string endpoint string revert-time</i> (<i>number</i> <i>keyword</i>)
Tree	revert-time
Range	1 to 600
Default	immediate
Units	seconds
Options	never, immediate
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class for destination traffic
Context	configure mirror mirror-dest <i>string fc keyword</i>
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

include-port-id *boolean*

Synopsis	Include the system port ID in the packet
Context	configure mirror mirror-dest <i>string include-port-id boolean</i>
Tree	include-port-id
Default	false
Introduced	16.0.R1
Platforms	All

pcap [*session-name*] *string*

Synopsis	Enter the pcap list instance
Context	configure mirror mirror-dest <i>string pcap string</i>
Tree	pcap

Max. Instances	1
Introduced	16.0.R1
Platforms	All

[session-name] *string*

Synopsis	PCAP session name
Context	configure mirror mirror-dest <i>string</i> pcap <i>string</i>
Tree	pcap
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

file-url *string*

Synopsis	URL and file name for packet capture transfer
Context	configure mirror mirror-dest <i>string</i> pcap <i>string</i> file-url <i>string</i>
Tree	file-url
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

remote-source

Synopsis	Enable the remote-source context
Context	configure mirror mirror-dest <i>string</i> remote-source
Tree	remote-source
Introduced	16.0.R1
Platforms	All

far-end [[far-end-addr](#)] *string*

Synopsis	Enter the far-end list instance
----------	--

Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i>
Tree	far-end
Introduced	16.0.R1
Platforms	All

[far-end-addr] *string*

Synopsis	Far end IP address
Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i>
Tree	far-end
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

icb *boolean*

Synopsis	Remote source as an inter-chassis backup
Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i> icb <i>boolean</i>
Tree	icb
Default	false
Introduced	16.0.R1
Platforms	All

ing-vc-label *number*

Synopsis	Ingress virtual circuit label
Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i> ing-vc-label <i>number</i>
Tree	ing-vc-label
Range	32 to 18431
Notes	The following elements are part of a choice: ing-vc-label or label-signaling .
Introduced	16.0.R1
Platforms	All

label-signaling *keyword*

Synopsis	Protocol to obtain the ingress labels
Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i> label-signaling <i>keyword</i>
Tree	label-signaling
Default	tldp
Options	tldp
Notes	The following elements are part of a choice: ing-vc-label or label-signaling .
Introduced	16.0.R1
Platforms	All

vc-id *number*

Synopsis	Virtual circuit ID associated with the remote source
Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i> vc-id <i>number</i>
Tree	vc-id
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

spoke-sdp [**sdp-bind-id**] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i>
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP ID number
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service SDP binding
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

control-word *boolean*

Synopsis	Enable the PW control word on spoke SDPs
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> control-word <i>boolean</i>
Tree	control-word
Description	When configured to true , this command enables the PW control word on spoke SDPs that are part of a mirror destination. The control word must be enabled to allow MPLS-TP OAM on spoke SDP and is only valid for spoke SDPs that are part of a mirror service of type ether . When configured to false , this command disables the PW control word.
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

endpoint

Synopsis	Enter the endpoint context
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	All

icb *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> endpoint icb <i>boolean</i>
Tree	icb
Default	false
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	SAP-associated endpoint name
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> endpoint <i>name</i> <i>reference</i>
Tree	name
Reference	configure mirror mirror-dest <i>string</i> endpoint <i>string</i>
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

l2tpv3

Synopsis	Enter the l2tpv3 context
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> ingress l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	All

cookie

Synopsis	Enter the cookie context
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> ingress l2tpv3 cookie
Tree	cookie
Introduced	16.0.R1
Platforms	All

cookie1 *string*

Synopsis	Value of the first cookie for the tunnel
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> ingress l2tpv3 cookie cookie1 <i>string</i>
Tree	cookie1
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

cookie2 *string*

Synopsis	Value of the second cookie for the tunnel
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> ingress l2tpv3 cookie cookie2 <i>string</i>
Tree	cookie2
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	32 to 18431
Introduced	16.0.R1
Platforms	All

sampling-rate *number*

Synopsis	Sampling rate
Context	configure mirror mirror-dest <i>string</i> sampling-rate <i>number</i>

Tree	sampling-rate
Description	This command configures the packet sampling rate value for mirrored traffic and is supported with mirror source configurations. The sampling rate is common to all endpoints on a given line card FP per mirror destination service.
Range	256 to 10000
Introduced	20.7.R1
Platforms	All

sap [[sap-id](#)] *string*

Synopsis	Enter the sap list instance
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i>
Tree	sap
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	All

ip-mirror

Synopsis	Enter the ip-mirror context
Context	configure mirror mirror-dest <i>string</i> <i>sap</i> <i>string</i> <i>egress</i> ip-mirror
Tree	ip-mirror
Introduced	16.0.R1
Platforms	All

mac

Synopsis	Enter the mac context
Context	configure mirror mirror-dest <i>string</i> <i>sap</i> <i>string</i> <i>egress</i> ip-mirror mac
Tree	mac
Introduced	16.0.R1
Platforms	All

destination *string*

Synopsis	Destination MAC address
Context	configure mirror mirror-dest <i>string</i> <i>sap</i> <i>string</i> <i>egress</i> ip-mirror mac destination <i>string</i>
Tree	destination
Introduced	16.0.R1
Platforms	All

source *string*

Synopsis	Source MAC address
Context	configure mirror mirror-dest <i>string</i> <i>sap</i> <i>string</i> <i>egress</i> ip-mirror mac source <i>string</i>
Tree	source
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
----------	------------------------------

Context	configure mirror mirror-dest string sap string egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

sap-egress

Synopsis	Enter the sap-egress context
Context	configure mirror mirror-dest string sap string egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

policy-name reference

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure mirror mirror-dest string sap string egress qos sap-egress policy-name reference
Tree	policy-name
Reference	configure qos sap-egress string
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure mirror mirror-dest string sap string egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name reference

Synopsis	Name of the queue group redirect list policy
Context	configure mirror mirror-dest string sap string egress qos sap-egress port-redirect-group group-name reference

Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Port queue group instance
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

endpoint *reference*

Synopsis	Service endpoint name
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> endpoint <i>reference</i>
Tree	endpoint
Reference	configure mirror mirror-dest <i>string</i> endpoint <i>string</i>
Introduced	16.0.R1
Platforms	All

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure mirror mirror-dest <i>string</i> service-id <i>number</i>
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

slice-size *number*

Synopsis	Maximum size of the transmitted mirrored frame
Context	configure mirror mirror-dest <i>string slice-size number</i>
Tree	slice-size
Range	0 128 to 9216
Default	0
Introduced	16.0.R1
Platforms	All

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure mirror mirror-dest <i>string spoke-sdp string</i>
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[sdp-bind-id] *string*

Synopsis	SDP ID number
Context	configure mirror mirror-dest <i>string spoke-sdp string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service SDP binding
Context	configure mirror mirror-dest <i>string spoke-sdp string admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced 16.0.R1
Platforms All

control-word *boolean*

Synopsis Enable the PW control word on spoke SDPs

Context **configure** **mirror** **mirror-dest** *string* **spoke-sdp** *string* **control-word** *boolean*

Tree [control-word](#)

Description When configured to **true**, this command enables the PW control word on spoke SDPs that are part of a mirror destination. The control word must be enabled to allow MPLS-TP OAM on spoke SDP and is only valid for spoke SDPs that are part of a mirror service of type **ether**.

When configured to **false**, this command disables the PW control word.

Default false

Introduced 16.0.R1

Platforms All

egress

Synopsis Enter the **egress** context

Context **configure** **mirror** **mirror-dest** *string* **spoke-sdp** *string* **egress**

Tree [egress](#)

Introduced 16.0.R1

Platforms All

I2tpv3

Synopsis Enter the **I2tpv3** context

Context **configure** **mirror** **mirror-dest** *string* **spoke-sdp** *string* **egress** **I2tpv3**

Tree [I2tpv3](#)

Introduced 16.0.R1

Platforms All

cookie *string*

Synopsis RX or TX cookie for L2TPv3 spoke SDPs

Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> egress l2tpv3 cookie <i>string</i>
Tree	cookie
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

endpoint

Synopsis	Enter the endpoint context
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	All

icb *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> endpoint icb <i>boolean</i>
Tree	icb
Default	false

Introduced 16.0.R1
Platforms All

name *reference*

Synopsis Endpoint name associated with the SAP
Context **configure** **mirror** **mirror-dest** *string* **spoke-sdp** *string* **endpoint** *name* *reference*
Tree **name**
Reference **configure** **mirror** **mirror-dest** *string* **endpoint** *string*
Introduced 16.0.R1
Platforms All

precedence (*number* | *keyword*)

Synopsis Precedence when multiple SDP binds are on one endpoint
Context **configure** **mirror** **mirror-dest** *string* **spoke-sdp** *string* **endpoint** **precedence** (*number* | *keyword*)
Tree **precedence**
Range 1 to 4
Default 4
Options primary
Introduced 16.0.R1
Platforms All

ingress

Synopsis Enter the **ingress** context
Context **configure** **mirror** **mirror-dest** *string* **spoke-sdp** *string* **ingress**
Tree **ingress**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	32 to 18431
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mirror type information
Context	configure mirror mirror-dest <i>string</i> type <i>keyword</i>
Tree	type
Default	ether
Options	ether, ip-only
Introduced	16.0.R1
Platforms	All

use-global-sampling-rate *boolean*

Synopsis	Enables global sampling rate by mirror destination
Context	configure mirror mirror-dest <i>string</i> use-global-sampling-rate <i>boolean</i>
Tree	use-global-sampling-rate
Description	<p>When configured to true, this command configures each mirror destination service to use the global sampling rate, which allows a single high sampling rate for the entire system.</p> <p>When configured to false, the mirror destination mirrors at the full rate (all packets) or mirrors based on the sampling rate for the mirror destination if the sampling-rate command is configured.</p>
Default	false

Introduced 22.10.R1
Platforms All

mirror-source [[service-name](#)] *string*

Synopsis Enter the **mirror-source** list instance
Context **configure mirror mirror-source string**
Tree [mirror-source](#)
Introduced 19.10.R1
Platforms All

[service-name] *string*

Synopsis Administrative service name
Context **configure mirror mirror-source string**
Tree [mirror-source](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 19.10.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the mirror service
Context **configure mirror mirror-source string admin-state keyword**
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 19.10.R1
Platforms All

ip-filter [[filter-name](#)] *reference*

Synopsis Enter the **ip-filter** list instance
Context **configure mirror mirror-source string ip-filter reference**

Tree	ip-filter
Introduced	19.10.R1
Platforms	All

[filter-name] *reference*

Synopsis	IP filter name
Context	configure mirror mirror-source <i>string ip-filter reference</i>
Tree	ip-filter
Reference	configure filter ip-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Add a list entry for entry
Context	configure mirror mirror-source <i>string ip-filter reference entry number</i>
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[entry-id] *number*

Synopsis	IP filter entry ID
Context	configure mirror mirror-source <i>string ip-filter reference entry number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ipv6-filter [[filter-name](#)] *reference*

Synopsis	Enter the ipv6-filter list instance
Context	configure mirror mirror-source <i>string</i> ipv6-filter <i>reference</i>
Tree	ipv6-filter
Introduced	19.10.R1
Platforms	All

[filter-name] *reference*

Synopsis	IPv6 filter name
Context	configure mirror mirror-source <i>string</i> ipv6-filter <i>reference</i>
Tree	ipv6-filter
Reference	configure filter ipv6-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Add a list entry for entry
Context	configure mirror mirror-source <i>string</i> ipv6-filter <i>reference</i> entry <i>number</i>
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[entry-id] *number*

Synopsis	IPv6 filter entry ID
Context	configure mirror mirror-source <i>string</i> ipv6-filter <i>reference</i> entry <i>number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1

Platforms All

mac-filter [[filter-name](#)] *reference*

Synopsis Enter the **mac-filter** list instance
Context **configure** [mirror](#) [mirror-source](#) *string* [mac-filter](#) *reference*
Tree [mac-filter](#)
Introduced 19.10.R1
Platforms All

[filter-name] *reference*

Synopsis MAC filter name
Context **configure** [mirror](#) [mirror-source](#) *string* [mac-filter](#) *reference*
Tree [mac-filter](#)
Reference **configure** [filter](#) [mac-filter](#) *string*
Notes This element is part of a list key.
Introduced 19.10.R1
Platforms All

entry [[entry-id](#)] *number*

Synopsis Add a list entry for **entry**
Context **configure** [mirror](#) [mirror-source](#) *string* [mac-filter](#) *reference* [entry](#) *number*
Tree [entry](#)
Min. 1
Instances
Introduced 19.10.R1
Platforms All

[entry-id] *number*

Synopsis MAC filter entry ID
Context **configure** [mirror](#) [mirror-source](#) *string* [mac-filter](#) *reference* [entry](#) *number*
Tree [entry](#)

Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

port [**port-id**] *string*

Synopsis	Enter the port list instance
Context	configure mirror mirror-source string port string
Tree	port
Introduced	19.10.R1
Platforms	All

[port-id] *string*

Synopsis	Port ID
Context	configure mirror mirror-source string port string
Tree	port
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Mirror egress packets
Context	configure mirror mirror-source string port string egress boolean
Tree	egress
Description	When configured to true , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

ingress *boolean*

Synopsis	Mirror ingress packets
Context	configure mirror mirror-source <i>string</i> port <i>string</i> ingress <i>boolean</i>
Tree	ingress
Description	When configured to true , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

sap [**sap-id**] *string*

Synopsis	Enter the sap list instance
Context	configure mirror mirror-source <i>string</i> sap <i>string</i>
Tree	sap
Introduced	19.10.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	configure mirror mirror-source <i>string</i> sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Mirror egress packets
Context	configure mirror mirror-source <i>string</i> sap <i>string</i> egress <i>boolean</i>
Tree	egress
Description	When configured to true , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.

Default	false
Introduced	19.10.R1
Platforms	All

ingress *boolean*

Synopsis	Mirror ingress packets
Context	configure mirror mirror-source <i>string</i> sap <i>string</i> ingress <i>boolean</i>
Tree	ingress
Description	When configured to true , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

subscriber [**subscriber-id**] *string*

Synopsis	Enter the subscriber list instance
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i>
Tree	subscriber
Introduced	19.10.R1
Platforms	All

[**subscriber-id**] *string*

Synopsis	Subscriber ID
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i>
Tree	subscriber
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Mirror egress packets
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> egress <i>boolean</i>
Tree	egress
Description	When configured to true , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

fc *keyword*

Synopsis	The forwarding classes traffic which should be mirrored
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	19.10.R1
Platforms	All

host-type *keyword*

Synopsis	Host type for mirroring
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> host-type <i>keyword</i>
Tree	host-type
Options	ipoe, ppp
Introduced	19.10.R1
Platforms	All

ingress *boolean*

Synopsis	Mirror ingress packets
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> ingress <i>boolean</i>
Tree	ingress

Description	When configured to true , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

ip-address *string*

Synopsis	Service IP address of remote device sending LI traffic
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> ip-address <i>string</i>
Tree	ip-address
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

ip-family *keyword*

Synopsis	IP family for mirroring
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> ip-family <i>keyword</i>
Tree	ip-family
Options	ipv4, ipv6
Introduced	19.10.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the subscriber
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> mac-address <i>string</i>
Tree	mac-address
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

sap-id *string*

Synopsis	Subscriber SAP ID
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> sap-id <i>string</i>
Tree	sap-id
String Length	1 to 45
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

sla-profile *string*

Synopsis	SLA profile name
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> sla-profile <i>string</i>
Tree	sla-profile
String Length	1 to 32
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

3.27 multicast-management commands

```

configure
- multicast-management
- apply-groups reference
- apply-groups-exclude reference
- bandwidth-policy string
- admin-bw-threshold number
- apply-groups reference
- apply-groups-exclude reference
- description string
- falling-percent-reset number
- impm-paths
- primary-path
- apply-groups reference
- apply-groups-exclude reference
- queue-parameters
- cbs decimal-number
- drop-tail
- low
- percent-reduction-from-mbs number
- mbs decimal-number
- secondary-path
- apply-groups reference
- apply-groups-exclude reference
- number-paths
- number-of-paths number
- redundant-sfm number
- queue-parameters
- cbs decimal-number
- drop-tail
- low
- percent-reduction-from-mbs number
- mbs decimal-number
- mcast-pool
- percent-of-total number
- resv-cbs number
- slope-policy reference
- chassis-level
- apply-groups reference
- apply-groups-exclude reference
- mmrp-imp-override boolean
- per-mcast-plane-capacity
- mcast-capacity
- primary-percentage decimal-number
- secondary-percentage decimal-number
- redundant-mcast-capacity
- primary-percentage decimal-number
- secondary-percentage decimal-number
- total-capacity keyword
- round-robin-inactive-records boolean
- multicast-info-policy string
- apply-groups reference
- apply-groups-exclude reference
- bundle string
- admin-bw number
- apply-groups reference
- apply-groups-exclude reference
- bw-activity
- black-hole-rate number
- bw-activity-type keyword

```

configure multicast-management multicast-info-policy bundle bw-activity falling-delay

```

- falling-delay number
- channel start (ipv4-address-no-zone | ipv6-address-no-zone) end (ipv4-address-
no-zone | ipv6-address-no-zone)
- admin-bw number
- apply-groups reference
- apply-groups-exclude reference
- bw-activity
- black-hole-rate number
- bw-activity-type keyword
- falling-delay number
- explicit-sf-path keyword
- keepalive-override number
- preference number
- primary-tunnel-interface
- ldp-p2mp number
- rsvp-p2mp string
- sender string
- source-override (ipv4-address-no-zone | ipv6-address-no-zone)
- admin-bw number
- apply-groups reference
- apply-groups-exclude reference
- bw-activity
- black-hole-rate number
- bw-activity-type keyword
- falling-delay number
- explicit-sf-path keyword
- keepalive-override number
- preference number
- primary-tunnel-interface
- ldp-p2mp number
- rsvp-p2mp string
- sender string
- video
- analyzer
- alarms
- cc-error boolean
- non-vid-pid-absent number
- pat-repetition
- poa number
- qos number
- tnc number
- pat-syntax boolean
- pcr-repetition
- poa number
- qos number
- tnc number
- pid-pmt-unref boolean
- pmt-repetition
- poa number
- qos number
- tnc number
- pmt-syntax boolean
- report-alarm
- severity keyword
- tei-set boolean
- ts-sync-loss boolean
- vid-pid-absent number
- description string
- fcc-channel-type keyword
- fcc-min-duration number
- fcc-server keyword
- local-rt-server keyword
- reorder-audio number
- rt-buffer-size number

```

configure multicast-management multicast-info-policy bundle channel source-override video rt-server

```

- rt-server
  - ip-address string
  - port number
  - rt-state keyword
- stream-selection
  - intf1 string
  - intf2 string
  - source1 string
  - source2 string
  - video-group (number | keyword)
- video
  - analyzer
  - alarms
    - cc-error boolean
    - non-vid-pid-absent number
    - pat-repetition
      - poa number
      - qos number
      - tnc number
    - pat-syntax boolean
    - pcr-repetition
      - poa number
      - qos number
      - tnc number
    - pid-pmt-unref boolean
    - pmt-repetition
      - poa number
      - qos number
      - tnc number
    - pmt-syntax boolean
    - report-alarm
      - severity keyword
    - tei-set boolean
    - ts-sync-loss boolean
    - vid-pid-absent number
  - description string
  - fcc-channel-type keyword
  - fcc-min-duration number
  - fcc-server keyword
  - local-rt-server keyword
  - reorder-audio number
  - rt-buffer-size number
  - rt-server
    - ip-address string
    - port number
    - rt-state keyword
  - stream-selection
    - intf1 string
    - intf2 string
    - source1 string
    - source2 string
    - video-group (number | keyword)
- cong-priority-threshold number
- description string
- ecmp-opt-threshold number
- explicit-sf-path keyword
- keepalive-override number
- preference number
- primary-tunnel-interface
  - ldp-p2mp number
  - rsvp-p2mp string
  - sender string
- video
  - analyzer

```

configure multicast-management multicast-info-policy bundle video-analyzer alarms

```

- alarms
- cc-error boolean
- non-vid-pid-absent number
- pat-repetition
- poa number
- qos number
- tnc number
- pat-syntax boolean
- pcr-repetition
- poa number
- qos number
- tnc number
- pid-pmt-unref boolean
- pmt-repetition
- poa number
- qos number
- tnc number
- pmt-syntax boolean
- report-alarm
- severity keyword
- tei-set boolean
- ts-sync-loss boolean
- vid-pid-absent number
- description string
- fcc-channel-type keyword
- fcc-min-duration number
- fcc-server boolean
- local-fcc-port number
- local-rt-port number
- local-rt-server boolean
- reorder-audio number
- rt-buffer-size number
- rt-server
- ip-address string
- port number
- stream-selection
- intf1 string
- intf2 string
- source1 string
- source2 string
- video-group number
- description string
- video-policy
- video-interface string
- apply-groups reference
- apply-groups-exclude reference
- extended-unicast boolean
- fcc-session-timeout number
- hd
- apply-groups reference
- apply-groups-exclude reference
- dent-threshold number
- fcc-burst number
- fcc-server
- mode keyword
- local-rt-server boolean
- mc-handover number
- rt-rate number
- max-igmp-latency number
- max-sessions number
- pip
- apply-groups reference
- apply-groups-exclude reference
- dent-threshold number

```


configure multicast-management multicast-info-policy video-policy video-interface pip fcc-burst

```
    - fcc-burst number
    - fcc-server
      - mode keyword
    - local-rt-server boolean
    - mc-handover number
    - rt-rate number
  - ret-session-timeout number
  - rt-payload-type number
  - rt-rate number
  - sd
    - apply-groups reference
    - apply-groups-exclude reference
    - dent-threshold number
    - fcc-burst number
    - fcc-server
      - mode keyword
    - local-rt-server boolean
    - mc-handover number
    - rt-rate number
    - subscriber-bw-limit number
- multicast-reporting-destination string
  - address string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - maximum-transmission-delay number
  - udp-port number
```

3.27.1 multicast-management command descriptions

multicast-management

Synopsis	Enter the multicast-management context
Context	configure multicast-management
Tree	multicast-management
Introduced	16.0.R1
Platforms	All

bandwidth-policy [[policy-name](#)] *string*

Synopsis	Enter the bandwidth-policy list instance
Context	configure multicast-management bandwidth-policy <i>string</i>
Tree	bandwidth-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

[[policy-name](#)] *string*

Synopsis	Bandwidth policy name
Context	configure multicast-management bandwidth-policy <i>string</i>
Tree	bandwidth-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

admin-bw-threshold *number*

Synopsis	Administrative bandwidth threshold
Context	configure multicast-management bandwidth-policy <i>string</i> admin-bw-threshold <i>number</i>

Tree	admin-bw-threshold
Range	1 to 40000000
Default	10
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure multicast-management bandwidth-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

falling-percent-reset *number*

Synopsis	Percent of bandwidth that decreases before resetting
Context	configure multicast-management bandwidth-policy <i>string</i> falling-percent-reset <i>number</i>
Tree	falling-percent-reset
Range	1 to 100
Default	50
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

impm-paths

Synopsis	Enter the impm-paths context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths
Tree	impm-paths
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

primary-path

Synopsis Enter the **primary-path** context

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#)

Tree [primary-path](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

queue-parameters

Synopsis Enter the **queue-parameters** context

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#) [queue-parameters](#)

Tree [queue-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

cbs *decimal-number*

Synopsis Override for default CBS for single queue for each path

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#) [queue-parameters](#) [cbs](#) *decimal-number*

Tree [cbs](#)

Range 0.00 to 100.00

Default 5.00

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

drop-tail

Synopsis	Enter the drop-tail context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths primary-path queue-parameters drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

low

Synopsis	Enter the low context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths primary-path queue-parameters drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

percent-reduction-from-mbs *number*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths primary-path queue-parameters drop-tail low percent-reduction-from-mbs <i>number</i>
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	10
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mbs *decimal-number*

Synopsis	Override for default MBS for single queue for each path
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths primary-path queue-parameters mbs <i>decimal-number</i>

Tree	mbs
Range	0.00 to 100.00
Default	7.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

secondary-path

Synopsis	Enter the secondary-path context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path
Tree	secondary-path
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

number-paths

Synopsis	Enter the number-paths context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path number-paths
Tree	number-paths
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

number-of-paths *number*

Synopsis	Number of secondary paths
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path number-paths number-of-paths <i>number</i>
Tree	number-of-paths
Range	1 to 15
Default	1
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

redundant-sfm *number*

Synopsis Number of secondary paths in redundant SFM mode

Context **configure** [multicast-management bandwidth-policy](#) *string* [impm-paths secondary-path number-paths](#) [redundant-sfm](#) *number*

Tree [redundant-sfm](#)

Range 1 to 15

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

queue-parameters

Synopsis Enter the **queue-parameters** context

Context **configure** [multicast-management bandwidth-policy](#) *string* [impm-paths secondary-path queue-parameters](#)

Tree [queue-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

cbs *decimal-number*

Synopsis Override for default CBS for single queue for each path

Context **configure** [multicast-management bandwidth-policy](#) *string* [impm-paths secondary-path queue-parameters](#) [cbs](#) *decimal-number*

Tree [cbs](#)

Range 0.00 to 100.00

Default 30.00

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

drop-tail

Synopsis	Enter the drop-tail context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path queue-parameters drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

low

Synopsis	Enter the low context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path queue-parameters drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

percent-reduction-from-mbs *number*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path queue-parameters drop-tail low percent-reduction-from-mbs <i>number</i>
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	10
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mbs *decimal-number*

Synopsis	Override for default MBS for single queue for each path
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Context	configure multicast-management bandwidth-policy <i>string</i> imp-path secondary-path queue-parameters mbs <i>decimal-number</i>
Tree	mbs
Range	0.00 to 100.00
Default	40.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mcast-pool

Synopsis	Enter the mcast-pool context
Context	configure multicast-management bandwidth-policy <i>string</i> mcast-pool
Tree	mcast-pool
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

percent-of-total *number*

Synopsis	Percent of ingress buffers assigned to multicast pool
Context	configure multicast-management bandwidth-policy <i>string</i> mcast-pool percent-of-total <i>number</i>
Tree	percent-of-total
Range	1 to 50
Default	10
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

resv-cbs *number*

Synopsis	Percentage of pool reserved for multicast path queues
Context	configure multicast-management bandwidth-policy <i>string</i> mcast-pool resv-cbs <i>number</i>
Tree	resv-cbs

Range	1 to 100
Default	50
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

slope-policy *reference*

Synopsis	Slope policy name
Context	configure multicast-management bandwidth-policy <i>string</i> mcast-pool slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

chassis-level

Synopsis	Enter the chassis-level context
Context	configure multicast-management chassis-level
Tree	chassis-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mmp-imp-override *boolean*

Synopsis	Manage MMRP traffic by IMPM
Context	configure multicast-management chassis-level mmp-imp-override <i>boolean</i>
Tree	mmp-imp-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

per-mcast-plane-capacity

Synopsis	Enter the per-mcast-plane-capacity context
Context	configure multicast-management chassis-level per-mcast-plane-capacity
Tree	per-mcast-plane-capacity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mcast-capacity

Synopsis	Enter the mcast-capacity context
Context	configure multicast-management chassis-level per-mcast-plane-capacity mcast-capacity
Tree	mcast-capacity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

primary-percentage *decimal-number*

Synopsis	Percent of plane capacity for primary multicast planes
Context	configure multicast-management chassis-level per-mcast-plane-capacity mcast-capacity primary-percentage <i>decimal-number</i>
Tree	primary-percentage
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

secondary-percentage *decimal-number*

Synopsis	Percent of plane capacity for secondary multicast plane
Context	configure multicast-management chassis-level per-mcast-plane-capacity mcast-capacity secondary-percentage <i>decimal-number</i>
Tree	secondary-percentage

Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

redundant-mcast-capacity

Synopsis	Enter the redundant-mcast-capacity context
Context	configure multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity
Tree	redundant-mcast-capacity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

primary-percentage *decimal-number*

Synopsis	Percent of plane capacity for primary multicast planes
Context	configure multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity primary-percentage <i>decimal-number</i>
Tree	primary-percentage
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

secondary-percentage *decimal-number*

Synopsis	Percent of plane capacity for secondary multicast plane
Context	configure multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity secondary-percentage <i>decimal-number</i>
Tree	secondary-percentage
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

total-capacity *keyword*

Synopsis Total multicast plane bandwidth
Context **configure** [multicast-management](#) [chassis-level](#) [per-mcast-plane-capacity](#) **total-capacity** *keyword*
Tree [total-capacity](#)
Units megabps
Options dynamic, 2000, 4000, 5250, 8250, 15000, 17000, 19000, 27000, 42000, 90000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

round-robin-inactive-records *boolean*

Synopsis Redistribute newly populated inactive records
Context **configure** [multicast-management](#) [chassis-level](#) **round-robin-inactive-records** *boolean*
Tree [round-robin-inactive-records](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

multicast-info-policy [[policy-name](#)] *string*

Synopsis Enter the **multicast-info-policy** list instance
Context **configure** [multicast-management](#) **multicast-info-policy** *string*
Tree [multicast-info-policy](#)
Max. Instances 32
Introduced 16.0.R1
Platforms All

[policy-name] *string*

Synopsis	Multicast information policy name
Context	configure multicast-management multicast-info-policy <i>string</i>
Tree	multicast-info-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bundle [[bundle-name](#)] *string*

Synopsis	Enter the bundle list instance
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i>
Tree	bundle
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[[bundle-name](#)] *string*

Synopsis	Bundle name
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i>
Tree	bundle
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-bw *number*

Synopsis	Administrative bandwidth
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> admin-bw <i>number</i>
Tree	admin-bw

Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

bw-activity

Synopsis	Enter the bw-activity context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> bw-activity
Tree	bw-activity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

black-hole-rate *number*

Synopsis	Rate that a channel is placed in the blackhole state
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> bw-activity black-hole-rate <i>number</i>
Tree	black-hole-rate
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bw-activity-type *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> bw-activity bw-activity-type <i>keyword</i>
Tree	bw-activity-type
Default	dynamic
Options	use-admin-bw, dynamic
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

falling-delay *number*

Synopsis Falling delay threshold value until delay time expires

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **bw-activity** **falling-delay** *number*

Tree **falling-delay**

Range 10 to 3600

Default 30

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

channel **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **channel** list instance

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **channel**

Introduced 16.0.R1

Platforms All

start (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Starting IP address for the channel range

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **channel**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Ending IP address for the channel range
Context	configure multicast-management multicast-info-policy <i>string bundle string channel start</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-bw *number*

Synopsis	Administrative bandwidth
Context	configure multicast-management multicast-info-policy <i>string bundle string channel start</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-bw <i>number</i>
Tree	admin-bw
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

bw-activity

Synopsis	Enter the bw-activity context
Context	configure multicast-management multicast-info-policy <i>string bundle string channel start</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity
Tree	bw-activity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

black-hole-rate *number*

Synopsis	Rate that a channel is placed in the blackhole state
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity black-hole-rate <i>number</i>
Tree	black-hole-rate
Range	0 to 40000000
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bw-activity-type *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity bw-activity-type <i>keyword</i>
Tree	bw-activity-type
Options	use-admin-bw, dynamic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

falling-delay *number*

Synopsis	Falling delay threshold value until delay time expires
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity falling-delay <i>number</i>
Tree	falling-delay
Range	10 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

explicit-sf-path *keyword*

Synopsis	Explicit switch fabric path shared to multicast channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) explicit-sf-path <i>keyword</i>
Tree	explicit-sf-path
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

keepalive-override *number*

Synopsis	Keepalive timer override
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive-override <i>number</i>
Tree	keepalive-override
Range	10 to 86000
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Relative preference level for multicast channels
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) preference <i>number</i>
Tree	preference
Range	1 to 7
Introduced	16.0.R1
Platforms	All

primary-tunnel-interface

Synopsis	Enter the primary-tunnel-interface context
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface
Tree	primary-tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp *number*

Synopsis	ID for signaling MLDP P2MP LSP
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface ldp-p2mp <i>number</i>
Tree	ldp-p2mp
Range	1 to 4294967295
Notes	The following elements are part of a choice: ldp-p2mp or rsvp-p2mp .
Introduced	16.0.R1
Platforms	All

rsvp-p2mp *string*

Synopsis	P2MP name for the LDP P2MP
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface rsvp-p2mp <i>string</i>
Tree	rsvp-p2mp
String Length	1 to 32
Notes	The following elements are part of a choice: ldp-p2mp or rsvp-p2mp .
Introduced	16.0.R1
Platforms	All

sender *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface sender <i>string</i>

Tree	sender
Introduced	16.0.R1
Platforms	All

source-override [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the source-override list instance
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-override
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address for the source override
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-override
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-bw *number*

Synopsis	Administrative bandwidth
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-bw <i>number</i>
Tree	admin-bw
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

bw-activity

Synopsis	Enter the bw-activity context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity
Tree	bw-activity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

black-hole-rate *number*

Synopsis	Rate that a channel is placed in the blackhole state
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity black-hole-rate <i>number</i>
Tree	black-hole-rate
Range	0 to 40000000
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bw-activity-type *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity bw-activity-type <i>keyword</i>
Tree	bw-activity-type
Options	use-admin-bw, dynamic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

falling-delay *number*

Synopsis	Falling delay threshold value until delay time expires
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity falling-delay <i>number</i>
Tree	falling-delay
Range	10 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

explicit-sf-path *keyword*

Synopsis	Explicit switch fabric path shared to multicast channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) explicit-sf-path <i>keyword</i>
Tree	explicit-sf-path
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

keepalive-override *number*

Synopsis	Keepalive timer override
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive-override <i>number</i>
Tree	keepalive-override
Range	10 to 86000
Units	seconds
Introduced	16.0.R1

Platforms All

preference *number*

Synopsis Relative preference level for multicast channels

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **preference** *number*

Tree [preference](#)

Range 1 to 7

Introduced 16.0.R1

Platforms All

primary-tunnel-interface

Synopsis Enter the **primary-tunnel-interface** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **primary-tunnel-interface**

Tree [primary-tunnel-interface](#)

Introduced 16.0.R1

Platforms All

ldp-p2mp *number*

Synopsis ID for signaling MLDP P2MP LSP

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **primary-tunnel-interface** **ldp-p2mp** *number*

Tree [ldp-p2mp](#)

Range 1 to 4294967295

Notes The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.

Introduced 16.0.R1

Platforms All

rsvp-p2mp *string*

Synopsis	P2MP name for the LDP P2MP
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface rsvp-p2mp <i>string</i>
Tree	rsvp-p2mp
String Length	1 to 32
Notes	The following elements are part of a choice: ldp-p2mp or rsvp-p2mp .
Introduced	16.0.R1
Platforms	All

sender *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface sender <i>string</i>
Tree	sender
Introduced	16.0.R1
Platforms	All

video

Synopsis	Enter the video context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video
Tree	video
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer

Synopsis	Enable the analyzer context
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer
Tree	analyzer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

alarms

Synopsis	Enter the alarms context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms
Tree	alarms
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cc-error *boolean*

Synopsis	Check the continuity counter
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms cc-error <i>boolean</i>
Tree	cc-error
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-</i>

	address-no-zone) source-override (ipv4-address-no-zone ipv6-address-no-zone) video analyzer alarms non-vid-pid-absent number
Tree	non-vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-repetition

Synopsis	Enable the pat-repetition context
Context	configure multicast-management multicast-info-policy string bundle string channel start (ipv4-address-no-zone ipv6-address-no-zone) end (ipv4-address-no-zone ipv6-address-no-zone) source-override (ipv4-address-no-zone ipv6-address-no-zone) video analyzer alarms pat-repetition
Tree	pat-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis	Time between two PATs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy string bundle string channel start (ipv4-address-no-zone ipv6-address-no-zone) end (ipv4-address-no-zone ipv6-address-no-zone) source-override (ipv4-address-no-zone ipv6-address-no-zone) video analyzer alarms pat-repetition poa number
Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition qos <i>number</i>
Tree	qos
Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-syntax boolean

Synopsis	Check for PAT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-syntax <i>boolean</i>
Tree	pat-syntax
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pcr-repetition

Synopsis	Enable the pcr-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition
Tree	pcr-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis	Time between two PCRs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition poa <i>number</i>
Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition qos <i>number</i>
Tree	qos

Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition tnc number
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pid-pmt-unref boolean

Synopsis	Check for unreferenced PIDs in the PMT
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pid-pmt-unref boolean
Tree	pid-pmt-unref
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-repetition

Synopsis	Enable the pmt-repetition context
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-repetition
Tree	pmt-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis	Time between two PMTs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-repetition poa <i>number</i>
Tree	poa
Range	300 to 5000
Default	2000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PMTs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-repetition qos <i>number</i>
Tree	qos
Range	200 to 4900
Default	800
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 4800
Default	400
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-syntax boolean

Synopsis	Check for PMT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-syntax <i>boolean</i>
Tree	pmt-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

report-alarm

Synopsis	Enter the report-alarm context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms report-alarm
Tree	report-alarm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

severity *keyword*

Synopsis	Keyword for the type of alarm
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms report-alarm severity <i>keyword</i>
Tree	severity
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tei-set *boolean*

Synopsis	Check for TEI set errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms tei-set <i>boolean</i>
Tree	tei-set
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ts-sync-loss *boolean*

Synopsis	Check for synchronization loss errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms ts-sync-loss <i>boolean</i>
Tree	ts-sync-loss
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vid-pid-absent *number*

Synopsis	VID PID checked within the specified time interval
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms vid-pid-absent <i>number</i>
Tree	vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-channel-type *keyword*

Synopsis	Channel type for the bundle or channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-channel-type <i>keyword</i>
Tree	fcc-channel-type
Options	hd, sd, pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-min-duration *number*

Synopsis	Minimum duration of the FCC burst
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-min-duration <i>number</i>
Tree	fcc-min-duration
Range	300 to 8000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *keyword*

Synopsis	Value to override the parent value of the FCC server
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-server <i>keyword</i>
Tree	fcc-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *keyword*

Synopsis	Value to override the parent value of local RT server
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video local-rt-server <i>keyword</i>
Tree	local-rt-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

reorder-audio *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video reorder-audio <i>number</i>
Tree	reorder-audio
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-buffer-size *number*

Synopsis	Buffer size to store channel packets
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video rt-buffer-size <i>number</i>
Tree	rt-buffer-size
Range	300 to 8000
Default	300
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-server

Synopsis	Enter the rt-server context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video rt-server
Tree	rt-server
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip-address *string*

Synopsis IP address of the upstream retransmission server

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **rt-server** **ip-address** *string*

Tree [ip-address](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

port *number*

Synopsis UDP port to send RET requests to the upstream RET sever

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **rt-server** **port** *number*

Tree [port](#)

Range 1024 to 5999 | 6251 to 65535

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-state *keyword*

Synopsis Retransmission server state

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **rt-server** **rt-state** *keyword*

Tree [rt-state](#)

Options false, true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

stream-selection

Synopsis Enter the **stream-selection** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection**

Tree **stream-selection**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf1 *string*

Synopsis Primary interface

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection** **intf1** *string*

Tree **intf1**

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf2 *string*

Synopsis Secondary interface

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection** **intf2** *string*

Tree **intf2**

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source1 string

Synopsis Primary source IP address

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [channel](#) [start](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [end](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [source-override](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [video](#) [stream-selection](#) **source1** *string*

Tree [source1](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source2 string

Synopsis Secondary source IP address

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [channel](#) [start](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [end](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [source-override](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [video](#) [stream-selection](#) **source2** *string*

Tree [source2](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group (number | keyword)

Synopsis Video group ID

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [channel](#) [start](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [end](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [source-override](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [video](#) [video-group](#) (*number* | *keyword*)

Tree [video-group](#)

Range 1 to 4

Options none

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video

Synopsis Enter the **video** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video**

Tree **video**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer

Synopsis Enable the **analyzer** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer**

Tree **analyzer**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

alarms

Synopsis Enter the **alarms** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms**

Tree **alarms**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cc-error boolean

Synopsis Check the continuity counter

Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms cc-error <i>boolean</i>
Tree	cc-error
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms non-vid-pid-absent <i>number</i>
Tree	non-vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-repetition

Synopsis	Enable the pat-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition
Tree	pat-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PATs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition poa <i>number</i>

Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition qos <i>number</i>
Tree	qos
Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-syntax *boolean*

Synopsis	Check for PAT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-syntax <i>boolean</i>
Tree	pat-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pcr-repetition

Synopsis	Enable the pcr-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition
Tree	pcr-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PCRs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition poa <i>number</i>
Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition qos number
Tree	qos
Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition tnc number
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pid-pmt-unref boolean

Synopsis	Check for unreferenced PIDs in the PMT
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pid-pmt-unref boolean
Tree	pid-pmt-unref
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-repetition

Synopsis Enable the **pmt-repetition** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms** **pmt-repetition**

Tree **pmt-repetition**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis Time between two PMTs for which a POA alarm is raised

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms** **pmt-repetition** **poa** *number*

Tree **poa**

Range 300 to 5000

Default 2000

Units milliseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis Time between two PMTs for which a QoS alarm is raised

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms** **pmt-repetition** **qos** *number*

Tree **qos**

Range 200 to 4900

Default 800

Units milliseconds

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 4800
Default	400
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-syntax boolean

Synopsis	Check for PMT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-syntax <i>boolean</i>
Tree	pmt-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

report-alarm

Synopsis	Enter the report-alarm context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms report-alarm
Tree	report-alarm
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

severity *keyword*

Synopsis Keyword for the type of alarm

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms report-alarm severity** *keyword*

Tree **severity**

Options tnc, qos, poa

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tei-set *boolean*

Synopsis Check for TEI set errors

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms tei-set boolean**

Tree **tei-set**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ts-sync-loss *boolean*

Synopsis Check for synchronization loss errors

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms ts-sync-loss boolean**

Tree **ts-sync-loss**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vid-pid-absent *number*

Synopsis	VID PID checked within the specified time interval
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms vid-pid-absent <i>number</i>
Tree	vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-channel-type *keyword*

Synopsis	Channel type for the bundle or channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-channel-type <i>keyword</i>
Tree	fcc-channel-type
Options	hd, sd, pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-min-duration *number*

Synopsis	Minimum duration of the FCC burst
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-min-duration <i>number</i>
Tree	fcc-min-duration
Range	300 to 8000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *keyword*

Synopsis	Value to override the parent value of the FCC server
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-server <i>keyword</i>
Tree	fcc-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *keyword*

Synopsis	Value to override the parent value of local RT server
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video local-rt-server <i>keyword</i>
Tree	local-rt-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

reorder-audio *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video reorder-audio <i>number</i>
Tree	reorder-audio
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-buffer-size *number*

Synopsis	Buffer size to store channel packets
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video rt-buffer-size <i>number</i>
Tree	rt-buffer-size
Range	300 to 8000
Default	300
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-server

Synopsis	Enter the rt-server context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video rt-server
Tree	rt-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip-address string

Synopsis	IP address of the upstream retransmission server
Context	configure multicast-management multicast-info-policy string bundle string channel start (ipv4-address-no-zone ipv6-address-no-zone) end (ipv4-address-no-zone ipv6-address-no-zone) video rt-server ip-address string
Tree	ip-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

port number

Synopsis	UDP port to send RET requests to the upstream RET sever
Context	configure multicast-management multicast-info-policy string bundle string channel start (ipv4-address-no-zone ipv6-address-no-zone) end (ipv4-address-no-zone ipv6-address-no-zone) video rt-server port number
Tree	port
Range	1024 to 5999 6251 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-state keyword

Synopsis	Retransmission server state
Context	configure multicast-management multicast-info-policy string bundle string channel start (ipv4-address-no-zone ipv6-address-no-zone) end (ipv4-address-no-zone ipv6-address-no-zone) video rt-server rt-state keyword
Tree	rt-state
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

stream-selection

Synopsis	Enter the stream-selection context
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video stream-selection
Tree	stream-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf1 *string*

Synopsis	Primary interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video stream-selection intf1 <i>string</i>
Tree	intf1
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf2 *string*

Synopsis	Secondary interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video stream-selection intf2 <i>string</i>
Tree	intf2
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source1 *string*

Synopsis	Primary source IP address
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video stream-selection source1 <i>string</i>
Tree	source1

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source2 *string*

Synopsis	Secondary source IP address
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video stream-selection source2 <i>string</i>
Tree	source2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group (*number* | *keyword*)

Synopsis	Video group ID
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video video-group (<i>number</i> <i>keyword</i>)
Tree	video-group
Range	1 to 4
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cong-priority-threshold *number*

Synopsis	Preference level threshold from low to high priority
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> cong-priority-threshold <i>number</i>
Tree	cong-priority-threshold
Range	0 to 7
Default	4
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description
Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

ecmp-opt-threshold *number*

Synopsis ECMP threshold
Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* **ecmp-opt-threshold** *number*
Tree [ecmp-opt-threshold](#)
Range 0 to 7
Default 7
Introduced 16.0.R1
Platforms All

explicit-sf-path *keyword*

Synopsis Explicit ingress switch fabric multicast path
Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* **explicit-sf-path** *keyword*
Tree [explicit-sf-path](#)
Options primary, secondary
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

keepalive-override *number*

Synopsis Keepalive timer override

Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> keepalive-override <i>number</i>
Tree	keepalive-override
Range	10 to 86000
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Relative preference level for multicast channels
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 7
Introduced	16.0.R1
Platforms	All

primary-tunnel-interface

Synopsis	Enter the primary-tunnel-interface context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> primary-tunnel-interface
Tree	primary-tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp *number*

Synopsis	ID for signaling MLDP P2MP LSP
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> primary-tunnel-interface ldp-p2mp <i>number</i>
Tree	ldp-p2mp
Range	1 to 4294967295
Notes	The following elements are part of a choice: ldp-p2mp or rsvp-p2mp .
Introduced	16.0.R1

Platforms All

rsvp-p2mp *string*

Synopsis P2MP name for the LDP P2MP

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **primary-tunnel-interface** **rsvp-p2mp** *string*

Tree **rsvp-p2mp**

String Length 1 to 32

Notes The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.

Introduced 16.0.R1

Platforms All

sender *string*

Synopsis Bundle set to receive from the primary tunnel interface

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **primary-tunnel-interface** **sender** *string*

Tree **sender**

Introduced 16.0.R1

Platforms All

video

Synopsis Enter the **video** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **video**

Tree **video**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer

Synopsis Enable the **analyzer** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **video** **analyzer**

Tree	analyzer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

alarms

Synopsis	Enter the alarms context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms
Tree	alarms
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cc-error *boolean*

Synopsis	Check the continuity counter
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms cc-error <i>boolean</i>
Tree	cc-error
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms non-vid-pid-absent <i>number</i>
Tree	non-vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-repetition

Synopsis	Enable the pat-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pat-repetition
Tree	pat-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis	Time between two PATs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pat-repetition poa <i>number</i>
Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pat-repetition qos <i>number</i>
Tree	qos
Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pat-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-syntax boolean

Synopsis	Check for PAT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pat-syntax <i>boolean</i>
Tree	pat-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pcr-repetition

Synopsis	Enable the pcr-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pcr-repetition
Tree	pcr-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis	Time between two PCRs for which a POA alarm is raised
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pcr-repetition poa <i>number</i>
Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos *number*

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pcr-repetition qos <i>number</i>
Tree	qos
Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc *number*

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pcr-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pid-pmt-unref *boolean*

Synopsis	Check for unreferenced PIDs in the PMT
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pid-pmt-unref <i>boolean</i>
Tree	pid-pmt-unref
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-repetition

Synopsis	Enable the pmt-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pmt-repetition
Tree	pmt-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PMTs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pmt-repetition poa <i>number</i>
Tree	poa
Range	300 to 5000
Default	2000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos *number*

Synopsis	Time between two PMTs for which a QoS alarm is raised
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pmt-repetition qos <i>number</i>
Tree	qos
Range	200 to 4900
Default	800
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pmt-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 4800
Default	400
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-syntax boolean

Synopsis	Check for PMT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pmt-syntax <i>boolean</i>
Tree	pmt-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

report-alarm

Synopsis	Enter the report-alarm context
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms report-alarm
Tree	report-alarm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

severity *keyword*

Synopsis	Keyword for the type of alarm
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms report-alarm severity <i>keyword</i>
Tree	severity
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tei-set *boolean*

Synopsis	Check for TEI set errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms tei-set <i>boolean</i>
Tree	tei-set
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ts-sync-loss *boolean*

Synopsis	Check for synchronization loss errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms ts-sync-loss <i>boolean</i>
Tree	ts-sync-loss
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vid-pid-absent *number*

Synopsis VID PID checked within the specified time interval

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video](#) [analyzer](#) [alarms](#) [vid-pid-absent](#) *number*

Tree [vid-pid-absent](#)

Range 100 to 5000

Units milliseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis Text description

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video](#) [analyzer](#) [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-channel-type *keyword*

Synopsis Channel type for the bundle or channel

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video](#) [fcc-channel-type](#) *keyword*

Tree [fcc-channel-type](#)

Default hd

Options hd, sd, pip

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-min-duration *number*

Synopsis	Minimum duration of the FCC burst
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video fcc-min-duration <i>number</i>
Tree	fcc-min-duration
Range	300 to 8000
Default	300
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *boolean*

Synopsis	Enable the FCC server for a multicast bundle
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video fcc-server <i>boolean</i>
Tree	fcc-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-fcc-port *number*

Synopsis	Local port for FCC requests
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video local-fcc-port <i>number</i>
Tree	local-fcc-port
Range	1024 to 5999 6251 to 65535
Default	4098
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-port *number*

Synopsis	Local port for RET requests
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video local-rt-port <i>number</i>
Tree	local-rt-port
Range	1024 to 5999 6251 to 65535
Default	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video local-rt-server <i>boolean</i>
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

reorder-audio *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video reorder-audio <i>number</i>
Tree	reorder-audio
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-buffer-size *number*

Synopsis	Buffer size to store channel packets
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video rt-buffer-size <i>number</i>
Tree	rt-buffer-size
Range	300 to 8000
Default	300
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-server

Synopsis	Enable the rt-server context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video rt-server
Tree	rt-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip-address *string*

Synopsis	IP address of the upstream retransmission server
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video rt-server ip-address <i>string</i>
Tree	ip-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

port *number*

Synopsis	RET server port number
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video rt-server port <i>number</i>
Tree	port

Range	1024 to 5999 6251 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

stream-selection

Synopsis	Enter the stream-selection context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video stream-selection
Tree	stream-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf1 *string*

Synopsis	Primary interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video stream-selection intf1 <i>string</i>
Tree	intf1
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf2 *string*

Synopsis	Secondary interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video stream-selection intf2 <i>string</i>
Tree	intf2
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source1 *string*

Synopsis	Primary source IP address
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video stream-selection source1 <i>string</i>
Tree	source1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source2 *string*

Synopsis	Secondary source IP address
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video stream-selection source2 <i>string</i>
Tree	source2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group *number*

Synopsis	Video group for the bundle
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video video-group <i>number</i>
Tree	video-group
Range	1 to 4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure multicast-management multicast-info-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80

Introduced 16.0.R1
Platforms All

video-policy

Synopsis Enter the **video-policy** context
Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [video-policy](#)
Tree [video-policy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-interface [[ip-address](#)] *string*

Synopsis Enter the **video-interface** list instance
Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [video-policy](#) [video-interface](#) *string*
Tree [video-interface](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[\[ip-address\]](#) *string*

Synopsis IP address of the video interface
Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [video-policy](#) [video-interface](#) *string*
Tree [video-interface](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

extended-unicast *boolean*

Synopsis Extend video unicast session

Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> extended-unicast <i>boolean</i>
Tree	extended-unicast
Description	<p>When configured to true, video unicast is delayed from switching over to multicast for 5 minutes. The unicast session can be extended further by sending an RTCP extension request, which resets the 5-minute timer. This is ideal for services that require unicast video and end devices that require extended time to switch over from unicast to multicast.</p> <p>When configured to false, the unicast session switches over to multicast 1.5 seconds after the IGMP request is sent. Most Fast Channel Change deployments do not require a time extension.</p>
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-session-timeout *number*

Synopsis	FCC session timeout
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> fcc-session-timeout <i>number</i>
Tree	fcc-session-timeout
Range	5 to 300
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

hd

Synopsis	Enter the hd context
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd
Tree	hd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd dent-threshold <i>number</i>
Tree	dent-threshold
Range	1 to 31
Default	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd fcc-burst <i>number</i>
Tree	fcc-burst
Range	0 to 600
Default	25
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server

Synopsis	Enter the fcc-server context
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd fcc-server
Tree	fcc-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mode *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd fcc-server mode <i>keyword</i>
Tree	mode
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd local-rt-server <i>boolean</i>
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mc-handover *number*

Synopsis	Rate the FCC server sends data during the handover
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd mc-handover <i>number</i>
Tree	mc-handover
Range	0 to 100
Default	25
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client
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Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd rt-rate <i>number</i>
Tree	rt-rate
Range	1 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

max-igmp-latency *number*

Synopsis	Maximum IGMP latency per client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> max-igmp-latency <i>number</i>
Tree	max-igmp-latency
Range	10 to 1000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

max-sessions *number*

Synopsis	Maximum number of sessions per client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> max-sessions <i>number</i>
Tree	max-sessions
Range	1 to 65536
Default	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pip

Synopsis	Enter the pip context
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip
Tree	pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip dent-threshold <i>number</i>
Tree	dent-threshold
Range	1 to 31
Default	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip fcc-burst <i>number</i>
Tree	fcc-burst
Range	0 to 600
Default	25
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server

Synopsis	Enter the fcc-server context
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Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip fcc-server
Tree	fcc-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mode *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip fcc-server mode <i>keyword</i>
Tree	mode
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip local-rt-server <i>boolean</i>
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mc-handover *number*

Synopsis	Rate the FCC server sends data during the handover
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip mc-handover <i>number</i>
Tree	mc-handover
Range	0 to 600
Default	25

Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip rt-rate <i>number</i>
Tree	rt-rate
Range	1 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ret-session-timeout *number*

Synopsis	RET session timeout
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> ret-session-timeout <i>number</i>
Tree	ret-session-timeout
Range	5 to 300
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-payload-type *number*

Synopsis	Format for the received retransmission packets
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> rt-payload-type <i>number</i>
Tree	rt-payload-type

Range	33 96 to 127
Default	99
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> rt-rate <i>number</i>
Tree	rt-rate
Range	1 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

sd

Synopsis	Enter the sd context
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd
Tree	sd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd dent-threshold <i>number</i>
Tree	dent-threshold
Range	1 to 31
Default	16

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd fcc-burst <i>number</i>
Tree	fcc-burst
Range	0 to 600
Default	25
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server

Synopsis	Enter the fcc-server context
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd fcc-server
Tree	fcc-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mode *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd fcc-server mode <i>keyword</i>
Tree	mode
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd local-rt-server <i>boolean</i>
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mc-handover *number*

Synopsis	Rate the FCC server sends data during the handover
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd mc-handover <i>number</i>
Tree	mc-handover
Range	0 to 600
Default	25
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd rt-rate <i>number</i>
Tree	rt-rate
Range	1 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

subscriber-bw-limit *number*

Synopsis	Egress bandwidth limit per subscriber
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> subscriber-bw-limit <i>number</i>
Tree	subscriber-bw-limit
Range	1 to 4294967295
Default	4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

multicast-reporting-destination [*name*] *string*

Synopsis	Enter the multicast-reporting-destination list instance
Context	configure multicast-management multicast-reporting-destination <i>string</i>
Tree	multicast-reporting-destination
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Multicast reporting destination name
Context	configure multicast-management multicast-reporting-destination <i>string</i>
Tree	multicast-reporting-destination
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IP address of the multicast reporting destination
Context	configure multicast-management multicast-reporting-destination <i>string</i> address <i>string</i>
Tree	address

Default	0.0.0.0
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of multicast reporting destination
Context	configure multicast-management multicast-reporting-destination <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure multicast-management multicast-reporting-destination <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

maximum-transmission-delay *number*

Synopsis	Time delay before packet transmits to the destination
Context	configure multicast-management multicast-reporting-destination <i>string</i> maximum-transmission-delay <i>number</i>
Tree	maximum-transmission-delay
Range	0 to 100
Default	1
Units	deciseconds
Introduced	16.0.R1
Platforms	All

udp-port *number*

Synopsis	UDP port where multicast reports are sent
Context	configure multicast-management multicast-reporting-destination <i>string</i> udp-port <i>number</i>
Tree	udp-port
Range	1 to 65535
Default	1037
Introduced	16.0.R1
Platforms	All

3.28 multilink-bundle commands

```
configure
- multilink-bundle string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- fragment-threshold (number | keyword)
- interleave-fragment boolean
- member string
- minimum-links number
- mlppp
- apply-groups reference
- apply-groups-exclude reference
- egress
- qos-profile reference
- endpoint-discriminator
- class keyword
- discriminator-id string
- ingress
- qos-profile reference
- magic-number boolean
- multiclass number
- stateless-aps-switchover boolean
- mrru number
- protect-bundle reference
- red-differential
- action keyword
- delay number
- short-sequence boolean
- working-bundle reference
- yellow-differential-delay number
```

3.28.1 multilink-bundle command descriptions

multilink-bundle [[bundle-id](#)] *string*

Synopsis	Enter the multilink-bundle list instance
Context	configure multilink-bundle <i>string</i>
Tree	multilink-bundle
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

[bundle-id] *string*

Synopsis	Multilink bundle associated with the IP interface
Context	configure multilink-bundle <i>string</i>
Tree	multilink-bundle
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

admin-state *keyword*

Synopsis	Administrative state of the multilink bundle
Context	configure multilink-bundle <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	configure multilink-bundle <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 160

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e

fragment-threshold (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum fragment length transmitted across the bundle
Context **configure** [multilink-bundle](#) *string* [fragment-threshold](#) (*number* | *keyword*)
Tree [fragment-threshold](#)
Range 128 to 512
Default 128
Units bytes
Options unlimited
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e

interleave-fragment *boolean*

Synopsis Enable LFI on the multilink bundle
Context **configure** [multilink-bundle](#) *string* [interleave-fragment](#) *boolean*
Tree [interleave-fragment](#)
Default false
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e

member [[channel-id](#)] *string*

Synopsis Add a list entry for **member**
Context **configure** [multilink-bundle](#) *string* [member](#) *string*
Tree [member](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e

[**channel-id**] *string*

Synopsis	Multilink bundle member ID
Context	configure multilink-bundle string member string
Tree	member
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

minimum-links *number*

Synopsis	Minimum links that must be active for an active bundle
Context	configure multilink-bundle string minimum-links number
Tree	minimum-links
Range	1 to 8
Default	1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

mlppp

Synopsis	Enter the mlppp context
Context	configure multilink-bundle string mlppp
Tree	mlppp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

egress

Synopsis	Enter the egress context
Context	configure multilink-bundle string mlppp egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

qos-profile *reference*

Synopsis	Egress MLPPP QoS profile
Context	configure multilink-bundle <i>string</i> mlppp egress qos-profile <i>reference</i>
Tree	qos-profile
Reference	configure qos mlppp-profile-egress <i>number</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

endpoint-discriminator

Synopsis	Enter the endpoint-discriminator context
Context	configure multilink-bundle <i>string</i> mlppp endpoint-discriminator
Tree	endpoint-discriminator
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

class *keyword*

Synopsis	LCP endpoint discriminator class type
Context	configure multilink-bundle <i>string</i> mlppp endpoint-discriminator class <i>keyword</i>
Tree	class
Options	null, ip-address, global-mac-address
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

discriminator-id *string*

Synopsis	Endpoint discriminator ID
Context	configure multilink-bundle <i>string</i> mlppp endpoint-discriminator discriminator-id <i>string</i>
Tree	discriminator-id
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

ingress

Synopsis	Enter the ingress context
Context	configure multilink-bundle <i>string</i> mlppp ingress
Tree	ingress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

qos-profile *reference*

Synopsis	Ingress MLPPP QoS profile
Context	configure multilink-bundle <i>string</i> mlppp ingress qos-profile <i>reference</i>
Tree	qos-profile
Reference	configure qos mlppp-profile-ingress <i>number</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

magic-number *boolean*

Synopsis	Allow loopback detection for MLPPP bundles
Context	configure multilink-bundle <i>string</i> mlppp magic-number <i>boolean</i>
Tree	magic-number
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

multiclass *number*

Synopsis	Multiclass MLPPP bundle index
Context	configure multilink-bundle <i>string</i> mlppp multiclass <i>number</i>
Tree	multiclass
Range	2 to 4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

stateless-aps-switchover *boolean*

Synopsis	Allow stateless APS swtichovers
Context	configure multilink-bundle <i>string</i> mlppp stateless-aps-switchover <i>boolean</i>
Tree	stateless-aps-switchover
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

mrru *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum Received Reconstructed Unit (MRRU)
Context	configure multilink-bundle <i>string</i> mrru <i>number</i>
Tree	mrru
Range	1500 to 9206
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

protect-bundle *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Protection multilink bundle in bundle protection group
Context	configure multilink-bundle <i>string</i> protect-bundle <i>reference</i>
Tree	protect-bundle
Reference	configure multilink-bundle <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

red-differential

Synopsis	Enter the red-differential context
Context	configure multilink-bundle <i>string</i> red-differential
Tree	red-differential
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

action *keyword*

Synopsis	Action when differential delay exceeds threshold
Context	configure multilink-bundle <i>string</i> red-differential action <i>keyword</i>
Tree	action
Options	down
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

delay *number*

Synopsis	Differential delay threshold for individual links
Context	configure multilink-bundle <i>string</i> red-differential delay <i>number</i>
Tree	delay
Range	1 to 50
Units	milliseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

short-sequence *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use 12-bit sequence numbers for the MLPPP bundle
Context	configure multilink-bundle <i>string</i> short-sequence <i>boolean</i>
Tree	short-sequence
Default	false

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e

working-bundle *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Working bundle that is part of the BPG
Context **configure** [multilink-bundle](#) *string* [working-bundle](#) *reference*
Tree [working-bundle](#)
Reference **configure** [multilink-bundle](#) *string*
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e

yellow-differential-delay *number*

Synopsis Yellow warning threshold for the differential delay
Context **configure** [multilink-bundle](#) *string* [yellow-differential-delay](#) *number*
Tree [yellow-differential-delay](#)
Range 1 to 25
Units milliseconds
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e

3.29 oam-pm commands

```

configure
- oam-pm
- apply-groups reference
- apply-groups-exclude reference
- bin-group number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bin-type keyword
- apply-groups reference
- apply-groups-exclude reference
- bin number
- apply-groups reference
- apply-groups-exclude reference
- lower-bound number
- delay-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- exclude-lowest-bin number
- lowest-bin number
- raise-threshold number
- exclude-from-avg keyword
- apply-groups reference
- apply-groups-exclude reference
- bins string
- description string
- session string
- apply-groups reference
- apply-groups-exclude reference
- bin-group reference
- description string
- ethernet
- dest-mac string
- dmm
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- data-tlv-size number
- delay-template string
- interval number
- test-duration number
- test-id number
- lmm
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- availability
- admin-state keyword
- flr-threshold number
- hli-force-count boolean
- timing
- chli-threshold number
- consec-delta-t number
- frames-per-delta-t number
- fc-collection boolean
- interval number
- loss-events
- avg-flr-event keyword

```

configure oam-pm session ethernet lmm loss-events avg-flr-event apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- clear-threshold decimal-number
- raise-threshold decimal-number
- chli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- hli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-availability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- test-duration number
- test-id number
- priority number
- remote-mep number
- slm
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- data-tlv-size number
- flr-threshold number
- hli-force-count boolean
- interval number
- loss-events
- avg-flr-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold decimal-number
- raise-threshold decimal-number
- chli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- hli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-availability-event keyword
- apply-groups reference

```

configure oam-pm session ethernet slm loss-events undet-availability-event apply-groups-exclude

- **apply-groups-exclude** *reference*
- **clear-threshold** *number*
- **raise-threshold** *number*
- **undet-unavailability-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
- **test-duration** *number*
- **test-id** *number*
- **timing**
 - **chli-threshold** *number*
 - **consec-delta-t** *number*
 - **frames-per-delta-t** *number*
- **source**
 - **ma-admin-name** *string*
 - **md-admin-name** *string*
 - **mep** *number*
- **ip**
 - **allow-egress-remark-dscp** *boolean*
 - **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **destination-udp-port** *number*
 - **do-not-fragment** *boolean*
 - **dscp** (*keyword* | *keyword*)
 - **fc** *keyword*
 - **forwarding**
 - **bypass-routing**
 - **interface** *string*
 - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **pattern** (*keyword* | *number*)
 - **profile** *keyword*
 - **router-instance** *string*
 - **source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **source-udp-port** *number*
 - **ttl** *number*
 - **twamp-light**
 - **admin-state** *keyword*
 - **allow-ipv6-udp-checksum-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **delay-template** *string*
 - **interval** *number*
 - **loss**
 - **flr-threshold** *number*
 - **hli-force-count** *boolean*
 - **timing**
 - **chli-threshold** *number*
 - **consec-delta-t** *number*
 - **frames-per-delta-t** *number*
 - **loss-events**
 - **avg-flr-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *decimal-number*
 - **raise-threshold** *decimal-number*
 - **chli-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
 - **hli-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*

configure oam-pm session ip twamp-light loss-events hli-event raise-threshold

```

    - raise-threshold number
    - unavailability-event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - clear-threshold number
    - raise-threshold number
    - undet-availability-event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - clear-threshold number
    - raise-threshold number
    - undet-unavailability-event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - clear-threshold number
    - raise-threshold number
    - pad-size number
    - record-stats keyword
    - test-duration number
    - test-id number
- measurement-interval keyword
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - boundary-type keyword
  - clock-offset number
  - intervals-stored number
  - threshold-cross-alerts
    - admin-state keyword
    - delay-events boolean
    - loss-events boolean
- mpls
  - dm
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - delay-template string
    - interval number
    - pad-tlv-size number
    - reflect-pad boolean
    - test-duration number
    - test-id number
  - dscp keyword
  - fc keyword
  - lsp
    - mpls-tp-static
      - lsp string
    - rsvp
      - lsp string
      - udp-return-object (ipv4-address-no-zone | ipv6-address-no-zone)
    - rsvp-auto
      - from string
      - lsp-template string
      - to string
      - udp-return-object (ipv4-address-no-zone | ipv6-address-no-zone)
  - pattern (keyword | number)
  - profile keyword
  - ttl number
- session-type keyword
- streaming
  - delay-template string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference

```

configure oam-pm streaming delay-template description

- **description** *string*
- **fd-avg** *keyword*
- **ifdv-avg** *keyword*
- **sample-window** *number*
- **window-integrity** *number*

3.29.1 oam-pm command descriptions

oam-pm

Synopsis	Enter the oam-pm context
Context	configure oam-pm
Tree	oam-pm
Introduced	16.0.R1
Platforms	All

bin-group [[bin-group-id](#)] *number*

Synopsis	Enter the bin-group list instance
Context	configure oam-pm bin-group number
Tree	bin-group
Introduced	16.0.R5
Platforms	All

[bin-group-id] *number*

Synopsis	Bin group ID
Context	configure oam-pm bin-group number
Tree	bin-group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the bin group
Context	configure oam-pm bin-group number admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	16.0.R5

Platforms All

bin-type [bin-metric] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **bin-type** list instance
Context **configure** oam-pm bin-group *number bin-type keyword*
Tree [bin-type](#)
Introduced 16.0.R5
Platforms All

[bin-metric] *keyword*

Synopsis Delay metric bin structure
Context **configure** oam-pm bin-group *number bin-type keyword*
Tree [bin-type](#)
Options fd, fdr, ifdv
Notes This element is part of a list key.
Introduced 16.0.R5
Platforms All

bin [bin-number] *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **bin** list instance
Context **configure** oam-pm bin-group *number bin-type keyword bin number*
Tree [bin](#)
Introduced 16.0.R5
Platforms All

[bin-number] *number*

Synopsis	Bin number
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> bin <i>number</i>
Tree	bin
Range	0 to 9
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

lower-bound *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound for the bin
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> bin <i>number</i> lower-bound <i>number</i>
Tree	lower-bound
Range	0 1 to 4294967295
Units	microseconds
Introduced	16.0.R5
Platforms	All

delay-event [**direction**] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the delay-event list instance
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> delay-event <i>keyword</i>
Tree	delay-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	configure oam-pm bin-group <i>number bin-type keyword delay-event keyword</i>
Tree	delay-event
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	OAM-PM clear threshold for an excessive delay
Context	configure oam-pm bin-group <i>number bin-type keyword delay-event keyword clear-threshold number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

exclude-lowest-bin *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lowest bin excluded from the TCA count
Context	configure oam-pm bin-group <i>number bin-type keyword delay-event keyword exclude-lowest-bin number</i>
Tree	exclude-lowest-bin
Range	1 to 9
Introduced	16.0.R5
Platforms	All

lowest-bin *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lowest delay bin used when applying a delay threshold
Context	configure oam-pm bin-group <i>number</i> bin-type keyword delay-event keyword lowest-bin <i>number</i>
Tree	lowest-bin
Range	0 to 9
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold for excessive delay
Context	configure oam-pm bin-group <i>number</i> bin-type keyword delay-event keyword raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

exclude-from-avg [*direction*] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the exclude-from-avg list instance
Context	configure oam-pm bin-group <i>number</i> bin-type keyword exclude-from-avg keyword

Tree	exclude-from-avg
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	configure oam-pm bin-group <i>number bin-type keyword exclude-from-avg keyword</i>
Tree	exclude-from-avg
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

bins *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bin numbers excluded from the average calculation
Context	configure oam-pm bin-group <i>number bin-type keyword exclude-from-avg keyword bins string</i>
Tree	bins
String Length	1 to 39
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

description *string*

Synopsis	Text description
Context	configure oam-pm bin-group <i>number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R5

Platforms All

session [[session-name](#)] *string*

Synopsis Enter the **session** list instance
Context **configure** [oam-pm session string](#)
Tree [session](#)
Introduced 16.0.R5
Platforms All

[session-name] *string*

Synopsis OAM-PM session name
Context **configure** [oam-pm session string](#)
Tree [session](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R5
Platforms All

bin-group *reference*

Synopsis Bin group for the session
Context **configure** [oam-pm session string bin-group reference](#)
Tree [bin-group](#)
Reference **configure** [oam-pm bin-group number](#)
Introduced 16.0.R5
Platforms All

description *string*

Synopsis Text description
Context **configure** [oam-pm session string description string](#)
Tree [description](#)
String Length 1 to 80

Introduced 16.0.R5
Platforms All

ethernet

Synopsis Enable the **ethernet** context
Context **configure** [oam-pm session string ethernet](#)
Tree [ethernet](#)
Notes The following elements are part of a mandatory choice: **ethernet**, **ip**, or **mpls**.
Introduced 16.0.R5
Platforms All

dest-mac *string*

Synopsis Destination MAC address for the session
Context **configure** [oam-pm session string ethernet dest-mac string](#)
Tree [dest-mac](#)
Introduced 16.0.R5
Platforms All

dmm

Synopsis Enable the **dmm** context
Context **configure** [oam-pm session string ethernet dmm](#)
Tree [dmm](#)
Introduced 16.0.R5
Platforms All

admin-state *keyword*

Synopsis Administrative state of the test
Context **configure** [oam-pm session string ethernet dmm admin-state keyword](#)
Tree [admin-state](#)
Default disable
Options enable, disable

Introduced 16.0.R5
Platforms All

data-tlv-size *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Size of the pad TLV in the frames sent for the test
Context **configure** **oam-pm session** *string ethernet dmm data-tlv-size number*
Tree [data-tlv-size](#)
Range 0 | 3 to 2000
Default 0
Units octets
Introduced 16.0.R5
Platforms All

delay-template *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Reference to a streaming delay template for the test
Context **configure** **oam-pm session** *string ethernet dmm delay-template string*
Tree [delay-template](#)
String Length 1 to 64
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Time between transmission PDUs for the session's test

Context	configure oam-pm session <i>string ethernet dmm interval number</i>
Tree	interval
Range	100 1000 10000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

test-duration *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	configure oam-pm session <i>string ethernet dmm test-duration number</i>
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

test-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	configure oam-pm session <i>string ethernet dmm test-id number</i>
Tree	test-id
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

Imm

Synopsis	Enable the Imm context
Context	configure oam-pm session string ethernet Imm
Tree	Imm
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the test
Context	configure oam-pm session string ethernet Imm admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R5
Platforms	All

availability



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the availability context
Context	configure oam-pm session string ethernet Imm availability
Tree	availability
Introduced	16.0.R5
Platforms	All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of availability statistics
Context	configure oam-pm session string ethernet Imm availability admin-state keyword

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R5
Platforms	All

flr-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	configure oam-pm session <i>string</i> ethernet lmm availability flr-threshold <i>number</i>
Tree	flr-threshold
Range	0 to 100
Default	50
Units	percent
Introduced	16.0.R5
Platforms	All

hli-force-count *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	configure oam-pm session <i>string</i> ethernet lmm availability hli-force-count <i>boolean</i>
Tree	hli-force-count
Default	false
Introduced	16.0.R5
Platforms	All

timing



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the timing context
Context	configure oam-pm session <i>string</i> ethernet lmm availability timing
Tree	timing
Introduced	16.0.R5
Platforms	All

chli-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	configure oam-pm session <i>string</i> ethernet lmm availability timing chli-threshold <i>number</i>
Tree	chli-threshold
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	All

consec-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	configure oam-pm session <i>string</i> ethernet lmm availability timing consec-delta-t <i>number</i>
Tree	consec-delta-t
Range	2 to 10
Default	10
Introduced	16.0.R5

Platforms All

frames-per-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of frames sent in one delta-t
Context **configure** **oam-pm session** *string* **ethernet lmm availability timing frames-per-delta-t** *number*
Tree [frames-per-delta-t](#)
Range 1 to 50
Introduced 16.0.R5
Platforms All

fc-collection *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable collection of per-forwarding class counters
Context **configure** **oam-pm session** *string* **ethernet lmm fc-collection** *boolean*
Tree [fc-collection](#)
Default false
Introduced 16.0.R5
Platforms All

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Time between transmission PDUs for the session's test
Context **configure** **oam-pm session** *string* **ethernet lmm interval** *number*
Tree [interval](#)

Range	100 1000 10000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

loss-events



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the loss-events context
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events
Tree	loss-events
Introduced	16.0.R5
Platforms	All

avg-flr-event [[direction](#)] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the avg-flr-event list instance
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events avg-flr-event <i>keyword</i>
Tree	avg-flr-event
Introduced	16.0.R5
Platforms	All

[[direction](#)] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events avg-flr-event <i>keyword</i>
Tree	avg-flr-event
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5

Platforms All

clear-threshold *decimal-number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold for the average FLR
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events avg-flr-event <i>keyword</i> clear-threshold <i>decimal-number</i>
Tree	clear-threshold
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	All

raise-threshold *decimal-number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold for the average FLR
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events avg-flr-event <i>keyword</i> raise-threshold <i>decimal-number</i>
Tree	raise-threshold
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

chli-event [*direction*] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the chli-event list instance
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events chli-event <i>keyword</i>
Tree	chli-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events chli-event <i>keyword</i>
Tree	chli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events chli-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events chli-event keyword raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

hli-event [*direction*] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the hli-event list instance
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events hli-event keyword
Tree	hli-event
Introduced	16.0.R5
Platforms	All

[*direction*] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events hli-event keyword
Tree	hli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events hli-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events hli-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

unavailability-event [*direction*] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the unavailability-event list instance
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events unavailability-event <i>keyword</i>
Tree	unavailability-event
Introduced	16.0.R5

Platforms All

[direction] *keyword*

Synopsis Traffic flow direction
Context **configure** **oam-pm session** *string* **ethernet lmm loss-events unavailability-event** *keyword*
Tree **unavailability-event**
Options forward, backward, aggregate
Notes This element is part of a list key.
Introduced 16.0.R5
Platforms All

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear threshold
Context **configure** **oam-pm session** *string* **ethernet lmm loss-events unavailability-event** *keyword* **clear-threshold** *number*
Tree **clear-threshold**
Range 0 to 863999
Introduced 16.0.R5
Platforms All

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Raise threshold
Context **configure** **oam-pm session** *string* **ethernet lmm loss-events unavailability-event** *keyword* **raise-threshold** *number*
Tree **raise-threshold**
Range 1 to 864000

Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

undet-availability-event [[direction](#)] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the undet-availability-event list instance
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-availability-event <i>keyword</i> clear-threshold <i>number</i>

Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-availability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

undet-unavailability-event [[direction](#)] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the undet-unavailability-event list instance
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-unavailability-event <i>keyword</i>
Tree	undet-unavailability-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-unavailability-event <i>keyword</i>

Tree	undet-unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-unavailability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-unavailability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

test-duration *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	configure oam-pm session <i>string</i> ethernet lmm test-duration <i>number</i>
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

test-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	configure oam-pm session <i>string</i> ethernet lmm test-id <i>number</i>
Tree	test-id
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

priority *number*

Synopsis	Priority and forwarding class for the session
Context	configure oam-pm session <i>string</i> ethernet priority <i>number</i>
Tree	priority
Range	0 to 7
Default	0
Introduced	16.0.R5
Platforms	All

remote-mep *number*

Synopsis	Remote MEP for the session
Context	configure oam-pm session <i>string</i> ethernet remote-mep number
Tree	remote-mep
Range	1 to 8191
Introduced	16.0.R5
Platforms	All

slm

Synopsis	Enable the slm context
Context	configure oam-pm session <i>string</i> ethernet slm
Tree	slm
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the test
Context	configure oam-pm session <i>string</i> ethernet slm admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R5
Platforms	All

data-tlv-size *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in the frames sent for the test
Context	configure oam-pm session <i>string</i> ethernet slm data-tlv-size number
Tree	data-tlv-size

Range	0 3 to 2000
Default	0
Units	octets
Introduced	16.0.R5
Platforms	All

flr-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	configure oam-pm session <i>string</i> ethernet slm flr-threshold <i>number</i>
Tree	flr-threshold
Range	0 to 100
Default	50
Units	percent
Introduced	16.0.R5
Platforms	All

hli-force-count *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	configure oam-pm session <i>string</i> ethernet slm hli-force-count <i>boolean</i>
Tree	hli-force-count
Default	false
Introduced	16.0.R5
Platforms	All

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
Context	configure oam-pm session <i>string</i> ethernet slm interval <i>number</i>
Tree	interval
Range	100 1000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

loss-events



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the loss-events context
Context	configure oam-pm session <i>string</i> ethernet slm loss-events
Tree	loss-events
Introduced	16.0.R5
Platforms	All

avg-flr-event [[direction](#)] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the avg-flr-event list instance
Context	configure oam-pm session <i>string</i> ethernet slm loss-events avg-flr-event <i>keyword</i>
Tree	avg-flr-event
Introduced	16.0.R5
Platforms	All

[direction] keyword

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet slm loss-events avg-flr-event <i>keyword</i>
Tree	avg-flr-event
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold decimal-number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold for the average FLR
Context	configure oam-pm session <i>string</i> ethernet slm loss-events avg-flr-event <i>keyword</i> clear-threshold <i>decimal-number</i>
Tree	clear-threshold
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	All

raise-threshold decimal-number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold for the average FLR
Context	configure oam-pm session <i>string</i> ethernet slm loss-events avg-flr-event <i>keyword</i> raise-threshold <i>decimal-number</i>
Tree	raise-threshold
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.

Introduced 16.0.R5
Platforms All

chli-event [[direction](#)] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **chli-event** list instance
Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events chli-event](#) *keyword*
Tree [chli-event](#)
Introduced 16.0.R5
Platforms All

[direction] *keyword*

Synopsis Traffic flow direction
Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events chli-event](#) *keyword*
Tree [chli-event](#)
Options forward, backward, aggregate
Notes This element is part of a list key.
Introduced 16.0.R5
Platforms All

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear threshold
Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events chli-event](#) *keyword* [clear-threshold](#) *number*
Tree [clear-threshold](#)
Range 0 to 863999
Introduced 16.0.R5

Platforms All

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Raise threshold
Context **configure** **oam-pm session** *string* **ethernet slm loss-events chli-event** *keyword* **raise-threshold** *number*
Tree **raise-threshold**
Range 1 to 864000
Notes This element is mandatory.
Introduced 16.0.R5
Platforms All

hli-event [*direction*] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **hli-event** list instance
Context **configure** **oam-pm session** *string* **ethernet slm loss-events hli-event** *keyword*
Tree **hli-event**
Introduced 16.0.R5
Platforms All

[direction] *keyword*

Synopsis Traffic flow direction
Context **configure** **oam-pm session** *string* **ethernet slm loss-events hli-event** *keyword*
Tree **hli-event**
Options forward, backward, aggregate
Notes This element is part of a list key.
Introduced 16.0.R5

Platforms All

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear threshold

Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events hli-event](#) *keyword* [clear-threshold](#) *number*

Tree [clear-threshold](#)

Range 0 to 863999

Introduced 16.0.R5

Platforms All

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Raise threshold

Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events hli-event](#) *keyword* [raise-threshold](#) *number*

Tree [raise-threshold](#)

Range 1 to 864000

Notes This element is mandatory.

Introduced 16.0.R5

Platforms All

unavailability-event [[direction](#)] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **unavailability-event** list instance

Context	configure oam-pm session <i>string</i> ethernet slm loss-events unavailability-event <i>keyword</i>
Tree	unavailability-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet slm loss-events unavailability-event <i>keyword</i>
Tree	unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet slm loss-events unavailability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold
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Context	configure <i>oam-pm session string ethernet slm loss-events unavailability-event keyword raise-threshold number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

undet-availability-event [[direction](#)] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the undet-availability-event list instance
Context	configure <i>oam-pm session string ethernet slm loss-events undet-availability-event keyword</i>
Tree	undet-availability-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure <i>oam-pm session string ethernet slm loss-events undet-availability-event keyword</i>
Tree	undet-availability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet slm loss-events undet-availability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold
Context	configure oam-pm session <i>string</i> ethernet slm loss-events undet-availability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

undet-unavailability-event [[direction](#)] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the undet-unavailability-event list instance
Context	configure oam-pm session <i>string</i> ethernet slm loss-events undet-unavailability-event <i>keyword</i>
Tree	undet-unavailability-event

Introduced 16.0.R5
Platforms All

[**direction**] *keyword*

Synopsis Traffic flow direction
Context **configure** **oam-pm session** *string* **ethernet slm loss-events undet-unavailability-event**
keyword
Tree **undet-unavailability-event**
Options forward, backward, aggregate
Notes This element is part of a list key.
Introduced 16.0.R5
Platforms All

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear threshold
Context **configure** **oam-pm session** *string* **ethernet slm loss-events undet-unavailability-event**
keyword **clear-threshold** *number*
Tree **clear-threshold**
Range 0 to 863999
Introduced 16.0.R5
Platforms All

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Raise threshold
Context **configure** **oam-pm session** *string* **ethernet slm loss-events undet-unavailability-event**
keyword **raise-threshold** *number*
Tree **raise-threshold**

Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

test-duration *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	configure oam-pm session <i>string ethernet slm test-duration number</i>
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

test-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	configure oam-pm session <i>string ethernet slm test-id number</i>
Tree	test-id
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

timing



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the timing context
Context	configure oam-pm session <i>string</i> ethernet slm timing
Tree	timing
Introduced	16.0.R5
Platforms	All

chli-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	configure oam-pm session <i>string</i> ethernet slm timing chli-threshold <i>number</i>
Tree	chli-threshold
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	All

consec-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	configure oam-pm session <i>string</i> ethernet slm timing consec-delta-t <i>number</i>
Tree	consec-delta-t
Range	2 to 10
Default	10
Introduced	16.0.R5

Platforms All

frames-per-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of frames sent in one delta-t
Context **configure** [oam-pm session](#) *string* [ethernet slm timing frames-per-delta-t](#) *number*
Tree [frames-per-delta-t](#)
Range 1 to 50
Introduced 16.0.R5
Platforms All

source

Synopsis Enable the **source** context
Context **configure** [oam-pm session](#) *string* [ethernet source](#)
Tree [source](#)
Introduced 16.0.R5
Platforms All

ma-admin-name *string*

Synopsis Source Ethernet MA name
Context **configure** [oam-pm session](#) *string* [ethernet source ma-admin-name](#) *string*
Tree [ma-admin-name](#)
String Length 1 to 64
Notes This element is mandatory.
Introduced 16.0.R5
Platforms All

md-admin-name *string*

Synopsis Source Ethernet MD name

Context	configure oam-pm session <i>string</i> ethernet source md-admin-name <i>string</i>
Tree	md-admin-name
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

mep *number*

Synopsis	Source Ethernet MEP ID
Context	configure oam-pm session <i>string</i> ethernet source mep <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

ip

Synopsis	Enable the ip context
Context	configure oam-pm session <i>string</i> ip
Tree	ip
Notes	The following elements are part of a mandatory choice: ethernet , ip , or mpls .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-egress-remark-dscp *boolean*

Synopsis	Allow DSCP modification by the egress QoS policy
Context	configure oam-pm session <i>string</i> ip allow-egress-remark-dscp <i>boolean</i>
Tree	allow-egress-remark-dscp
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Destination IP address for the session
Context	configure oam-pm session <i>string ip destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	destination
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination-udp-port *number*

Synopsis	Destination UDP port for the session
Context	configure oam-pm session <i>string ip destination-udp-port number</i>
Tree	destination-udp-port
Range	1 to 65535
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

do-not-fragment *boolean*

Synopsis	Do not allow packet fragmentation in the IPv4 header
Context	configure oam-pm session <i>string ip do-not-fragment boolean</i>
Tree	do-not-fragment
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp (*keyword* | *keyword*)

Synopsis	DSCP value configured to the DSCP name
Context	configure oam-pm session <i>string ip dscp</i> (<i>keyword</i> <i>keyword</i>)
Tree	dscp
Description	This command allows for the explicit setting of the DSCP rather than deriving the DSCP value from the egress network QoS policy 1 using the fc and profile values.

Although disconnected from the **fc** and **profile** settings unless required, the three parameters should be aligned to ensure proper treatment within the node and along the path.

Default	resolve
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class for the session
Context	configure oam-pm session <i>string ip fc keyword</i>
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding

Synopsis	Enable the forwarding context
Context	configure oam-pm session <i>string ip forwarding</i>
Tree	forwarding
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bypass-routing

Synopsis	Bypass the routing table when sending test packets
Context	configure oam-pm session <i>string ip forwarding bypass-routing</i>
Tree	bypass-routing
Notes	The following elements are part of a mandatory choice: bypass-routing , interface , or next-hop .

Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface *string*

Synopsis	Interface name
Context	configure oam-pm session <i>string</i> ip forwarding interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: bypass-routing , interface , or next-hop .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address for forwarding
Context	configure oam-pm session <i>string</i> ip forwarding next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a mandatory choice: bypass-routing , interface , or next-hop .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern (*keyword* | *number*)

Synopsis	Pattern used to fill the packet padding field
Context	configure oam-pm session <i>string</i> ip pattern (<i>keyword</i> <i>number</i>)
Tree	pattern
Range	0 to 65535
Default	0
Options	sequential
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*

Synopsis	Profile type for the session
Context	configure oam-pm session <i>string ip profile keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

router-instance *string*

Synopsis	Router instance for the session
Context	configure oam-pm session <i>string ip router-instance string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source IP address for the session
Context	configure oam-pm session <i>string ip source (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	source
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-udp-port *number*

Synopsis	Source UDP port for the session
Context	configure oam-pm session <i>string ip source-udp-port number</i>
Tree	source-udp-port
Range	64374 to 64383
Introduced	16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ttl *number*

Synopsis TTL value for the session
Context **configure** **oam-pm session** *string ip ttl number*
Tree **ttl**
Range 1 to 255
Default 255
Introduced 16.0.R5
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

twamp-light

Synopsis Enable the **twamp-light** context
Context **configure** **oam-pm session** *string ip twamp-light*
Tree **twamp-light**
Introduced 16.0.R5
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the test
Context **configure** **oam-pm session** *string ip twamp-light admin-state keyword*
Tree **admin-state**
Default disable
Options enable, disable
Introduced 16.0.R5
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	configure oam-pm session <i>string</i> ip twamp-light allow-ipv6-udp-checksum-zero <i>boolean</i>
Tree	allow-ipv6-udp-checksum-zero
Description	<p>When configured to true, this command configures the acceptance of IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x0000 arriving packets are discarded.</p> <p>When configured to false, packets that arrive with an IPv6 UDP checksum of 0x0000 are discarded.</p>
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delay-template *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	configure oam-pm session <i>string</i> ip twamp-light delay-template <i>string</i>
Tree	delay-template
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
Context	configure oam-pm session <i>string</i> ip twamp-light interval <i>number</i>
Tree	interval
Range	100 1000 10000

Units	milliseconds
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loss



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the loss context
Context	configure oam-pm session <i>string</i> ip twamp-light loss
Tree	loss
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

flr-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	configure oam-pm session <i>string</i> ip twamp-light loss flr-threshold <i>number</i>
Tree	flr-threshold
Range	0 to 100
Default	50
Units	percent
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hli-force-count *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
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Context	configure oam-pm session <i>string ip twamp-light loss hli-force-count</i> <i>boolean</i>
Tree	hli-force-count
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timing



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the timing context
Context	configure oam-pm session <i>string ip twamp-light loss</i> timing
Tree	timing
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

chli-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	configure oam-pm session <i>string ip twamp-light loss timing</i> chli-threshold <i>number</i>
Tree	chli-threshold
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

consec-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	configure oam-pm session <i>string ip twamp-light loss timing consec-delta-t number</i>
Tree	consec-delta-t
Range	2 to 10
Default	10
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

frames-per-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of frames sent in one delta-t
Context	configure oam-pm session <i>string ip twamp-light loss timing frames-per-delta-t number</i>
Tree	frames-per-delta-t
Range	1 to 50
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loss-events



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the loss-events context
Context	configure oam-pm session <i>string ip twamp-light loss-events</i>
Tree	loss-events
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

avg-flr-event [direction] keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the avg-flr-event list instance
Context	configure oam-pm session string ip twamp-light loss-events avg-flr-event keyword
Tree	avg-flr-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] keyword

Synopsis	Traffic flow direction
Context	configure oam-pm session string ip twamp-light loss-events avg-flr-event keyword
Tree	avg-flr-event
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold decimal-number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold for the average FLR
Context	configure oam-pm session string ip twamp-light loss-events avg-flr-event keyword clear-threshold decimal-number
Tree	clear-threshold
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *decimal-number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold for the average FLR
Context	configure oam-pm session <i>string ip twamp-light loss-events avg-flr-event keyword raise-threshold decimal-number</i>
Tree	raise-threshold
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

chli-event [*direction*] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the chli-event list instance
Context	configure oam-pm session <i>string ip twamp-light loss-events chli-event keyword</i>
Tree	chli-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[*direction*] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string ip twamp-light loss-events chli-event keyword</i>
Tree	chli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events chli-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events chli-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hli-event [*direction*] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the hli-event list instance
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events hli-event <i>keyword</i>
Tree	hli-event

Introduced 16.0.R5
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**direction**] *keyword*

Synopsis Traffic flow direction
Context **configure** **oam-pm session** *string ip twamp-light loss-events hli-event keyword*
Tree [hli-event](#)
Options forward, backward, aggregate
Notes This element is part of a list key.
Introduced 16.0.R5
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear threshold
Context **configure** **oam-pm session** *string ip twamp-light loss-events hli-event keyword clear-threshold number*
Tree [clear-threshold](#)
Range 0 to 863999
Introduced 16.0.R5
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Raise threshold
Context **configure** **oam-pm session** *string ip twamp-light loss-events hli-event keyword raise-threshold number*
Tree [raise-threshold](#)

Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

unavailability-event [[direction](#)] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the unavailability-event list instance
Context	configure oam-pm session <i>string ip twamp-light loss-events unavailability-event keyword</i>
Tree	unavailability-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string ip twamp-light loss-events unavailability-event keyword</i>
Tree	unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
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Context	configure oam-pm session <i>string</i> ip twamp-light loss-events unavailability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events unavailability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

undet-availability-event [[direction](#)] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the undet-availability-event list instance
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] *keyword*

Synopsis	Traffic flow direction
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Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-availability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-availability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

undet-unavailability-event [*direction*] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the undet-unavailability-event list instance
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-unavailability-event <i>keyword</i>
Tree	undet-unavailability-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[*direction*] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-unavailability-event <i>keyword</i>
Tree	undet-unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-unavailability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Raise threshold
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-unavailability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pad-size *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of packet padding sent for the TWAMP-Light test
Context	configure oam-pm session <i>string</i> ip twamp-light pad-size <i>number</i>
Tree	pad-size
Range	0 to 2000
Default	0
Units	octets
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

record-stats *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of statistics recorded for the TWAMP-Light test
Context	configure oam-pm session <i>string</i> ip twamp-light record-stats <i>keyword</i>

Tree	record-stats
Default	delay
Options	delay, loss, delay-and-loss
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-duration *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	configure oam-pm session <i>string ip twamp-light test-duration number</i>
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	configure oam-pm session <i>string ip twamp-light test-id number</i>
Tree	test-id
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

measurement-interval [[duration](#)] *keyword*

Synopsis	Enter the measurement-interval list instance
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Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i>
Tree	measurement-interval
Introduced	16.0.R5
Platforms	All

[duration] *keyword*

Synopsis	Duration of the measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i>
Tree	measurement-interval
Options	15-mins, 1-hour, 1-day, 5-mins
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy for the measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R5
Platforms	All

boundary-type *keyword*

Synopsis	Alignment of the start of the measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> boundary-type <i>keyword</i>
Tree	boundary-type
Default	clock-aligned
Options	clock-aligned, test-relative
Introduced	16.0.R5
Platforms	All

clock-offset *number*

Synopsis	Offset for a clock-aligned measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> clock-offset <i>number</i>
Tree	clock-offset
Range	0 to 86399
Default	0
Units	seconds
Introduced	16.0.R5
Platforms	All

intervals-stored *number*

Synopsis	Maximum number of measurement intervals stored
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> intervals-stored <i>number</i>
Tree	intervals-stored
Range	1 to 96
Introduced	16.0.R5
Platforms	All

threshold-cross-alerts

Synopsis	Enter the threshold-cross-alerts context
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> threshold-cross-alerts
Tree	threshold-cross-alerts
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of TCAs for measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> threshold-cross-alerts admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R5
Platforms	All

delay-events *boolean*

Synopsis	Enable delay TCAs for the measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> threshold-cross-alerts delay-events <i>boolean</i>
Tree	delay-events
Default	false
Introduced	16.0.R5
Platforms	All

loss-events *boolean*

Synopsis	Enable loss TCAs for the measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> threshold-cross-alerts loss-events <i>boolean</i>
Tree	loss-events
Default	false
Introduced	16.0.R5
Platforms	All

mpls

Synopsis	Enable the mpls context
Context	configure oam-pm session <i>string</i> mpls
Tree	mpls
Notes	The following elements are part of a mandatory choice: ethernet , ip , or mpls .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dm

Synopsis	Enable the dm context
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Context	configure oam-pm session string mpls dm
Tree	dm
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MPLS DM test
Context	configure oam-pm session string mpls dm admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delay-template *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	configure oam-pm session string mpls dm delay-template string
Tree	delay-template
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Elapsed time between query messages sent for the test
Context	configure oam-pm session string mpls dm interval number
Tree	interval

Range	1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
Default	1000
Units	milliseconds
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pad-tlv-size *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in query messages sent for the test
Context	configure oam-pm session <i>string</i> mpls dm pad-tlv-size <i>number</i>
Tree	pad-tlv-size
Range	0 2 to 257
Default	0
Units	octets
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reflect-pad *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy the pad TLV in each query to the response
Context	configure oam-pm session <i>string</i> mpls dm reflect-pad <i>boolean</i>
Tree	reflect-pad
Default	false
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-duration *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	configure oam-pm session <i>string</i> mpls dm test-duration <i>number</i>
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID for query and response messages
Context	configure oam-pm session <i>string</i> mpls dm test-id <i>number</i>
Tree	test-id
Range	0 to 67108863
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp *keyword*

Synopsis	DSCP value for the session
Context	configure oam-pm session <i>string</i> mpls dscp <i>keyword</i>
Tree	dscp
Default	be
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,

cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60,
cp61, cp62, cp63

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis Forwarding class for the session

Context **configure** **oam-pm session** *string* **mpls fc keyword**

Tree **fc**

Default be

Options be, l2, af, l1, h2, ef, h1, nc

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp

Synopsis Enter the **lsp** context

Context **configure** **oam-pm session** *string* **mpls lsp**

Tree **lsp**

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mpls-tp-static

Synopsis Enable the **mpls-tp-static** context

Context **configure** **oam-pm session** *string* **mpls lsp mpls-tp-static**

Tree **mpls-tp-static**

Notes The following elements are part of a choice: **mpls-tp-static**, **rsvp**, or **rsvp-auto**.

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp string

Synopsis LSP to be tested

Context **configure** **oam-pm session** *string* **mpls lsp mpls-tp-static lsp string**

Tree	lsp
String Length	1 to 64
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp

Synopsis	Enable the rsvp context
Context	configure oam-pm session <i>string</i> mpls lsp rsvp
Tree	rsvp
Notes	The following elements are part of a choice: mpls-tp-static , rsvp , or rsvp-auto .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp string

Synopsis	LSP to be tested
Context	configure oam-pm session <i>string</i> mpls lsp rsvp lsp string
Tree	lsp
String Length	1 to 64
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

udp-return-object (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address used by far end of the test to send response
Context	configure oam-pm session <i>string</i> mpls lsp rsvp udp-return-object (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	udp-return-object
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp-auto

Synopsis	Enable the rsvp-auto context
----------	-------------------------------------

Context	configure oam-pm session <i>string</i> mpls lsp rsvp-auto
Tree	rsvp-auto
Notes	The following elements are part of a choice: mpls-tp-static , rsvp , or rsvp-auto .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

from *string*

Synopsis	IPv4 address used to identify the LSP to be tested
Context	configure oam-pm session <i>string</i> mpls lsp rsvp-auto from <i>string</i>
Tree	from
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp-template *string*

Synopsis	LSP template used to identify the LSP to be tested
Context	configure oam-pm session <i>string</i> mpls lsp rsvp-auto lsp-template <i>string</i>
Tree	lsp-template
String Length	1 to 32
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

to *string*

Synopsis	IPv4 address used to identify the LSP to be tested
Context	configure oam-pm session <i>string</i> mpls lsp rsvp-auto to <i>string</i>
Tree	to
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

udp-return-object (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address used by far end of the test to send response
----------	---

Context	configure oam-pm session <i>string</i> mpls lsp rsvp-auto udp-return-object (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	udp-return-object
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern (*keyword | number*)

Synopsis	Pattern value repeated to fill padding field of packet
Context	configure oam-pm session <i>string</i> mpls pattern (<i>keyword number</i>)
Tree	pattern
Range	0 to 65535
Default	0
Options	sequential
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*

Synopsis	QoS profile for the session
Context	configure oam-pm session <i>string</i> mpls profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ttl *number*

Synopsis	MPLS TTL value for the session
Context	configure oam-pm session <i>string</i> mpls ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	255
Introduced	16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

session-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Session type
Context **configure** *oam-pm session string session-type keyword*
Tree *session-type*
Default proactive
Options proactive, on-demand
Introduced 16.0.R5
Platforms All

streaming

Synopsis Enter the **streaming** context
Context **configure** *oam-pm streaming*
Tree *streaming*
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delay-template [*delay-template-name*] *string*

Synopsis Enter the **delay-template** list instance
Context **configure** *oam-pm streaming delay-template string*
Tree *delay-template*
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[*delay-template-name*] *string*

Synopsis Streaming delay template name
Context **configure** *oam-pm streaming delay-template string*

Tree	delay-template
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the delay template
Context	configure oam-pm streaming delay-template <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure oam-pm streaming delay-template <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fd-avg [[direction](#)] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for fd-avg
Context	configure oam-pm streaming delay-template <i>string</i> fd-avg <i>keyword</i>
Tree	fd-avg
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] keyword

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	configure oam-pm streaming delay-template string fd-avg keyword
Tree	fd-avg
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ifdv-avg [direction] keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for ifdv-avg
Context	configure oam-pm streaming delay-template string ifdv-avg keyword
Tree	ifdv-avg
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] keyword

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	configure oam-pm streaming delay-template string ifdv-avg keyword
Tree	ifdv-avg
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sample-window *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Sample window duration for the template
Context	configure oam-pm streaming delay-template <i>string</i> sample-window <i>number</i>
Tree	sample-window
Range	10 to 60
Default	60
Units	seconds
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window-integrity *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Measurements for the sample window validity
Context	configure oam-pm streaming delay-template <i>string</i> window-integrity <i>number</i>
Tree	window-integrity
Range	1 to 100
Default	50
Units	percent
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

3.30 openflow commands

```
configure
- openflow
  - apply-groups reference
  - apply-groups-exclude reference
  - of-controller number
    - address string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - echo-interval number
    - echo-multiple number
    - ipv6-address string
    - role keyword
    - tls-server-profile reference
    - version keyword
  - of-switch string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - aux-channel boolean
    - controller (ipv4-address-no-zone | ipv6-address-no-zone) port number
      - apply-groups reference
      - apply-groups-exclude reference
      - ofc-loopback (ipv4-address-no-zone | ipv6-address-no-zone)
      - service-name string
      - tls-client-profile reference
    - description string
    - echo-interval number
    - echo-multiple number
    - flowtable number
      - apply-groups reference
      - apply-groups-exclude reference
      - max-size number
      - mismatch-action keyword
      - switch-defined-cookie boolean
    - logical-port-status keyword
    - ofs-id number
```

3.30.1 openflow command descriptions

openflow

Synopsis	Enter the openflow context
Context	configure openflow
Tree	openflow
Introduced	16.0.R4
Platforms	All

of-controller [[controller-id](#)] *number*

Synopsis	Enter the of-controller list instance
Context	configure openflow of-controller <i>number</i>
Tree	of-controller
Max. Instances	1
Introduced	16.0.R4
Platforms	VSR-NRC

[[controller-id](#)] *number*

Synopsis	OpenFlow controller ID
Context	configure openflow of-controller <i>number</i>
Tree	of-controller
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	VSR-NRC

address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv4 address for the OpenFlow controller
Context	configure openflow of-controller <i>number</i> address <i>string</i>
Tree	address
Introduced	16.0.R4
Platforms	VSR-NRC

admin-state *keyword*

Synopsis	Administrative state of OpenFlow controller instance
Context	configure openflow of-controller <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	VSR-NRC

description *string*

Synopsis	Text description
Context	configure openflow of-controller <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	VSR-NRC

echo-interval *number*

Synopsis	Interval for monitoring OpenFlow control channels
Context	configure openflow of-controller <i>number</i> echo-interval <i>number</i>
Tree	echo-interval
Range	10 to 3600
Default	10
Units	seconds
Introduced	16.0.R4
Platforms	VSR-NRC

echo-multiple *number*

Synopsis	Consecutive lost messages before channel declared down
Context	configure openflow of-controller <i>number</i> echo-multiple <i>number</i>
Tree	echo-multiple
Range	3 to 100
Default	3
Introduced	16.0.R4
Platforms	VSR-NRC

ipv6-address *string*

Synopsis	IPv6 address for the OpenFlow channel to the controller
Context	configure openflow of-controller <i>number</i> ipv6-address <i>string</i>
Tree	ipv6-address
Introduced	19.10.R1
Platforms	VSR-NRC

role *keyword*

Synopsis	Role when multiple controllers connected to OF switch
Context	configure openflow of-controller <i>number</i> role <i>keyword</i>
Tree	role
Default	equal
Options	equal
Introduced	16.0.R4
Platforms	VSR-NRC

tls-server-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Profile name used by the controller
Context	configure openflow of-controller <i>number</i> tls-server-profile <i>reference</i>

Tree	tls-server-profile
Reference	configure system security tls server-tls-profile <i>string</i>
Introduced	16.0.R4
Platforms	VSR-NRC

version *keyword*

Synopsis	Version negotiated between OF controller and switch
Context	configure openflow of-controller <i>number</i> version <i>keyword</i>
Tree	version
Default	version-1-3-1
Options	version-1-3-1
Introduced	16.0.R4
Platforms	VSR-NRC

of-switch [[name](#)] *string*

Synopsis	Enter the of-switch list instance
Context	configure openflow of-switch <i>string</i>
Tree	of-switch
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[name] *string*

Synopsis	OpenFlow switch name
Context	configure openflow of-switch <i>string</i>
Tree	of-switch
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OpenFlow switch instance
Context	configure openflow of-switch <i>string admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

aux-channel *boolean*

Synopsis	Enable the auxiliary connection for the H-OFS instance
Context	configure openflow of-switch <i>string aux-channel boolean</i>
Tree	aux-channel
Default	false
Introduced	16.0.R4
Platforms	All

controller [[address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*) [port](#) *number*

Synopsis	Enter the controller list instance
Context	configure openflow of-switch <i>string controller (ipv4-address-no-zone ipv6-address-no-zone) port number</i>
Tree	controller
Max. Instances	2
Introduced	16.0.R4
Platforms	All

[[address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the OpenFlow channel to the controller
Context	configure openflow of-switch <i>string controller (ipv4-address-no-zone ipv6-address-no-zone) port number</i>
Tree	controller

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port number

Synopsis	Controller port ID
Context	configure openflow of-switch <i>string controller (ipv4-address-no-zone ipv6-address-no-zone)</i> port number
Tree	controller
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

ofc-loopback (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Loopback IP address in the VPRN
Context	configure openflow of-switch <i>string controller (ipv4-address-no-zone ipv6-address-no-zone)</i> port number ofc-loopback (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	ofc-loopback
Introduced	16.0.R4
Platforms	All

service-name *string*

Synopsis	Administrative service name
Context	configure openflow of-switch <i>string controller (ipv4-address-no-zone ipv6-address-no-zone)</i> port number service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R4
Platforms	All

tls-client-profile *reference*

Synopsis	TLS profile name for use on the control channel
Context	configure openflow of-switch <i>string</i> controller (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port <i>number</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Reference	configure system security tls client-tls-profile <i>string</i>
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure openflow of-switch <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R4
Platforms	All

echo-interval *number*

Synopsis	Interval for monitoring OpenFlow control channels
Context	configure openflow of-switch <i>string</i> echo-interval <i>number</i>
Tree	echo-interval
Range	1 to 3600
Default	10
Units	seconds
Introduced	16.0.R4
Platforms	All

echo-multiple *number*

Synopsis	Consecutive lost messages before channel declared down
Context	configure openflow of-switch <i>string</i> echo-multiple <i>number</i>
Tree	echo-multiple
Range	3 to 100

Default	3
Introduced	16.0.R4
Platforms	All

flowtable [*table-id*] *number*

Synopsis	Enter the flowtable list instance
Context	configure openflow of-switch <i>string flowtable number</i>
Tree	flowtable
Max. Instances	1
Introduced	16.0.R4
Platforms	All

[table-id] *number*

Synopsis	OpenFlow table ID
Context	configure openflow of-switch <i>string flowtable number</i>
Tree	flowtable
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

max-size *number*

Synopsis	Maximum size of the flow table
Context	configure openflow of-switch <i>string flowtable number max-size number</i>
Tree	max-size
Range	1 to 524288
Default	1000
Introduced	16.0.R4
Platforms	All

mismatch-action *keyword*

Synopsis	Action taken when no match entries found in flow table
Context	configure openflow of-switch <i>string</i> flowtable <i>number</i> mismatch-action <i>keyword</i>
Tree	mismatch-action
Default	fall-through
Options	drop, fall-through, packet-in
Introduced	16.0.R4
Platforms	All

switch-defined-cookie *boolean*

Synopsis	Enable switch-defined cookie encoding
Context	configure openflow of-switch <i>string</i> flowtable <i>number</i> switch-defined-cookie <i>boolean</i>
Tree	switch-defined-cookie
Default	false
Introduced	16.0.R4
Platforms	All

logical-port-status *keyword*

Synopsis	Logical port type for status change reporting
Context	configure openflow of-switch <i>string</i> logical-port-status <i>keyword</i>
Tree	logical-port-status
Options	rsvp-te, mpls-tp, sr-te
Max. Instances	3
Introduced	16.0.R4
Platforms	All

ofs-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	OFS switch ID
----------	---------------

Context	configure openflow of-switch <i>string ofs-id number</i>
Tree	<i>ofs-id</i>
Range	1 to 8
Introduced	16.0.R6
Platforms	All

3.31 policy-options commands

```

configure
- policy-options
  - apply-groups reference
  - apply-groups-exclude reference
  - as-path string
    - apply-groups reference
    - apply-groups-exclude reference
    - expression string
  - as-path-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
      - apply-groups reference
      - apply-groups-exclude reference
      - expression string
  - community string
    - apply-groups reference
    - apply-groups-exclude reference
    - expression
      - apply-groups reference
      - apply-groups-exclude reference
      - exact boolean
      - expr string
    - member string
  - damping string
    - apply-groups reference
    - apply-groups-exclude reference
    - half-life number
    - max-suppress number
    - reuse number
    - suppress number
  - global-variables
    - name string
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - decimal decimal-number
      - number number
      - value string
  - policy-statement string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action
      - action-type keyword
      - add-paths-send-limit (number | keyword)
      - admin-tag-policy (param-midstring-64 | string)
      - advertise-label keyword
      - aigp-metric
        - add (number | string)
        - set (keyword | number | string)
      - apply-groups reference
      - apply-groups-exclude reference
      - as-path
        - add (param-midstring | string)
        - replace (param-midstring | string)
      - as-path-prepend
        - as-path (number | string | keyword)
        - repeat (number | string)
      - bgp-high-priority boolean

```

configure policy-options policy-statement default-action bgp-leak

```

- bgp-leak boolean
- bgp-med
  - adjust string
  - set (keyword | number | string)
- bgp-tunnel-metric
  - prefer-aigp boolean
  - value (string | number)
- community
  - add (param-midstring-64 | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - remove (param-midstring-64 | string)
  - replace (param-midstring-64 | string)
- create-mpls-tunnel boolean
- create-udp-tunnel boolean
- damping (keyword | param-midstring | string)
- dest-class number
- egress-statistics boolean
- flex-algo (string | number)
- ingress-statistics boolean
- install-backup-path boolean
- local-preference (number | string)
- metric
  - add (number | string)
  - set (number | string)
  - subtract (number | string)
- multicast-redirect
  -  fwd-service string
  - ip-int-name string
- nat-policy (param-midstring | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- description string
- entry number
- action
  - action-type keyword
  - add-paths-send-limit (number | keyword)
  - admin-tag-policy (param-midstring-64 | string)
  - advertise-label keyword
  - aigp-metric
    - add (number | string)
    - set (keyword | number | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - as-path
    - add (param-midstring | string)
    - replace (param-midstring | string)
  - as-path-prepend
    - as-path (number | string | keyword)
    - repeat (number | string)
  - bgp-high-priority boolean
  - bgp-leak boolean

```

configure policy-options policy-statement entry action bgp-med

```

- bgp-med
  - adjust string
  - set (keyword | number | string)
- bgp-tunnel-metric
  - prefer-aigp boolean
  - value (string | number)
- community
  - add (param-midstring-64 | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - remove (param-midstring-64 | string)
  - replace (param-midstring-64 | string)
- create-mpls-tunnel boolean
- create-udp-tunnel boolean
- damping (keyword | param-midstring | string)
- dest-class number
- egress-statistics boolean
- flex-algo (string | number)
- forwarding-class
  - fc keyword
  - priority keyword
- ingress-statistics boolean
- install-backup-path boolean
- local-preference (number | string)
- metric
  - add (number | string)
  - set (number | string)
  - subtract (number | string)
- multicast-redirect
  - fwd-service string
  - ip-int-name string
- nat-policy (param-midstring | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- apply-groups reference
- apply-groups-exclude reference
- conditional-expression
  - apply-groups reference
  - apply-groups-exclude reference
  - route-exists string
- description string
- from
  - aggregate-contributor boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
- as-path
  - group (param-midstring | string)
  - length
    - qualifier keyword
    - unique boolean
    - value (number | string)

```

configure policy-options policy-statement entry from as-path name

```

- name (param-midstring | string)
- cluster-id
- ip-address string
- none-cluster-list boolean
- color number
- community
- count
  - qualifier keyword
  - type keyword
  - value (number | string)
- expression string
- name (param-midstring-64 | string)
- distinguisher number
- endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- evpn-type keyword
- external boolean
- family keyword
- flowspec
  - dest (param-midstring | string)
  - source (param-midstring | string)
- group-address (param-midstring | string)
- host-ip (param-midstring | string)
- interface (named-item | interface-name | interface-name | interface-name)
- interface-subnets
  - ip-int-name string
  - service string
- level number
- local-preference
  - qualifier keyword
  - value (number | string)
- metric
  - qualifier keyword
  - value (number | string)
- mvpn-type keyword
- neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
- next-hop
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- origin keyword
- origin-validation-state keyword
- ospf-type number
- path-type keyword
- policy (string | string)
- policy-variables
  - name string
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - decimal decimal-number
  - number number
  - value string
- prefix-list (param-midstring | string)
- protocol
  - instance (keyword | number)
  - name keyword
- source-address
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- state keyword
- tag (number | keyword)
- to

```


configure policy-options policy-statement entry to apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- level number
- neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
- prefix-list (param-midstring | string)
- protocol
  - instance (keyword | number)
  - name keyword
- entry-type keyword
- named-entry string
- action
  - action-type keyword
  - add-paths-send-limit (number | keyword)
  - admin-tag-policy (param-midstring-64 | string)
  - advertise-label keyword
  - aigp-metric
    - add (number | string)
    - set (keyword | number | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - as-path
    - add (param-midstring | string)
    - replace (param-midstring | string)
  - as-path-prepend
    - as-path (number | string | keyword)
    - repeat (number | string)
  - bgp-high-priority boolean
  - bgp-leak boolean
  - bgp-med
    - adjust string
    - set (keyword | number | string)
  - bgp-tunnel-metric
    - prefer-aigp boolean
    - value (string | number)
  - community
    - add (param-midstring-64 | string)
    - apply-groups reference
    - apply-groups-exclude reference
    - remove (param-midstring-64 | string)
    - replace (param-midstring-64 | string)
  - create-mpls-tunnel boolean
  - create-udp-tunnel boolean
  - damping (keyword | param-midstring | string)
  - dest-class number
  - egress-statistics boolean
  - flex-algo (string | number)
  - forwarding-class
    - fc keyword
    - priority keyword
  - ingress-statistics boolean
  - install-backup-path boolean
  - local-preference (number | string)
  - metric
    - add (number | string)
    - set (number | string)
    - subtract (number | string)
  - multicast-redirect
    - fwd-service string
    - ip-int-name string
  - nat-policy (param-midstring | string)
  - next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)

```

configure policy-options policy-statement named-entry action origin

```

- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- apply-groups reference
- apply-groups-exclude reference
- conditional-expression
  - apply-groups reference
  - apply-groups-exclude reference
  - route-exists string
- description string
- from
  - aggregate-contributor boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
  - as-path
    - group (param-midstring | string)
    - length
      - qualifier keyword
      - unique boolean
      - value (number | string)
    - name (param-midstring | string)
  - cluster-id
    - ip-address string
    - none-cluster-list boolean
  - color number
  - community
    - count
      - qualifier keyword
      - type keyword
      - value (number | string)
    - expression string
    - name (param-midstring-64 | string)
  - distinguisher number
  - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
  - evpn-type keyword
  - external boolean
  - family keyword
  - flowspec
    - dest (param-midstring | string)
    - source (param-midstring | string)
  - group-address (param-midstring | string)
  - host-ip (param-midstring | string)
  - interface (named-item | interface-name | interface-name | interface-name)
  - interface-subnets
    - ip-int-name string
    - service string
  - level number
  - local-preference
    - qualifier keyword
    - value (number | string)
  - metric
    - qualifier keyword
    - value (number | string)

```

configure policy-options policy-statement named-entry from mvpn-type

```

- mvpn-type keyword
- neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
- next-hop
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- origin keyword
- origin-validation-state keyword
- ospf-type number
- path-type keyword
- policy (string | string)
- policy-variables
  - name string
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - decimal decimal-number
    - number number
    - value string
  - prefix-list (param-midstring | string)
- protocol
  - instance (keyword | number)
  - name keyword
- source-address
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- state keyword
- tag (number | keyword)
- to
  - apply-groups reference
  - apply-groups-exclude reference
  - level number
  - neighbor
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
    - prefix-list (param-midstring | string)
  - prefix-list (param-midstring | string)
  - protocol
    - instance (keyword | number)
    - name keyword
- prefix-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - prefix (ipv4-prefix | ipv6-prefix) type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - end-length number
  - mask-pattern (ipv4-address-no-zone | ipv6-address-no-zone)
  - start-length number
  - through-length number
  - to-prefix (ipv4-prefix | ipv6-prefix)

```

3.31.1 policy-options command descriptions

policy-options

Synopsis	Enter the policy-options context
Context	configure policy-options
Tree	policy-options
Introduced	16.0.R1
Platforms	All

as-path [[name](#)] *string*

Synopsis	Enter the as-path list instance
Context	configure policy-options as-path <i>string</i>
Tree	as-path
Introduced	16.0.R1
Platforms	All

[\[name\]](#) *string*

Synopsis	AS path name
Context	configure policy-options as-path <i>string</i>
Tree	as-path
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

expression *string*

Synopsis	Regular expression string
Context	configure policy-options as-path <i>string</i> expression <i>string</i>
Tree	expression
String Length	1 to 255
Introduced	16.0.R1

Platforms All

as-path-group [[name](#)] *string*

Synopsis Enter the **as-path-group** list instance
Context **configure** [policy-options as-path-group](#) *string*
Tree [as-path-group](#)
Introduced 16.0.R1
Platforms All

[name] *string*

Synopsis AS path group name
Context **configure** [policy-options as-path-group](#) *string*
Tree [as-path-group](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

entry [[entry](#)] *number*

Synopsis Enter the **entry** list instance
Context **configure** [policy-options as-path-group](#) *string* [entry](#) *number*
Tree [entry](#)
Introduced 16.0.R1
Platforms All

[entry] *number*

Synopsis AS path entry ID
Context **configure** [policy-options as-path-group](#) *string* [entry](#) *number*
Tree [entry](#)
Range 1 to 128
Notes This element is part of a list key.

Introduced 16.0.R1
Platforms All

expression *string*

Synopsis Regular expression string
Context **configure** [policy-options](#) [as-path-group](#) *string* [entry](#) [number](#) [expression](#) *string*
Tree [expression](#)
String Length 1 to 255
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

community [[name](#)] *string*

Synopsis Enter the **community** list instance
Context **configure** [policy-options](#) [community](#) *string*
Tree [community](#)
Introduced 16.0.R1
Platforms All

[name] *string*

Synopsis Community name
Context **configure** [policy-options](#) [community](#) *string*
Tree [community](#)
Description This command configures a route policy community name.
String values must be composed of printable, 7-bit ASCII characters. If the string contains special characters (<#>, [\\$](#), spaces, and so on), the entire string must be enclosed within double quotes.
String Length 1 to 64
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

expression

Synopsis	Enable the expression context
Context	configure policy-options community <i>string</i> expression
Tree	expression
Introduced	16.0.R1
Platforms	All

exact *boolean*

Synopsis	Match exactly for the specified expression
Context	configure policy-options community <i>string</i> expression exact <i>boolean</i>
Tree	exact
Default	false
Introduced	16.0.R1
Platforms	All

expr *string*

Synopsis	Community expression value
Context	configure policy-options community <i>string</i> expression expr <i>string</i>
Tree	expr
String Length	1 to 900
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

member [[member](#)] *string*

Synopsis	Add a list entry for member
Context	configure policy-options community <i>string</i> member <i>string</i>
Tree	member
Introduced	16.0.R1
Platforms	All

[member] *string*

Synopsis	Community member value
Context	configure policy-options community <i>string</i> member <i>string</i>
Tree	member
String Length	1 to 72
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

damping [[name](#)] *string*

Synopsis	Enter the damping list instance
Context	configure policy-options damping <i>string</i>
Tree	damping
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Damping profile name
Context	configure policy-options damping <i>string</i>
Tree	damping
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

half-life *number*

Synopsis	Time after the FOM value is halved
Context	configure policy-options damping <i>string</i> half-life <i>number</i>
Tree	half-life
Range	1 to 45
Units	minutes
Introduced	16.0.R1

Platforms All

max-suppress *number*

Synopsis Maximum time for a route to remain suppressed
Context **configure** [policy-options](#) [damping](#) *string* **max-suppress** *number*
Tree [max-suppress](#)
Range 1 to 720
Units minutes
Introduced 16.0.R1
Platforms All

reuse *number*

Synopsis Value below which a suppressed route can be used again
Context **configure** [policy-options](#) [damping](#) *string* **reuse** *number*
Tree [reuse](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

suppress *number*

Synopsis Value above which a route is suppressed
Context **configure** [policy-options](#) [damping](#) *string* **suppress** *number*
Tree [suppress](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

global-variables

Synopsis Enter the **global-variables** context
Context **configure** [policy-options](#) [global-variables](#)
Tree [global-variables](#)

Introduced 16.0.R4
Platforms All

name [[variable-name](#)] *string*

Synopsis Enter the **name** list instance
Context **configure** [policy-options](#) [global-variables](#) [name](#) *string*
Tree [name](#)
Max. Instances 1000
Introduced 16.0.R4
Platforms All

[variable-name] *string*

Synopsis Global variable name used to reference policy functions
Context **configure** [policy-options](#) [global-variables](#) [name](#) *string*
Tree [name](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

address ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis IP address of the policy variable
Context **configure** [policy-options](#) [global-variables](#) [name](#) *string* [address](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))
Tree [address](#)
Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.
Introduced 16.0.R4
Platforms All

decimal *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	configure policy-options global-variables name <i>string</i> decimal <i>decimal-number</i>
Tree	decimal
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	19.7.R1
Platforms	All

number *number*

Synopsis	Numerical value of the policy variable
Context	configure policy-options global-variables name <i>string</i> number <i>number</i>
Tree	number
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	16.0.R4
Platforms	All

value *string*

Synopsis	Policy variable value
Context	configure policy-options global-variables name <i>string</i> value <i>string</i>
Tree	value
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	16.0.R4
Platforms	All

policy-statement [[name](#)] *string*

Synopsis	Enter the policy-statement list instance
----------	---

Context	configure policy-options policy-statement <i>string</i>
Tree	policy-statement
Max. Instances	65535
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Route policy statement name
Context	configure policy-options policy-statement <i>string</i>
Tree	policy-statement
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-action

Synopsis	Enable the default-action context
Context	configure policy-options policy-statement <i>string</i> default-action
Tree	default-action
Introduced	16.0.R1
Platforms	All

action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	configure policy-options policy-statement <i>string</i> default-action action-type <i>keyword</i>
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

add-paths-send-limit (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	configure policy-options policy-statement <i>string</i> default-action add-paths-send-limit (<i>number</i> <i>keyword</i>)
Tree	add-paths-send-limit
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

admin-tag-policy (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	configure policy-options policy-statement <i>string</i> default-action admin-tag-policy (<i>param-midstring-64</i> <i>string</i>)
Tree	admin-tag-policy
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	configure policy-options policy-statement <i>string</i> default-action advertise-label <i>keyword</i>
Tree	advertise-label
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	16.0.R1
Platforms	All

aigp-metric

Synopsis	Enter the aigp-metric context
Context	configure policy-options policy-statement <i>string</i> default-action aigp-metric

Tree	aigp-metric
Introduced	16.0.R1
Platforms	All

add (*number* | *string*)

Synopsis	AIGP metric to add
Context	configure policy-options policy-statement <i>string</i> default-action aigp-metric add (<i>number</i> <i>string</i>)
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add or set .
Introduced	16.0.R1
Platforms	All

set (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	configure policy-options policy-statement <i>string</i> default-action aigp-metric set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: add or set .
Introduced	16.0.R1
Platforms	All

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>string</i> default-action as-path
Tree	as-path
Introduced	16.0.R1

Platforms All

add (*param-midstring* | *string*)

Synopsis AS path to add

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path](#) **add** (*param-midstring* | *string*)

Tree [add](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 16.0.R1

Platforms All

replace (*param-midstring* | *string*)

Synopsis AS path to replace

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path](#) **replace** (*param-midstring* | *string*)

Tree [replace](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 16.0.R1

Platforms All

as-path-prepend

Synopsis Enter the **as-path-prepend** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path-prepend](#)

Tree [as-path-prepend](#)

Introduced 16.0.R1

Platforms All

as-path (*number* | *string* | *keyword*)

Synopsis AS number to prepend to the AS path attribute

Context	configure policy-options policy-statement <i>string</i> default-action as-path-prepend as-path (<i>number</i> <i>string</i> <i>keyword</i>)
Tree	as-path
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	16.0.R1
Platforms	All

repeat (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	configure policy-options policy-statement <i>string</i> default-action as-path-prepend repeat (<i>number</i> <i>string</i>)
Tree	repeat
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	16.0.R1
Platforms	All

bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	configure policy-options policy-statement <i>string</i> default-action bgp-high-priority <i>boolean</i>
Tree	bgp-high-priority
Description	<p>When configured to true, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> • IPv4 • label-IPv4 • IPv6 • label-IPv6 <p>This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.</p>

When configured to **false**, no routes are tagged for faster route table updates.

Default	false
Introduced	20.5.R1
Platforms	All

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	configure policy-options policy-statement <i>string</i> default-action bgp-leak <i>boolean</i>
Tree	bgp-leak
Default	false
Introduced	16.0.R1
Platforms	All

bgp-med

Synopsis	Enter the bgp-med context
Context	configure policy-options policy-statement <i>string</i> default-action bgp-med
Tree	bgp-med
Introduced	19.7.R1
Platforms	All

adjust *string*

Synopsis	BGP-MED adjustment
Context	configure policy-options policy-statement <i>string</i> default-action bgp-med adjust <i>string</i>
Tree	adjust
String Length	1 to 64
Notes	The following elements are part of a choice: adjust or set .
Introduced	19.7.R1
Platforms	All

set (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
----------	--------------------

Context	configure policy-options policy-statement <i>string</i> default-action bgp-med set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: adjust or set .
Introduced	19.7.R1
Platforms	All

bgp-tunnel-metric

Synopsis	Enter the bgp-tunnel-metric context
Context	configure policy-options policy-statement <i>string</i> default-action bgp-tunnel-metric
Tree	bgp-tunnel-metric
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All

prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>string</i> default-action bgp-tunnel-metric prefer-aigp <i>boolean</i>
Tree	prefer-aigp
Description	<p>When configured to true, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to false, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false
Introduced	20.5.R1
Platforms	All

value (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	configure policy-options policy-statement <i>string</i> default-action bgp-tunnel-metric <i>value</i> (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> the prefer-aigp option is set to false the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute
String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>string</i> default-action community
Tree	community
Introduced	16.0.R1
Platforms	All

add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	configure policy-options policy-statement <i>string</i> default-action community add (<i>param-midstring-64</i> <i>string</i>)
Tree	add
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.

Introduced 16.0.R1
Platforms All

remove (*param-midstring-64* | *string*)

Synopsis List of community names to remove
Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [community](#) [remove](#)
(*param-midstring-64* | *string*)
Tree [remove](#)
String Length 1 to 64
Max. 28
Instances
Notes The following elements are part of a choice: (**add** and **remove**) or **replace**.
This element is ordered by the user.
Introduced 16.0.R1
Platforms All

replace (*param-midstring-64* | *string*)

Synopsis List of community names to replace
Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [community](#) [replace](#)
(*param-midstring-64* | *string*)
Tree [replace](#)
String Length 1 to 64
Max. 28
Instances
Notes The following elements are part of a choice: (**add** and **remove**) or **replace**.
This element is ordered by the user.
Introduced 16.0.R1
Platforms All

create-mpls-tunnel *boolean*

Synopsis Create an MPLS tunnel
Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [create-mpls-tunnel](#)
boolean

Tree	create-mpls-tunnel
Description	When configured to true , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> • evpn • ipv4 • ipv6 • label-ipv4 • label-ipv6 • vpn-ipv4 • vpn-ipv6
Default	false
Introduced	21.10.R1
Platforms	All

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	configure policy-options policy-statement <i>string</i> default-action create-udp-tunnel <i>boolean</i>
Tree	create-udp-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

damping (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	configure policy-options policy-statement <i>string</i> default-action damping (<i>keyword</i> <i>param-midstring</i> <i>string</i>)
Tree	damping
String Length	1 to 32
Options	none
Introduced	16.0.R1
Platforms	All

dest-class *number*

Synopsis	Default destination class for the policy statement
Context	configure policy-options policy-statement <i>string</i> default-action dest-class <i>number</i>
Tree	dest-class
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

egress-statistics *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	configure policy-options policy-statement <i>string</i> default-action egress-statistics <i>boolean</i>
Tree	egress-statistics
Description	When configured to true , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths. When configured to false , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

flex-algo (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	configure policy-options policy-statement <i>string</i> default-action flex-algo (<i>string</i> <i>number</i>)
Tree	flex-algo
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry. Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU. This command is not supported for multicast address families.
String Length	1 to 32
Range	128 to 255

Introduced 20.10.R1
Platforms All

ingress-statistics *boolean*

Synopsis Enable ingress statistics for BGP-LU routes
Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [ingress-statistics](#) *boolean*
Tree [ingress-statistics](#)
Description When configured to **true**, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.
When configured to **false**, this command disables the allocation of statistical indexes to BGP-LU route entries.
Default false
Introduced 20.10.R1
Platforms All

install-backup-path *boolean*

Synopsis Install a preprogrammed backup path for the prefix
Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [install-backup-path](#) *boolean*
Tree [install-backup-path](#)
Default false
Introduced 16.0.R1
Platforms All

local-preference (*number* | *string*)

Synopsis BGP local preference for routes not matching any entry
Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [local-preference](#) (*number* | *string*)
Tree [local-preference](#)
String Length 1 to 32
Range 0 to 4294967295
Introduced 16.0.R1

Platforms All

metric

Synopsis Enter the **metric** context
Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [metric](#)
Tree [metric](#)
Introduced 16.0.R1
Platforms All

add (*number* | *string*)

Synopsis Metric to add
Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [metric](#) [add](#) (*number* | *string*)
Tree [add](#)
String Length 1 to 32
Range 0 to 4294967295
Notes The following elements are part of a choice: **add**, **set**, or **subtract**.
Introduced 16.0.R1
Platforms All

set (*number* | *string*)

Synopsis Metric to assign
Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [metric](#) [set](#) (*number* | *string*)
Tree [set](#)
String Length 1 to 32
Range 0 to 4294967295
Notes The following elements are part of a choice: **add**, **set**, or **subtract**.
Introduced 16.0.R1
Platforms All

subtract (*number* | *string*)

Synopsis	Metric to subtract
Context	configure policy-options policy-statement <i>string</i> default-action metric subtract (<i>number</i> <i>string</i>)
Tree	subtract
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	16.0.R1
Platforms	All

multicast-redirect

Synopsis	Enter the multicast-redirect context
Context	configure policy-options policy-statement <i>string</i> default-action multicast-redirect
Tree	multicast-redirect
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *string*

Synopsis	Service ID for multicast redirection
Context	configure policy-options policy-statement <i>string</i> default-action multicast-redirect fwd-service <i>string</i>
Tree	fwd-service
Default	Base
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis	Alternate interface where IGMP messages are redirected
Context	configure policy-options policy-statement <i>string</i> default-action multicast-redirect ip-int-name <i>string</i>
Tree	ip-int-name
String Length	1 to 32

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-policy (*param-midstring* | *string*)

Synopsis	BGP-VPN imported route and a NAT policy association
Context	configure policy-options policy-statement <i>string</i> default-action nat-policy (<i>param-midstring</i> <i>string</i>)
Tree	nat-policy
Description	<p>This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type accept regardless of whether the NAT policy is configured in the action.</p>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Synopsis	Next-hop IP address applied to routes
Context	configure policy-options policy-statement <i>string</i> default-action next-hop (<i>keyword</i> <i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>string</i>)
Tree	next-hop
String Length	1 to 32
Options	peer-address, self
Introduced	16.0.R1
Platforms	All

origin (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	configure policy-options policy-statement <i>string</i> default-action origin (<i>keyword</i> <i>string</i>)

Tree	origin
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	16.0.R1
Platforms	All

origin-validation-state (*keyword* | *string*)

Synopsis	Origin validation state for routes
Context	configure policy-options policy-statement <i>string</i> default-action origin-validation-state (<i>keyword</i> <i>string</i>)
Tree	origin-validation-state
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

preference (*number* | *string*)

Synopsis	Route preference applied to routes
Context	configure policy-options policy-statement <i>string</i> default-action preference (<i>number</i> <i>string</i>)
Tree	preference
String Length	1 to 32
Range	1 to 255
Introduced	16.0.R1
Platforms	All

resolve-static *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	configure policy-options policy-statement <i>string</i> default-action resolve-static <i>boolean</i>
Tree	resolve-static
Default	false
Introduced	16.0.R1

Platforms All

route-table-install *boolean*

Synopsis Allow BGP route installation in the route table

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [route-table-install](#) *boolean*

Tree [route-table-install](#)

Default true

Introduced 19.10.R1

Platforms All

source-class *number*

Synopsis Default source class for the policy statement

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [source-class](#) *number*

Tree [source-class](#)

Description This command specifies the policy accounting source class index to associate with matched routes.

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

sr-label-index

Synopsis Enter the **sr-label-index** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [sr-label-index](#)

Tree [sr-label-index](#)

Description Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.

The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.

This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.

When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.

Introduced	19.10.R1
Platforms	All

prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	configure policy-options policy-statement <i>string</i> default-action sr-label-index prefer-igp <i>boolean</i>
Tree	prefer-igp
Description	<p>When configured to true, BGP obtains the SID index from the IGP route (if a SID index is present) and the configure router bgp segment-routing prefix-sid-range global command is set to true.</p> <p>This command applies only to route table import policies.</p> <p>When configured to false, or the SID index is not present in the IGP route, or the configure router bgp segment-routing prefix-sid-range global command is not set to true, BGP obtains the label index value from the value command.</p>
Default	false
Introduced	19.10.R1
Platforms	All

value (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	configure policy-options policy-statement <i>string</i> default-action sr-label-index value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

sr-maintenance-policy (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	configure policy-options policy-statement <i>string</i> default-action sr-maintenance-policy (<i>param-midstring</i> <i>string</i>)
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	configure policy-options policy-statement <i>string</i> default-action sticky-ecmp <i>boolean</i>
Tree	sticky-ecmp
Default	false
Introduced	16.0.R1
Platforms	All

tag (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	configure policy-options policy-statement <i>string</i> default-action tag (<i>number</i> <i>string</i>)
Tree	tag
String Length	1 to 32
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

type (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	configure policy-options policy-statement <i>string</i> default-action type (<i>number</i> <i>string</i>)
Tree	type

String Length	1 to 32
Range	1 to 2
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure policy-options policy-statement <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	Entry ID for a route policy entry
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i>
Tree	entry
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the action context
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	All

action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action action-type <i>keyword</i>
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

add-paths-send-limit (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action add-paths-send-limit (<i>number</i> <i>keyword</i>)
Tree	add-paths-send-limit
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

admin-tag-policy (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action admin-tag-policy (<i>param-midstring-64</i> <i>string</i>)
Tree	admin-tag-policy
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action advertise-label <i>keyword</i>
Tree	advertise-label
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	16.0.R1
Platforms	All

aigp-metric

Synopsis	Enter the aigp-metric context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action aigp-metric
Tree	aigp-metric
Introduced	16.0.R1
Platforms	All

add (*number* | *string*)

Synopsis	AIGP metric to add
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action aigp-metric add (<i>number</i> <i>string</i>)
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add or set .
Introduced	16.0.R1
Platforms	All

set (*keyword* | *number* | *string*)

Synopsis	AIGP metric
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action aigp-metric set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: add or set .
Introduced	16.0.R1
Platforms	All

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path
Tree	as-path
Introduced	16.0.R1
Platforms	All

add (*param-midstring* | *string*)

Synopsis	AS path to add
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path add (<i>param-midstring</i> <i>string</i>)
Tree	add
String Length	1 to 32
Notes	The following elements are part of a choice: add or replace .
Introduced	16.0.R1
Platforms	All

replace (*param-midstring* | *string*)

Synopsis	AS path to replace
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path replace (<i>param-midstring</i> <i>string</i>)
Tree	replace
String Length	1 to 32

Notes	The following elements are part of a choice: add or replace .
Introduced	16.0.R1
Platforms	All

as-path-prepend

Synopsis	Enter the as-path-prepend context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path-prepend
Tree	as-path-prepend
Introduced	16.0.R1
Platforms	All

as-path (*number* | *string* | *keyword*)

Synopsis	AS number to prepend to the AS path attribute
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path-prepend as-path (<i>number</i> <i>string</i> <i>keyword</i>)
Tree	as-path
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	16.0.R1
Platforms	All

repeat (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path-prepend repeat (<i>number</i> <i>string</i>)
Tree	repeat
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	16.0.R1
Platforms	All

bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-high-priority <i>boolean</i>
Tree	bgp-high-priority
Description	<p>When configured to true, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> • IPv4 • label-IPv4 • IPv6 • label-IPv6 <p>This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.</p> <p>When configured to false, no routes are tagged for faster route table updates.</p>
Default	false
Introduced	20.5.R1
Platforms	All

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-leak <i>boolean</i>
Tree	bgp-leak
Default	false
Introduced	16.0.R1
Platforms	All

bgp-med

Synopsis	Enter the bgp-med context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-med
Tree	bgp-med
Introduced	19.7.R1

Platforms All

adjust *string*

Synopsis BGP-MED adjustment

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [bgp-med](#) [adjust](#) *string*

Tree [adjust](#)

String Length 1 to 64

Notes The following elements are part of a choice: **adjust** or **set**.

Introduced 19.7.R1

Platforms All

set (*keyword* | *number* | *string*)

Synopsis BGP-MED assignment

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [bgp-med](#) [set](#) (*keyword* | *number* | *string*)

Tree [set](#)

String Length 1 to 32

Range 0 to 4294967295

Options [igp](#), [min-igp](#)

Notes The following elements are part of a choice: **adjust** or **set**.

Introduced 19.7.R1

Platforms All

bgp-tunnel-metric

Synopsis Enter the **bgp-tunnel-metric** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [bgp-tunnel-metric](#)

Tree [bgp-tunnel-metric](#)

Description Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.

Introduced 20.5.R1

Platforms All

prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-tunnel-metric prefer-aigp <i>boolean</i>
Tree	prefer-aigp
Description	<p>When configured to true, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to false, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false
Introduced	20.5.R1
Platforms	All

value (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-tunnel-metric value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> the prefer-aigp option is set to false the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute
String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

community

Synopsis	Enter the community context
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action community
Tree	community
Introduced	16.0.R1
Platforms	All

add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action community add (<i>param-midstring-64</i> <i>string</i>)
Tree	add
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

remove (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action community remove (<i>param-midstring-64</i> <i>string</i>)
Tree	remove
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

replace (*param-midstring-64* | *string*)

Synopsis	List of community names to replace
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action community replace (<i>param-midstring-64</i> <i>string</i>)
Tree	replace
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

create-mpls-tunnel *boolean*

Synopsis	Create an MPLS tunnel
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action create-mpls-tunnel <i>boolean</i>
Tree	create-mpls-tunnel
Description	When configured to true , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> • evpn • ipv4 • ipv6 • label-ipv4 • label-ipv6 • vpn-ipv4 • vpn-ipv6
Default	false
Introduced	21.10.R1
Platforms	All

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action create-udp-tunnel <i>boolean</i>
Tree	create-udp-tunnel

Default	false
Introduced	16.0.R1
Platforms	All

damping (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action damping (<i>keyword</i> <i>param-midstring</i> <i>string</i>)
Tree	damping
String Length	1 to 32
Options	none
Introduced	16.0.R1
Platforms	All

dest-class *number*

Synopsis	Default destination class for the policy statement
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action dest-class <i>number</i>
Tree	dest-class
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

egress-statistics *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action egress-statistics <i>boolean</i>
Tree	egress-statistics
Description	When configured to true , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths. When configured to false , this command disables the allocation of statistical indexes to BGP-LU route entries.

Default	false
Introduced	20.10.R1
Platforms	All

flex-algo (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action flex-algo (<i>string</i> <i>number</i>)
Tree	flex-algo
Description	<p>This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry.</p> <p>Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU.</p> <p>This command is not supported for multicast address families.</p>
String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

forwarding-class

Synopsis	Enter the forwarding-class context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action forwarding-class
Tree	forwarding-class
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class associated with the route
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action forwarding-class fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis Route priority

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [forwarding-class](#) [priority](#) *keyword*

Tree [priority](#)

Options low, high

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress-statistics *boolean*

Synopsis Enable ingress statistics for BGP-LU routes

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [ingress-statistics](#) *boolean*

Tree [ingress-statistics](#)

Description When configured to **true**, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.

When configured to **false**, this command disables the allocation of statistical indexes to BGP-LU route entries.

Default false

Introduced 20.10.R1

Platforms All

install-backup-path *boolean*

Synopsis Install a preprogrammed backup path for the prefix

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [install-backup-path](#) *boolean*

Tree [install-backup-path](#)

Default false

Introduced 16.0.R1

Platforms All

local-preference (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action local-preference (<i>number</i> <i>string</i>)
Tree	local-preference
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action metric
Tree	metric
Introduced	16.0.R1
Platforms	All

add (*number* | *string*)

Synopsis	Metric to add
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action metric add (<i>number</i> <i>string</i>)
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	16.0.R1
Platforms	All

set (*number* | *string*)

Synopsis	Metric to assign
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action metric set (<i>number</i> <i>string</i>)

Tree	set
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	16.0.R1
Platforms	All

subtract (*number* | *string*)

Synopsis	Metric to subtract
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action metric subtract (<i>number</i> <i>string</i>)
Tree	subtract
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	16.0.R1
Platforms	All

multicast-redirect

Synopsis	Enter the multicast-redirect context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action multicast-redirect
Tree	multicast-redirect
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *string*

Synopsis	Service ID for multicast redirection
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action multicast-redirect fwd-service <i>string</i>
Tree	fwd-service
Default	Base
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis Alternate interface where IGMP messages are redirected

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [multicast-redirect](#) [ip-int-name](#) *string*

Tree [ip-int-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-policy (*param-midstring* | *string*)

Synopsis BGP-VPN imported route and a NAT policy association

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [nat-policy](#) (*param-midstring* | *string*)

Tree [nat-policy](#)

Description This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.

A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.

All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type **accept** regardless of whether the NAT policy is configured in the action.

String Length 1 to 32

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Synopsis Next-hop IP address applied to routes

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [next-hop](#) (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Tree [next-hop](#)

String Length	1 to 32
Options	peer-address, self
Introduced	16.0.R1
Platforms	All

origin (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action origin (<i>keyword</i> <i>string</i>)
Tree	origin
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	16.0.R1
Platforms	All

origin-validation-state (*keyword* | *string*)

Synopsis	Origin validation state for routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action origin-validation-state (<i>keyword</i> <i>string</i>)
Tree	origin-validation-state
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

preference (*number* | *string*)

Synopsis	Route preference applied to routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action preference (<i>number</i> <i>string</i>)
Tree	preference
String Length	1 to 32
Range	1 to 255
Introduced	16.0.R1

Platforms All

resolve-static *boolean*

Synopsis Resolve next hop of a static route for the BGP next hop

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [resolve-static](#) *boolean*

Tree [resolve-static](#)

Default false

Introduced 16.0.R1

Platforms All

route-table-install *boolean*

Synopsis Allow BGP route installation in the route table

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [route-table-install](#) *boolean*

Tree [route-table-install](#)

Default true

Introduced 19.10.R1

Platforms All

source-class *number*

Synopsis Default source class for the policy statement

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [source-class](#) *number*

Tree [source-class](#)

Description This command specifies the policy accounting source class index to associate with matched routes.

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

sr-label-index

Synopsis	Enter the sr-label-index context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action sr-label-index
Tree	sr-label-index
Description	<p>Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.</p> <p>The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.</p> <p>This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.</p> <p>When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.</p>
Introduced	19.10.R1
Platforms	All

prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action sr-label-index prefer-igp <i>boolean</i>
Tree	prefer-igp
Description	<p>When configured to true, BGP obtains the SID index from the IGP route (if a SID index is present) and the configure router bgp segment-routing prefix-sid-range global command is set to true.</p> <p>This command applies only to route table import policies.</p> <p>When configured to false, or the SID index is not present in the IGP route, or the configure router bgp segment-routing prefix-sid-range global command is not set to true, BGP obtains the label index value from the value command.</p>
Default	false
Introduced	19.10.R1
Platforms	All

value (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action sr-label-index value (<i>string</i> <i>number</i>)

Tree	value
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

sr-maintenance-policy (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action sr-maintenance-policy (<i>param-midstring</i> <i>string</i>)
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action sticky-ecmp <i>boolean</i>
Tree	sticky-ecmp
Default	false
Introduced	16.0.R1
Platforms	All

tag (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action tag (<i>number</i> <i>string</i>)
Tree	tag
String Length	1 to 32
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

type (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action type (<i>number</i> <i>string</i>)
Tree	type
String Length	1 to 32
Range	1 to 2
Introduced	16.0.R1
Platforms	All

conditional-expression

Synopsis	Enable the conditional-expression context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> conditional-expression
Tree	conditional-expression
Introduced	16.0.R1
Platforms	All

route-exists *string*

Synopsis	Conditional expression to test route existence
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> conditional-expression route-exists <i>string</i>
Tree	route-exists
String Length	1 to 255

Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

from

Synopsis	Enable the from context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from
Tree	from
Description	Commands in this context configure policy match criteria based on the route's source or the protocol from which it is received. If conditions are not specified, all route sources are considered to match.
Introduced	16.0.R1
Platforms	All

aggregate-contributor *boolean*

Synopsis	Enable aggregate route match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from aggregate-contributor <i>boolean</i>
Tree	aggregate-contributor
Description	<p>When configured to true, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor.</p> <p>This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, vrf-export policy or vrf-import policy, no routes are matched by that entry.</p>

When configured to **false**, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.

Default	false
Introduced	20.10.R1
Platforms	All

area string

Synopsis	OSPF area as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from area <i>string</i>
Tree	area
Introduced	16.0.R1
Platforms	All

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path
Tree	as-path
Introduced	16.0.R1
Platforms	All

group (*param-midstring* | *string*)

Synopsis	AS path group as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path group (<i>param-midstring</i> <i>string</i>)
Tree	group
String Length	1 to 32
Notes	The following elements are part of a choice: group or name .
Introduced	16.0.R1
Platforms	All

length

Synopsis	Enter the length context
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path length
Tree	length
Introduced	16.0.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path length qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	16.0.R1
Platforms	All

unique *boolean*

Synopsis	Use unique AS numbers as matching criteria
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path length unique <i>boolean</i>
Tree	unique
Default	false
Introduced	16.0.R1
Platforms	All

value (*number* | *string*)

Synopsis	AS numbers in the AS path that match on the BGP route
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path length value (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 255
Introduced	16.0.R1
Platforms	All

name (*param-midstring* | *string*)

Synopsis	AS path name to match
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path <i>name</i> (<i>param-midstring</i> <i>string</i>)
Tree	name
Description	This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 32
Notes	The following elements are part of a choice: group or name .
Introduced	16.0.R1
Platforms	All

cluster-id

Synopsis	Enter the cluster-id context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from cluster-id
Tree	cluster-id
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	Cluster list attribute IP addresses for route matching
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from cluster-id ip-address <i>string</i>
Tree	ip-address
Max. Instances	5
Notes	The following elements are part of a choice: ip-address or none-cluster-list . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

none-cluster-list *boolean*

Synopsis	Specify matching BGP routes without a cluster ID
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from cluster-id none-cluster-list <i>boolean</i>
Tree	none-cluster-list
Default	false
Notes	The following elements are part of a choice: ip-address or none-cluster-list .
Introduced	16.0.R1
Platforms	All

color *number*

Synopsis	Color ID as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from color <i>number</i>
Tree	color
Description	This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from community
Tree	community
Introduced	16.0.R1
Platforms	All

count

Synopsis	Enter the count context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from community count
Tree	count
Introduced	16.0.R1

Platforms All

qualifier *keyword*

Synopsis Higher or lower values to be accepted as match criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [community](#) [count](#) **qualifier** *keyword*

Tree [qualifier](#)

Default equal

Options equal, or-higher, or-lower

Introduced 16.0.R1

Platforms All

type *keyword*

Synopsis Community count to match the community count criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [community](#) [count](#) **type** *keyword*

Tree [type](#)

Options standard, extended, large

Introduced 16.0.R1

Platforms All

value (*number* | *string*)

Synopsis Number of BGP communities to match the BGP route

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [community](#) [count](#) **value** (*number* | *string*)

Tree [value](#)

String Length 1 to 32

Range 0 to 1024

Introduced 16.0.R1

Platforms All

expression string

Synopsis	Community expression name as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from community expression <i>string</i>
Tree	expression
String Length	1 to 900
Notes	The following elements are part of a choice: expression or name .
Introduced	16.0.R1
Platforms	All

name (*param-midstring-64* | *string*)

Synopsis	Community list name
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from community name (<i>param-midstring-64</i> <i>string</i>)
Tree	name
String Length	1 to 64
Notes	The following elements are part of a choice: expression or name .
Introduced	16.0.R1
Platforms	All

distinguisher number

Synopsis	SR policy distinguisher as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from distinguisher <i>number</i>
Tree	distinguisher
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

endpoint (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	SR policy endpoint address as a match criterion
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from endpoint (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	endpoint
Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	20.10.R1
Platforms	All

evpn-type *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from evpn-type <i>keyword</i>
Tree	evpn-type
Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync
Introduced	16.0.R4
Platforms	All

external *boolean*

Synopsis	Specify the external IS-IS route as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from external <i>boolean</i>
Tree	external
Default	false
Introduced	16.0.R1
Platforms	All

family *keyword*

Synopsis	Address family as the match condition
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from family <i>keyword</i>
Tree	family
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6

Max. Instances	20
Introduced	16.0.R1
Platforms	All

flowspec

Synopsis	Enter the flowspec context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from flowspec
Tree	flowspec
Introduced	16.0.R4
Platforms	All

dest (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per destination IP prefix
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from flowspec dest (<i>param-midstring</i> <i>string</i>)
Tree	dest
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

source (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per the source IP prefix
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from flowspec source (<i>param-midstring</i> <i>string</i>)
Tree	source
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

group-address (*param-midstring* | *string*)

Synopsis	Prefix list of multicast group addresses for mathcing
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from group-address (<i>param-midstring</i> <i>string</i>)
Tree	group-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

host-ip (*param-midstring* | *string*)

Synopsis	Prefix list of IGMP host IP addresses for matching
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from host-ip (<i>param-midstring</i> <i>string</i>)
Tree	host-ip
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

interface (*named-item* | *interface-name* | *interface-name* | *interface-name*)

Synopsis	Interface name as match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from interface (<i>named-item</i> <i>interface-name</i> <i>interface-name</i> <i>interface-name</i>)
Tree	interface
String Length	1 to 32
Max. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface-subnets

Synopsis	Enter the interface-subnets context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from interface-subnets
Tree	interface-subnets

Description	<p>Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol.</p> <p>The interface subnet policy statement match criterion is applied to the following unicast use case contexts:</p> <ul style="list-style-type: none"> • export, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP • route-table-import, when used with BGP • vrf-export, when used with MP-BGP
Introduced	21.2.R1
Platforms	All

ip-int-name *string*

Synopsis	Interface name as the match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from interface-subnets ip-int-name <i>string</i>
Tree	ip-int-name
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.
String Length	1 to 32
Max. Instances	10
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

service *string*

Synopsis	Service ID of the interface subnets
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from interface-subnets service <i>string</i>
Tree	service
Default	Base
Introduced	21.2.R1
Platforms	All

level *number*

Synopsis	IS-IS route level as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from level <i>number</i>
Tree	level
Range	1 to 2
Introduced	16.0.R1
Platforms	All

local-preference

Synopsis	Enter the local-preference context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from local-preference
Tree	local-preference
Introduced	16.0.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from local-preference qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	16.0.R1
Platforms	All

value (*number* | *string*)

Synopsis	BGP routes per local preference value or variable name
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from local-preference value (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 4294967295

Introduced 16.0.R1
Platforms All

metric

Synopsis Enter the **metric** context
Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [metric](#)
Tree [metric](#)
Introduced 16.0.R1
Platforms All

qualifier *keyword*

Synopsis Higher or lower values to be accepted as match criteria
Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [metric](#) [qualifier](#) *keyword*
Tree [qualifier](#)
Default equal
Options equal, or-higher, or-lower
Introduced 16.0.R1
Platforms All

value (*number* | *string*)

Synopsis Local preference value or variable name
Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [metric](#) [value](#) (*number* | *string*)
Tree [value](#)
String Length 1 to 32
Range 0 to 4294967295
Introduced 16.0.R1
Platforms All

mvpn-type *keyword*

Synopsis MVPN type as a match criterion for the entry

Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from mvpn-type <i>keyword</i>
Tree	mvpn-type
Options	intra-as-ipmsi-auto-discovery, inter-as-ipmsi-auto-discovery, s-pmsi-auto-discovery, intra-as-segment-leaf-auto-discovery, source-active-auto-discovery, shared-tree-join, source-tree-join
Introduced	16.0.R1
Platforms	All

neighbor

Synopsis	Enter the neighbor context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from neighbor
Tree	neighbor
Introduced	16.0.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from neighbor ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Name to match the neighbor prefix list
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from neighbor prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1

Platforms All

next-hop

Synopsis Enter the **next-hop** context
Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from next-hop](#)
Tree [next-hop](#)
Introduced 16.0.R1
Platforms All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the next hop to match
Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from next-hop ip-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [ip-address](#)
Notes The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced 16.0.R1
Platforms All

prefix-list (*param-midstring* | *string*)

Synopsis Name of a next hop prefix list to match
Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from next-hop prefix-list](#) (*param-midstring* | *string*)
Tree [prefix-list](#)
String Length 1 to 32
Notes The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced 16.0.R1
Platforms All

origin *keyword*

Synopsis Route origin match criteria
Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from origin](#) *keyword*
Tree [origin](#)

Description	<p>This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes:</p> <p>Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the sub-mgmt option for the protocol command.</p> <p>Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the direct option for the protocol command.</p> <p>Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the direct option for the protocol command.</p> <p>Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the managed option for the protocol command.</p> <p>The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.</p>
Options	igp, egp, incomplete, any, aaa, dynamic, static, bonding, pfcp
Introduced	16.0.R1
Platforms	All

origin-validation-state *keyword*

Synopsis	Origin validation state used for match criteria
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from origin-validation-state <i>keyword</i>
Tree	origin-validation-state
Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

ospf-type *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from ospf-type <i>number</i>
Tree	ospf-type

Range	1 to 2
Introduced	16.0.R1
Platforms	All

path-type *keyword*

Synopsis	Path type as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from path-type <i>keyword</i>
Tree	path-type
Options	ibgp, ebgp
Introduced	16.0.R1
Platforms	All

policy (*string* | *string*)

Synopsis	Policy statement as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy (<i>string</i> <i>string</i>)
Tree	policy
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

policy-variables

Synopsis	Enter the policy-variables context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables
Tree	policy-variables
Introduced	16.0.R1
Platforms	All

name [[variable-name](#)] *string*

Synopsis	Enter the name list instance
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables name <i>string</i>

Tree	name
Max. Instances	10
Introduced	16.0.R1
Platforms	All

[variable-name] *string*

Synopsis	Global variable name used to reference policy functions
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables name <i>string</i>
Tree	name
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the policy variable
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables name <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	16.0.R1
Platforms	All

decimal *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables name <i>string</i> decimal <i>decimal-number</i>
Tree	decimal
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .

Introduced 19.7.R1
Platforms All

number *number*

Synopsis Numerical value of the policy variable
Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [policy-variables](#)
name *string* *number* *number*
Tree [number](#)
Range 0 to 4294967295
Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.
Introduced 16.0.R1
Platforms All

value *string*

Synopsis Policy variable value
Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [policy-variables](#)
name *string* *value* *string*
Tree [value](#)
String Length 1 to 32
Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.
Introduced 16.0.R1
Platforms All

prefix-list (*param-midstring* | *string*)

Synopsis Prefix list as match criterion
Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [prefix-list](#) (*param-midstring* | *string*)
Tree [prefix-list](#)
String Length 1 to 32
Max. Instances 28
Notes This element is ordered by the user.

Introduced	16.0.R1
Platforms	All

protocol

Synopsis	Enter the protocol context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from protocol
Tree	protocol
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.
Introduced	16.0.R1
Platforms	All

instance (*keyword* | *number*)

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from protocol instance (<i>keyword</i> <i>number</i>)
Tree	instance
Description	This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion. When this command is explicitly configured, the name command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).
Range	0 to 127
Default	0
Options	all
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	List of protocol names as the match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from protocol name <i>keyword</i>
Tree	name
Description	This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set:

- direct
- static
- isis
- aggregate
- bgp
- bgp-label
- direct-interface

If multiple protocols are specified, the **instance** command cannot be explicitly configured.

Options	direct, static, bgp, isis, ospf, rip, aggregate, bgp-vpn, igmp, pim, ospf3, ldp, sub-mgmt, mld, managed, vpn-leak, nat, periodic, ipsec, dhcpv6-pd, dhcpv6-na, dhcpv6-ta, dhcpv6-pd-excl, ripng, bgp-label, direct-interface, arp-nd, rib-api, dhcp-client, evpn-ifl, srv6, video
Max. Instances	5
Introduced	16.0.R1
Platforms	All

source-address

Synopsis	Enter the source-address context
Context	configure policy-options policy-statement <i>string</i> entry number from source-address
Tree	source-address
Introduced	16.0.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address to match
Context	configure policy-options policy-statement <i>string</i> entry number from source-address ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Name of a source address prefix list to match
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from source-address prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1
Platforms	All

state *keyword*

Synopsis	State used as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from state <i>keyword</i>
Tree	state
Description	This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.
Options	srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag (*number* | *keyword*)

Synopsis	Route tag used as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from tag (<i>number</i> <i>keyword</i>)
Tree	tag
Range	1 to 4294967295
Options	no-tag
Introduced	16.0.R1
Platforms	All

to

Synopsis	Enable the to context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to
Tree	to
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	IS-IS route level as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to level <i>number</i>
Tree	level
Range	1 to 2
Introduced	16.0.R1
Platforms	All

neighbor

Synopsis	Enter the neighbor context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to neighbor
Tree	neighbor
Introduced	16.0.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to neighbor ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Name to match the neighbor prefix list
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to neighbor prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Prefix list as match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

protocol

Synopsis	Enter the protocol context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to protocol
Tree	protocol
Introduced	16.0.R1
Platforms	All

instance (*keyword* | *number*)

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to protocol instance (<i>keyword</i> <i>number</i>)
Tree	instance
Range	0 to 127
Default	0
Options	all
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	Protocol name to match
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to protocol name <i>keyword</i>
Tree	name
Options	bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ift
Max. Instances	2
Introduced	16.0.R1
Platforms	All

entry-type *keyword*

Synopsis	The entry type for a route policy entry
Context	configure policy-options policy-statement <i>string</i> entry-type <i>keyword</i>
Tree	entry-type
Default	numbered
Options	numbered, named
Introduced	19.10.R1
Platforms	All

named-entry [[entry-name](#)] *string*

Synopsis	Enter the named-entry list instance
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i>
Tree	named-entry

Max. Instances	16384
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

[entry-name] *string*

Synopsis	Route policy entry name
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i>
Tree	named-entry
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

action

Synopsis	Enable the action context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action
Tree	action
Introduced	19.10.R1
Platforms	All

action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action action-type <i>keyword</i>
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

add-paths-send-limit (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action add-paths-send-limit (<i>number</i> <i>keyword</i>)
Tree	add-paths-send-limit
Range	1 to 16
Options	multipaths
Introduced	19.10.R1
Platforms	All

admin-tag-policy (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action admin-tag-policy (<i>param-midstring-64</i> <i>string</i>)
Tree	admin-tag-policy
String Length	1 to 64
Introduced	19.10.R1
Platforms	All

advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action advertise-label <i>keyword</i>
Tree	advertise-label
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	19.10.R1
Platforms	All

aigp-metric

Synopsis	Enter the aigp-metric context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action aigp-metric

Tree	aigp-metric
Introduced	19.10.R1
Platforms	All

add (*number* | *string*)

Synopsis	AIGP metric to add
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action aigp-metric add (<i>number</i> <i>string</i>)
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add or set .
Introduced	19.10.R1
Platforms	All

set (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action aigp-metric set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: add or set .
Introduced	19.10.R1
Platforms	All

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action as-path
Tree	as-path
Introduced	19.10.R1

Platforms All

add (*param-midstring* | *string*)

Synopsis AS path to add

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action as-path add](#) (*param-midstring* | *string*)

Tree [add](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 19.10.R1

Platforms All

replace (*param-midstring* | *string*)

Synopsis AS path to replace

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action as-path replace](#) (*param-midstring* | *string*)

Tree [replace](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 19.10.R1

Platforms All

as-path-prepend

Synopsis Enter the **as-path-prepend** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action as-path-prepend](#)

Tree [as-path-prepend](#)

Introduced 19.10.R1

Platforms All

as-path (*number* | *string* | *keyword*)

Synopsis AS number to prepend to the AS path attribute

Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action as-path-prepend as-path (<i>number</i> <i>string</i> <i>keyword</i>)
Tree	as-path
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	19.10.R1
Platforms	All

repeat (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action as-path-prepend repeat (<i>number</i> <i>string</i>)
Tree	repeat
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	19.10.R1
Platforms	All

bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-high-priority <i>boolean</i>
Tree	bgp-high-priority
Description	<p>When configured to true, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> • IPv4 • label-IPv4 • IPv6 • label-IPv6

This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.

When configured to **false**, no routes are tagged for faster route table updates.

Default	false
Introduced	20.5.R1
Platforms	All

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-leak <i>boolean</i>
Tree	bgp-leak
Default	false
Introduced	19.10.R1
Platforms	All

bgp-med

Synopsis	Enter the bgp-med context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-med
Tree	bgp-med
Introduced	19.10.R1
Platforms	All

adjust *string*

Synopsis	BGP-MED adjustment
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-med adjust <i>string</i>
Tree	adjust
String Length	1 to 64
Notes	The following elements are part of a choice: adjust or set .
Introduced	19.10.R1
Platforms	All

set (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-med set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: adjust or set .
Introduced	19.10.R1
Platforms	All

bgp-tunnel-metric

Synopsis	Enter the bgp-tunnel-metric context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-tunnel-metric
Tree	bgp-tunnel-metric
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All

prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-tunnel-metric prefer-aigp <i>boolean</i>
Tree	prefer-aigp
Description	<p>When configured to true, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to false, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false

Introduced	20.5.R1
Platforms	All

value (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-tunnel-metric value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> • the prefer-aigp option is set to false • the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute
String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action community
Tree	community
Introduced	19.10.R1
Platforms	All

add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action community add (<i>param-midstring-64</i> <i>string</i>)
Tree	add
String Length	1 to 64

Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

remove (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action community remove (<i>param-midstring-64</i> <i>string</i>)
Tree	remove
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

replace (*param-midstring-64* | *string*)

Synopsis	List of community names to replace
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action community replace (<i>param-midstring-64</i> <i>string</i>)
Tree	replace
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

create-mpls-tunnel *boolean*

Synopsis	Create an MPLS tunnel
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action create-mpls-tunnel <i>boolean</i>
Tree	create-mpls-tunnel
Description	When configured to true , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> • evpn • ipv4 • ipv6 • label-ipv4 • label-ipv6 • vpn-ipv4 • vpn-ipv6
Default	false
Introduced	21.10.R1
Platforms	All

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action create-udp-tunnel <i>boolean</i>
Tree	create-udp-tunnel
Default	false
Introduced	19.10.R1
Platforms	All

damping (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action damping (<i>keyword</i> <i>param-midstring</i> <i>string</i>)
Tree	damping
String Length	1 to 32
Options	none

Introduced	19.10.R1
Platforms	All

dest-class *number*

Synopsis	Default destination class for the policy statement
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action dest-class <i>number</i>
Tree	dest-class
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

egress-statistics *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action egress-statistics <i>boolean</i>
Tree	egress-statistics
Description	When configured to true , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths. When configured to false , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

flex-algo (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action flex-algo (<i>string</i> <i>number</i>)
Tree	flex-algo
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry.

Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU.

This command is not supported for multicast address families.

String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

forwarding-class

Synopsis	Enter the forwarding-class context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action forwarding-class
Tree	forwarding-class
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class associated with the route
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action forwarding-class fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority keyword

Synopsis	Route priority
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action forwarding-class priority <i>keyword</i>
Tree	priority
Options	low, high
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress-statistics *boolean*

Synopsis	Enable ingress statistics for BGP-LU routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action ingress-statistics <i>boolean</i>
Tree	ingress-statistics
Description	When configured to true , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics. When configured to false , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

install-backup-path *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action install-backup-path <i>boolean</i>
Tree	install-backup-path
Default	false
Introduced	19.10.R1
Platforms	All

local-preference (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action local-preference (<i>number</i> <i>string</i>)
Tree	local-preference
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action metric
Tree	metric
Introduced	19.10.R1
Platforms	All

add (*number* | *string*)

Synopsis	Metric to add
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action metric add (<i>number</i> <i>string</i>)
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	19.10.R1
Platforms	All

set (*number* | *string*)

Synopsis	Metric to assign
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action metric set (<i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	19.10.R1
Platforms	All

subtract (*number* | *string*)

Synopsis	Metric to subtract
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action metric subtract (<i>number</i> <i>string</i>)

Tree	subtract
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	19.10.R1
Platforms	All

multicast-redirectation

Synopsis	Enter the multicast-redirectation context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action multicast-redirectation
Tree	multicast-redirectation
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *string*

Synopsis	Service ID for multicast redirection
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action multicast-redirectation fwd-service <i>string</i>
Tree	fwd-service
Default	Base
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis	Alternate interface where IGMP messages are redirected
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action multicast-redirectation ip-int-name <i>string</i>
Tree	ip-int-name
String Length	1 to 32
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-policy (*param-midstring* | *string*)

Synopsis	BGP-VPN imported route and a NAT policy association
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action nat-policy (<i>param-midstring</i> <i>string</i>)
Tree	nat-policy
Description	<p>This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type accept regardless of whether the NAT policy is configured in the action.</p>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Synopsis	Next-hop IP address applied to routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action next-hop (<i>keyword</i> <i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>string</i>)
Tree	next-hop
String Length	1 to 32
Options	peer-address, self
Introduced	19.10.R1
Platforms	All

origin (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action origin (<i>keyword</i> <i>string</i>)
Tree	origin
String Length	1 to 32

Options	igp, egp, incomplete
Introduced	19.10.R1
Platforms	All

origin-validation-state (*keyword | string*)

Synopsis	Origin validation state for routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action origin-validation-state (<i>keyword string</i>)
Tree	origin-validation-state
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	19.10.R1
Platforms	All

preference (*number | string*)

Synopsis	Route preference applied to routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action preference (<i>number string</i>)
Tree	preference
String Length	1 to 32
Range	1 to 255
Introduced	19.10.R1
Platforms	All

resolve-static *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action resolve-static <i>boolean</i>
Tree	resolve-static
Default	false
Introduced	19.10.R1
Platforms	All

route-table-install *boolean*

Synopsis	Allow BGP route installation in the route table
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action route-table-install <i>boolean</i>
Tree	route-table-install
Default	true
Introduced	19.10.R1
Platforms	All

source-class *number*

Synopsis	Default source class for the policy statement
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action source-class <i>number</i>
Tree	source-class
Description	This command specifies the policy accounting source class index to associate with matched routes.
Range	1 to 255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

sr-label-index

Synopsis	Enter the sr-label-index context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action sr-label-index
Tree	sr-label-index
Description	<p>Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.</p> <p>The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.</p> <p>This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.</p> <p>When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.</p>
Introduced	19.10.R1

Platforms All

prefer-igp *boolean*

Synopsis Use the SR label index from the IGP route when present

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [sr-label-index](#) **prefer-igp** *boolean*

Tree [prefer-igp](#)

Description When configured to **true**, BGP obtains the SID index from the IGP route (if a SID index is present) and the **configure router bgp segment-routing prefix-sid-range global** command is set to **true**.

This command applies only to route table import policies.

When configured to **false**, or the SID index is not present in the IGP route, or the **configure router bgp segment-routing prefix-sid-range global** command is not set to **true**, BGP obtains the label index value from the **value** command.

Default false

Introduced 19.10.R1

Platforms All

value (*string* | *number*)

Synopsis BGP SR label index associated with routes

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [sr-label-index](#) **value** (*string* | *number*)

Tree [value](#)

Description This command specifies the BGP SR label index value to be associated with a route or routes.

If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.

If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.

String Length 1 to 32

Range 0 to 524287

Introduced 19.10.R1

Platforms All

sr-maintenance-policy (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action sr-maintenance-policy (<i>param-midstring</i> <i>string</i>)
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action sticky-ecmp <i>boolean</i>
Tree	sticky-ecmp
Default	false
Introduced	19.10.R1
Platforms	All

tag (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action tag (<i>number</i> <i>string</i>)
Tree	tag
String Length	1 to 32
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

type (*number* | *string*)

Synopsis	OSPF metric type applied to routes
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Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action <i>type</i> (<i>number</i> <i>string</i>)
Tree	type
String Length	1 to 32
Range	1 to 2
Introduced	19.10.R1
Platforms	All

conditional-expression

Synopsis	Enable the conditional-expression context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> conditional-expression
Tree	conditional-expression
Introduced	19.10.R1
Platforms	All

route-exists *string*

Synopsis	Conditional expression to test route existence
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> conditional-expression route-exists <i>string</i>
Tree	route-exists
String Length	1 to 255
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

from

Synopsis	Enable the from context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from
Tree	from
Introduced	19.10.R1
Platforms	All

aggregate-contributor *boolean*

Synopsis	Enable aggregate route match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from aggregate-contributor <i>boolean</i>
Tree	aggregate-contributor
Description	<p>When configured to true, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor.</p> <p>This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, vrf-export policy or vrf-import policy, no routes are matched by that entry.</p> <p>When configured to false, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.</p>
Default	false
Introduced	20.10.R1
Platforms	All

area *string*

Synopsis	OSPF area as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from area <i>string</i>
Tree	area
Introduced	19.10.R1
Platforms	All

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from as-path
Tree	as-path
Introduced	19.10.R1
Platforms	All

group (*param-midstring* | *string*)

Synopsis	AS path group as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from as-path group (<i>param-midstring</i> <i>string</i>)
Tree	group
String Length	1 to 32
Notes	The following elements are part of a choice: group or name .
Introduced	19.10.R1
Platforms	All

length

Synopsis	Enter the length context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from as-path length
Tree	length
Introduced	19.10.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from as-path length qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	19.10.R1

Platforms All

unique *boolean*

Synopsis Use unique AS numbers as matching criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from as-path](#) [length](#) **unique** *boolean*

Tree [unique](#)

Default false

Introduced 19.10.R1

Platforms All

value (*number* | *string*)

Synopsis AS numbers in the AS path that match on the BGP route

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from as-path](#) [length](#) **value** (*number* | *string*)

Tree [value](#)

String Length 1 to 32

Range 0 to 255

Introduced 19.10.R1

Platforms All

name (*param-midstring* | *string*)

Synopsis AS path name to match

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from as-path](#) [name](#) (*param-midstring* | *string*)

Tree [name](#)

Description This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".

String Length 1 to 32

Notes The following elements are part of a choice: **group** or **name**.

Introduced 19.10.R1

Platforms All

cluster-id

Synopsis	Enter the cluster-id context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from cluster-id
Tree	cluster-id
Introduced	19.10.R1
Platforms	All

ip-address *string*

Synopsis	Cluster list attribute IP addresses for route matching
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from cluster-id ip-address <i>string</i>
Tree	ip-address
Max. Instances	5
Notes	The following elements are part of a choice: ip-address or none-cluster-list . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

none-cluster-list *boolean*

Synopsis	Specify matching BGP routes without a cluster ID
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from cluster-id none-cluster-list <i>boolean</i>
Tree	none-cluster-list
Default	false
Notes	The following elements are part of a choice: ip-address or none-cluster-list .
Introduced	19.10.R1
Platforms	All

color *number*

Synopsis	Color ID as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from color <i>number</i>

Tree	color
Description	This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community
Tree	community
Introduced	19.10.R1
Platforms	All

count

Synopsis	Enter the count context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community count
Tree	count
Introduced	19.10.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community count qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	19.10.R1
Platforms	All

type *keyword*

Synopsis	Community count to match the community count criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community count <i>type</i> <i>keyword</i>
Tree	type
Options	standard, extended, large
Introduced	19.10.R1
Platforms	All

value (*number* | *string*)

Synopsis	Number of BGP communities to match the BGP route
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community count <i>value</i> (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 1024
Introduced	19.10.R1
Platforms	All

expression *string*

Synopsis	Community expression name as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community expression <i>string</i>
Tree	expression
String Length	1 to 900
Notes	The following elements are part of a choice: expression or name .
Introduced	19.10.R1
Platforms	All

name (*param-midstring-64* | *string*)

Synopsis	Community list name
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community name (<i>param-midstring-64</i> <i>string</i>)

Tree	name
String Length	1 to 64
Notes	The following elements are part of a choice: expression or name .
Introduced	19.10.R1
Platforms	All

distinguisher *number*

Synopsis	SR policy distinguisher as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from distinguisher <i>number</i>
Tree	distinguisher
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

endpoint (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	SR policy endpoint address as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from endpoint (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	endpoint
Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	20.10.R1
Platforms	All

evpn-type *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from evpn-type <i>keyword</i>
Tree	evpn-type
Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync

Introduced	19.10.R1
Platforms	All

external *boolean*

Synopsis	Specify the external IS-IS route as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from external <i>boolean</i>
Tree	external
Default	false
Introduced	19.10.R1
Platforms	All

family *keyword*

Synopsis	Address family as the match condition
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from family <i>keyword</i>
Tree	family
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Max. Instances	20
Introduced	19.10.R1
Platforms	All

flowspec

Synopsis	Enter the flowspec context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from flowspec
Tree	flowspec
Introduced	19.10.R1
Platforms	All

dest (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per destination IP prefix
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from flowspec dest (<i>param-midstring</i> <i>string</i>)
Tree	dest
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

source (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per the source IP prefix
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from flowspec source (<i>param-midstring</i> <i>string</i>)
Tree	source
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

group-address (*param-midstring* | *string*)

Synopsis	Prefix list of multicast group addresses for mathcing
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from group-address (<i>param-midstring</i> <i>string</i>)
Tree	group-address
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

host-ip (*param-midstring* | *string*)

Synopsis	Prefix list of IGMP host IP addresses for matching
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from host-ip (<i>param-midstring</i> <i>string</i>)
Tree	host-ip
String Length	1 to 32

Introduced 19.10.R1
Platforms All

interface (*named-item* | *interface-name* | *interface-name* | *interface-name*)

Synopsis Interface name as match criterion
Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from interface](#) (*named-item* | *interface-name* | *interface-name* | *interface-name*)
Tree [interface](#)
String Length 1 to 32
Max. Instances 1
Notes This element is ordered by the user.
Introduced 19.10.R1
Platforms All

interface-subnets

Synopsis Enter the **interface-subnets** context
Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from interface-subnets](#)
Tree [interface-subnets](#)
Description Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol.
The interface subnet policy statement match criterion is applied to the following unicast use case contexts:

- **export**, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP
- **route-table-import**, when used with BGP
- **vrf-export**, when used with MP-BGP

Introduced 21.2.R1
Platforms All

ip-int-name *string*

Synopsis Interface name as the match criterion

Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from interface-subnets ip-int-name <i>string</i>
Tree	ip-int-name
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.
String Length	1 to 32
Max. Instances	10
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

service *string*

Synopsis	Service ID of the interface subnets
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from interface-subnets service <i>string</i>
Tree	service
Default	Base
Introduced	21.2.R1
Platforms	All

level *number*

Synopsis	IS-IS route level as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from level <i>number</i>
Tree	level
Range	1 to 2
Introduced	19.10.R1
Platforms	All

local-preference

Synopsis	Enter the local-preference context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from local-preference

Tree	local-preference
Introduced	19.10.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from local-preference qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	19.10.R1
Platforms	All

value (*number* | *string*)

Synopsis	BGP routes per local preference value or variable name
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from local-preference value (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from metric
Tree	metric
Introduced	19.10.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from metric qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	19.10.R1
Platforms	All

value (*number* | *string*)

Synopsis	Local preference value or variable name
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from metric value (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

mvpn-type *keyword*

Synopsis	MVPN type as a match criterion for the entry
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from mvpn-type <i>keyword</i>
Tree	mvpn-type
Options	intra-as-ipmsi-auto-discovery, inter-as-ipmsi-auto-discovery, s-pmsi-auto-discovery, intra-as-segment-leaf-auto-discovery, source-active-auto-discovery, shared-tree-join, source-tree-join
Introduced	19.10.R1
Platforms	All

neighbor

Synopsis	Enter the neighbor context
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Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from neighbor
Tree	neighbor
Introduced	19.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from neighbor ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone ipv4-address-with-zone ipv6-address-with-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

prefix-list (*param-midstring | string*)

Synopsis	Name to match the neighbor prefix list
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from neighbor prefix-list (<i>param-midstring string</i>)
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

next-hop

Synopsis	Enter the next-hop context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from next-hop
Tree	next-hop
Introduced	19.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the next hop to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from next-hop ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Name of a next hop prefix list to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from next-hop prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

origin *keyword*

Synopsis	Route origin match criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from origin <i>keyword</i>
Tree	origin
Description	<p>This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes:</p> <p>Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the sub-mgmt option for the protocol command.</p> <p>Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the direct option for the protocol command.</p>

Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the **direct** option for the **protocol** command.

Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the **managed** option for the **protocol** command.

The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.

Options	igp, egg, incomplete, any, aaa, dynamic, static, bonding, pfc
Introduced	19.10.R1
Platforms	All

origin-validation-state *keyword*

Synopsis	Origin validation state used for match criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from origin-validation-state <i>keyword</i>
Tree	origin-validation-state
Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.
Options	valid, not-found, invalid
Introduced	19.10.R1
Platforms	All

ospf-type *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from ospf-type <i>number</i>
Tree	ospf-type
Range	1 to 2
Introduced	19.10.R1
Platforms	All

path-type *keyword*

Synopsis	Path type as a match criterion
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Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from path-type <i>keyword</i>
Tree	path-type
Options	ibgp, ebgp
Introduced	19.10.R1
Platforms	All

policy (*string* | *string*)

Synopsis	Policy statement as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from policy (<i>string</i> <i>string</i>)
Tree	policy
String Length	1 to 255
Introduced	19.10.R1
Platforms	All

policy-variables

Synopsis	Enter the policy-variables context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from policy-variables
Tree	policy-variables
Introduced	19.10.R1
Platforms	All

name [[variable-name](#)] *string*

Synopsis	Enter the name list instance
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from policy-variables name <i>string</i>
Tree	name
Description	Commands in this context configure global variables for use across BGP peers of a common type (transit, peer, customer, and so on).
Max. Instances	10
Introduced	19.10.R1

Platforms All

[variable-name] *string*

Synopsis Global variable name used to reference policy functions

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string*

Tree [name](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the policy variable

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string* **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.

Introduced 19.10.R1

Platforms All

decimal *decimal-number*

Synopsis Attribute decimal to which variable name is resolved

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string* **decimal** *decimal-number*

Tree [decimal](#)

Range 0.000 to 4294967295.000

Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.

Introduced 19.10.R1

Platforms All

number *number*

Synopsis	Numerical value of the policy variable
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from policy-variables name <i>string</i> number <i>number</i>
Tree	number
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	19.10.R1
Platforms	All

value *string*

Synopsis	Policy variable value
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from policy-variables name <i>string</i> value <i>string</i>
Tree	value
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	19.10.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Prefix list as match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

protocol

Synopsis	Enter the protocol context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from protocol
Tree	protocol
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.
Introduced	19.10.R1
Platforms	All

instance (*keyword* | *number*)

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from protocol instance (<i>keyword</i> <i>number</i>)
Tree	instance
Description	This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion. When this command is explicitly configured, the name command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).
Range	0 to 127
Default	0
Options	all
Introduced	19.10.R1
Platforms	All

name *keyword*

Synopsis	List of protocol names as the match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from protocol name <i>keyword</i>
Tree	name
Description	This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set: <ul style="list-style-type: none">• direct• static• isis• aggregate

- bgp
- bgp-label
- direct-interface

If multiple protocols are specified, the **instance** command cannot be explicitly configured.

Options	direct, static, bgp, isis, ospf, rip, aggregate, bgp-vpn, igmp, pim, ospf3, ldp, sub-mgmt, mld, managed, vpn-leak, nat, periodic, ipsec, dhcpv6-pd, dhcpv6-na, dhcpv6-ta, dhcpv6-pd-excl, ripng, bgp-label, direct-interface, arp-nd, rib-api, dhcp-client, evpn-ift, srv6, video
Max. Instances	5
Introduced	19.10.R1
Platforms	All

source-address

Synopsis	Enter the source-address context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from source-address
Tree	source-address
Introduced	19.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from source-address ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Name of a source address prefix list to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from source-address prefix-list (<i>param-midstring</i> <i>string</i>)

Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

state keyword

Synopsis	State used as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from state <i>keyword</i>
Tree	state
Description	This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.
Options	srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag (number | keyword)

Synopsis	Route tag used as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from tag (<i>number</i> <i>keyword</i>)
Tree	tag
Range	1 to 4294967295
Options	no-tag
Introduced	19.10.R1
Platforms	All

to

Synopsis	Enable the to context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> to
Tree	to
Introduced	19.10.R1

Platforms All

level number

Synopsis IS-IS route level as a match criterion
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [to level](#) *number*
 Tree [level](#)
 Range 1 to 2
 Introduced 19.10.R1
 Platforms All

neighbor

Synopsis Enter the **neighbor** context
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [to neighbor](#)
 Tree [neighbor](#)
 Introduced 19.10.R1
 Platforms All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis IP address to match the neighbor
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [to neighbor](#) [ip-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)
 Tree [ip-address](#)
 Notes The following elements are part of a choice: **ip-address** or **prefix-list**.
 Introduced 19.10.R1
 Platforms All

prefix-list (*param-midstring* | *string*)

Synopsis Name to match the neighbor prefix list
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [to neighbor](#) [prefix-list](#) (*param-midstring* | *string*)

Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Prefix list as match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> to prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

protocol

Synopsis	Enter the protocol context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> to protocol
Tree	protocol
Introduced	19.10.R1
Platforms	All

instance (*keyword* | *number*)

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> to protocol instance (<i>keyword</i> <i>number</i>)
Tree	instance
Range	0 to 127
Default	0
Options	all

Introduced 19.10.R1
Platforms All

name *keyword*

Synopsis Protocol name to match
Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [to protocol name](#) *keyword*
Tree [name](#)
Options bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ift
Max. Instances 2
Introduced 19.10.R1
Platforms All

prefix-list [[name](#)] *string*

Synopsis Enter the **prefix-list** list instance
Context **configure** [policy-options](#) [prefix-list](#) *string*
Tree [prefix-list](#)
Introduced 16.0.R1
Platforms All

[name] *string*

Synopsis Prefix list name
Context **configure** [policy-options](#) [prefix-list](#) *string*
Tree [prefix-list](#)
Description This command specifies the name for a prefix list.
Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

prefix [ip-prefix] (ipv4-prefix | ipv6-prefix) type keyword

Synopsis	Enter the prefix list instance
Context	configure policy-options prefix-list string prefix (ipv4-prefix ipv6-prefix) type keyword
Tree	prefix
Introduced	16.0.R1
Platforms	All

[ip-prefix] (ipv4-prefix | ipv6-prefix)

Synopsis	IP prefix associated with the prefix length
Context	configure policy-options prefix-list string prefix (ipv4-prefix ipv6-prefix) type keyword
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Prefix list match type
Context	configure policy-options prefix-list string prefix (ipv4-prefix ipv6-prefix) type keyword
Tree	prefix
Options	exact, longer, through, range, to, address-mask
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end-length number

Synopsis	Prefix range end length
Context	configure policy-options prefix-list string prefix (ipv4-prefix ipv6-prefix) type keyword end-length number
Tree	end-length
Range	0 to 128

Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	16.0.R1
Platforms	All

mask-pattern [address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for mask-pattern
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type keyword mask-pattern (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	mask-pattern
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	20.7.R1
Platforms	All

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Address mask for matching routes to the prefix entry
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type keyword mask-pattern (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	mask-pattern
Description	<p>This command specifies the address mask to compare against the prefix entry to determine whether the route is considered a match.</p> <p>A route matches the prefix entry if the following conditions are met.</p> <ul style="list-style-type: none"> • The bitwise logical AND of the prefix address and its mask matches the bitwise logical AND of the route address and its mask. • The prefix length of the prefix entry matches the prefix length of the route. <p>For example, for a prefix entry of 17.1.0.0/32, routes with an address 17.1.x.0 (where x can be 0 through 255) and a prefix length of 32 match the entry.</p>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

start-length *number*

Synopsis	Start in the prefix range length
----------	----------------------------------

Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i> start-length <i>number</i>
Tree	start-length
Range	0 to 128
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	16.0.R1
Platforms	All

through-length *number*

Synopsis	Prefix through length
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i> through-length <i>number</i>
Tree	through-length
Range	0 to 128
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	16.0.R1
Platforms	All

to-prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for to-prefix
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i> to-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	to-prefix
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	20.7.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for "to" match type
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i> to-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)

Tree	to-prefix
Description	<p>This command configures an IP prefix to use in a route policy prefix list for the to match type. If the prefix entry is in the format <i>prefix1/length1</i>, and this command is configured in the format <i>prefix2/length2</i>, a route matches the prefix entry if the following conditions are met.</p> <ul style="list-style-type: none">• The route shares the same most-significant bits (specified by <i>length1</i>) with the prefix entry• The route shares the same most-significant bits (specified by <i>length2</i>) with this IP prefix value• The prefix length of the route is in the range of <i>length1</i> to <i>length2</i> (inclusive) <p>For example, for a prefix entry of 10.0.0.8 with a to IP prefix value of 10.0.0.0/32, routes 10.0.0.0/8, 10.0.0.0/9, 10.0.0.0/10, and so on, to 10.0.0.0/32 are considered matches for the prefix entry.</p>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

3.32 port commands

```

configure
- port string
- access
- apply-groups reference
- apply-groups-exclude reference
- egress
- pool string
- amber-alarm-threshold number
- apply-groups reference
- apply-groups-exclude reference
- red-alarm-threshold number
- resv-cbs
- amber-alarm-action
- max number
- step number
- cbs (number | keyword)
- slope-policy reference
- ingress
- pool string
- amber-alarm-threshold number
- apply-groups reference
- apply-groups-exclude reference
- red-alarm-threshold number
- resv-cbs
- amber-alarm-action
- max number
- step number
- cbs (number | keyword)
- slope-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- connector
- apply-groups reference
- apply-groups-exclude reference
- breakout keyword
- rs-fec-mode keyword
- ddm-events boolean
- description string
- dist-cpu-protection
- policy reference
- dwdm
- apply-groups reference
- apply-groups-exclude reference
- coherent
- apply-groups reference
- apply-groups-exclude reference
- compatibility keyword
- cpr-window-size number
- dispersion number
- mode keyword
- report-alarm
- hosttx boolean
- mod boolean
- modflt boolean
- netrx boolean
- nettx boolean
- rx-los-reaction keyword
- rx-los-thresh decimal-number

```

configure port dwdm coherent sweep

```

- sweep
  - end number
  - start number
  - target-power decimal-number
- frequency number
- ethernet
- access
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth number
  - booking-factor number
  - egress
    - queue-group reference instance-id number
      - accounting-policy reference
      - aggregate-rate
        - limit-unused-bandwidth boolean
        - queue-frame-based-accounting boolean
        - rate (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - collect-stats boolean
      - description string
      - host-match
        - int-dest-id string
      - hs-turbo boolean
      - queue-overrides
        - queue reference
          - adaptation-rule
            - cir keyword
            - pir keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - burst-limit (number | keyword)
          - cbs (number | keyword)
          - drop-tail
            - low
              - percent-reduction-from-mbs (number | keyword)
          - mbs (number | keyword)
          - monitor-queue-depth
            - fast-polling boolean
            - violation-threshold decimal-number
        - parent
          - cir-weight number
          - weight number
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
      - scheduler-policy
        - overrides
          - scheduler string
          - apply-groups reference
          - apply-groups-exclude reference
          - parent
            - cir-weight number
            - weight number
          - rate
            - cir (number | keyword)
            - pir (number | keyword)
          - policy-name reference
        - virtual-port string
      - aggregate-rate

```


configure port ethernet access egress virtual-port aggregate-rate limit-unused-bandwidth

```

    - limit-unused-bandwidth boolean
    - rate (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - host-match
    - int-dest-id string
    - hw-agg-shaper-scheduler-policy reference
    - lag-per-link-hash
    - class number
    - weight number
    - monitor-hw-agg-shaper-scheduler boolean
    - monitor-port-scheduler boolean
    - multicast-hqos-adjustment boolean
    - port-scheduler-policy reference
    - scheduler-policy
    - policy-name reference
- ingress
  - queue-group reference
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - description string
  - queue-overrides
  - queue reference
  - adaptation-rule
  - cir keyword
  - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cbs (number | keyword)
  - drop-tail
  - low
  - percent-reduction-from-mbs (number | keyword)
  - mbs (number | keyword)
  - monitor-queue-depth
  - fast-polling boolean
  - rate
  - cir (number | keyword)
  - pir (number | keyword)
  - scheduler-policy
  - overrides
  - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - parent
  - cir-weight number
  - weight number
  - rate
  - cir (number | keyword)
  - pir (number | keyword)
  - policy-name reference
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- autonegotiate keyword
- collect-stats boolean
- crc-monitor
- signal-degrade
- multiplier number
- threshold number
- signal-failure
- multiplier number

```

configure port ethernet crc-monitor signal-failure threshold

```

    - threshold number
    - window-size number
- dampening
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - half-life number
    - max-suppress-time number
    - reuse-threshold number
    - suppress-threshold number
- discard-rx-pause-frames boolean
- dot1q-etype string
- dot1x
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
- macsec
    - apply-groups reference
    - apply-groups-exclude reference
    - exclude-mac-policy reference
    - exclude-protocol
        - cdp boolean
        - eapol-start boolean
        - efm-oam boolean
        - eth-cfm boolean
        - lacp boolean
        - lldp boolean
        - ptp boolean
        - ubfd boolean
    - rx-must-be-encrypted boolean
- sub-port number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ca-name reference
    - eapol-destination-address string
    - encap-match
        - all-match boolean
        - double-tag string
        - single-tag string
        - untagged boolean
        - max-peers number
- max-authentication-requests number
- per-host-authentication
    - admin-state keyword
    - allowed-source-macs
        - mac-address string
    - authenticator-init boolean
- port-control keyword
- quiet-period number
- radius-policy reference
- radius-server-policy reference
- radius-server-policy-acct reference
- radius-server-policy-auth reference
- re-authentication
    - period number
- server-timeout number
- supplicant-timeout number
- transmit-period number
- tunnel-dot1q boolean
- tunnel-qinq boolean
- tunneling boolean
- down-on-internal-error
    - tx-laser keyword

```

configure port ethernet down-when-looped

- **down-when-looped**
 - **admin-state** *keyword*
 - **keep-alive** *number*
 - **retry-timeout** *number*
 - **use-broadcast-address** *boolean*
- **duplex** *keyword*
- **efm-oam**
 - **accept-remote-loopback** *boolean*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **discovery**
 - **advertise-capabilities**
 - **link-monitoring** *boolean*
 - **dying-gasp-tx-on-reset** *boolean*
 - **grace-tx** *boolean*
 - **grace-vendor-oui** *string*
 - **hold-time** *number*
 - **ignore-efm-state** *boolean*
- **link-monitoring**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **errored-frame**
 - **admin-state** *keyword*
 - **event-notification** *boolean*
 - **sd-threshold** *number*
 - **sf-threshold** *number*
 - **window** *number*
 - **errored-frame-period**
 - **admin-state** *keyword*
 - **event-notification** *boolean*
 - **sd-threshold** *number*
 - **sf-threshold** *number*
 - **window** *number*
 - **errored-frame-seconds**
 - **admin-state** *keyword*
 - **event-notification** *boolean*
 - **sd-threshold** *number*
 - **sf-threshold** *number*
 - **window** *number*
 - **errored-symbols**
 - **admin-state** *keyword*
 - **event-notification** *boolean*
 - **sd-threshold** *number*
 - **sf-threshold** *number*
 - **window** *number*
 - **local-sf-action**
 - **event-notification-burst** *number*
 - **info-notification**
 - **critical-event** *boolean*
 - **dying-gasp** *boolean*
 - **local-port-action** *keyword*
- **mode** *keyword*
- **multiplier** *number*
- **peer-rdi-rx**
 - **critical-event** *keyword*
 - **dying-gasp** *keyword*
 - **event-notification** *keyword*
 - **link-fault** *keyword*
- **transmit-interval** *number*
- **trigger-fault** *keyword*
- **tunneling** *boolean*
- **egress**

configure port ethernet egress apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **eth-bn-rate-changes** *boolean*
- **hs-port-pool-policy** *reference*
- **hs-scheduler-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate** (*number* | *keyword*)
 - **max-rate** (*number* | *keyword*)
 - **scheduling-class** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate** (*number* | *keyword*)
 - **weight** *number*
 - **policy-name** *reference*
- **hs-secondary-shaper** *string*
 - **aggregate**
 - **low-burst-max-class** *number*
 - **rate** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **class** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate** (*number* | *keyword*)
 - **description** *string*
- **hw-agg-shaper-scheduler**
 - **monitor** *boolean*
 - **policy-name** *reference*
- **monitor-port-scheduler** *boolean*
- **port-scheduler-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **max-rate**
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
 - **policy-name** *reference*
 - **rate** *number*
- **elmi**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mode** *keyword*
 - **n393** *number*
 - **t391** *number*
 - **t392** *number*
- **encap-type** *keyword*
- **eth-cfm**
 - **mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **ais**

configure port ethernet eth-cfm mep ais client-meg-level

- **client-meg-level** *number*
- **interface-support** *boolean*
- **interval** *number*
- **low-priority-defect** *keyword*
- **priority** *number*
- **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ccm** *boolean*
- **ccm-ltm-priority** *number*
- **ccm-padding-size** *number*
- **ccm-tlv-ignore** *keyword*
- **collect-lmm-stats** *boolean*
- **csf**
 - **multiplier** *decimal-number*
- **description** *string*
- **eth-bn**
 - **receive** *boolean*
 - **rx-update-pacing** *number*
- **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
- **facility-fault** *boolean*
- **grace**
 - **eth-ed**
 - **max-rx-defect-window** *number*
 - **priority** *number*
 - **rx-eth-ed** *boolean*
 - **tx-eth-ed** *boolean*
 - **eth-vsm-grace**
 - **rx-eth-vsm-grace** *boolean*
 - **tx-eth-vsm-grace** *boolean*
- **low-priority-defect** *keyword*
- **mac-address** *string*
- **one-way-delay-threshold** *number*
- **vlan** (*number* | *keyword*)
- **hold-time**
 - **down** *number*
 - **units** *keyword*
 - **up** *number*
- **ingress**
 - **rate** *number*
- **lACP-tunnel** *boolean*
- **lldp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-mac** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **notification** *boolean*
 - **port-id-subtype** *keyword*
 - **receive** *boolean*
 - **transmit** *boolean*
 - **tunnel-nearest-bridge** *boolean*
 - **tx-mgmt-address** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tx-tlvs**
 - **port-desc** *boolean*

configure port ethernet lldp dest-mac tx-tlvs sys-cap

```

    - sys-cap boolean
    - sys-desc boolean
    - sys-name boolean
- load-balancing-algorithm keyword
- mac-address string
- min-frame-length number
- mode keyword
- mtu number
- network
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - egress
    - port-queues
      - overrides
        - queue number
          - apply-groups reference
          - apply-groups-exclude reference
          - monitor-queue-depth
            - fast-polling boolean
            - violation-threshold decimal-number
      - queue-group reference instance-id number
        - accounting-policy reference
        - aggregate-rate
          - limit-unused-bandwidth boolean
          - queue-frame-based-accounting boolean
          - rate (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - collect-stats boolean
        - description string
        - hs-turbo boolean
        - policer-control-policy reference
        - queue-overrides
          - queue reference
            - adaptation-rule
              - cir keyword
              - pir keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - cbs (number | keyword)
            - drop-tail
              - low
                - percent-reduction-from-mbs (number | keyword)
            - mbs (number | keyword)
            - monitor-queue-depth
              - fast-polling boolean
              - violation-threshold decimal-number
            - percent-rate
              - cir decimal-number
              - pir decimal-number
            - rate
              - cir (number | keyword)
              - pir (number | keyword)
          - scheduler-policy
            - policy-name reference
        - queue-policy reference
      - pbb-etype string
      - ptp-asymmetry number
      - qinq-etype string
    - report-alarm
      - alignment-marker-not-locked boolean
    - block-not-locked boolean

```

configure port ethernet report-alarm duplicate-lane

- **duplicate-lane** *boolean*
- **frame-not-locked** *boolean*
- **high-ber** *boolean*
- **local** *boolean*
- **remote** *boolean*
- **signal-fail** *boolean*
- **rs-fec-mode** *keyword*
- **single-fiber** *boolean*
- **speed** *number*
- **ssm**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **code-type** *keyword*
 - **esmc-tunnel** *boolean*
 - **tx-dus** *boolean*
- **symbol-monitor**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **signal-degrade**
 - **multiplier** *number*
 - **threshold** *number*
 - **signal-failure**
 - **multiplier** *number*
 - **threshold** *number*
 - **window-size** *number*
- **util-stats-interval** *number*
- **xgig** *keyword*
- **gnss**
 - **antenna-cable-delay** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **constellation**
 - **galileo** *boolean*
 - **glonass** *boolean*
 - **gps** *boolean*
 - **elevation-mask-angle** *number*
- **hybrid-buffer-allocation**
 - **egress-weight**
 - **access** *number*
 - **network** *number*
 - **ingress-weight**
 - **access** *number*
 - **network** *number*
- **modify-buffer-allocation**
 - **percentage-of-rate**
 - **egress** *number*
 - **ingress** *number*
- **monitor-agg-egress-queue-stats** *boolean*
- **monitor-oper-group** *reference*
- **network**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress**
 - **pool** *string*
 - **amber-alarm-threshold** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **red-alarm-threshold** *number*
 - **resv-cbs**
 - **amber-alarm-action**
 - **max** *number*
 - **step** *number*

configure port network egress pool resv-cbs cbs

```

    - cbs (number | keyword)
    - slope-policy reference
- oper-group reference
- otu
  - apply-groups reference
  - apply-groups-exclude reference
  - async-mapping boolean
  - fec keyword
  - fine-granularity-ber
    - signal-degrade
      - clear
        - multiplier number
        - threshold number
      - raise
        - multiplier number
        - threshold number
    - signal-failure
      - clear
        - multiplier number
        - threshold number
      - raise
        - multiplier number
        - threshold number
  - otu2-lan-data-rate keyword
  - path-monitoring
    - trail-trace-identifier
      - expected
        - auto-generated
        - bytes string
        - string string
      - mismatch-reaction keyword
      - transmit
        - auto-generated
        - bytes string
        - string string
    - payload-structure-identifier
      - payload
        - expected keyword
        - mismatch-reaction keyword
        - transmit keyword
  - report-alarm
    - fec-fail boolean
    - fec-sd boolean
    - fec-sf boolean
    - fec-uncorr boolean
    - loc boolean
    - lof boolean
    - lom boolean
    - los boolean
    - odu-ais boolean
    - odu-bdi boolean
    - odu-lck boolean
    - odu-oci boolean
    - odu-tim boolean
    - opu-plm boolean
    - otu-ais boolean
    - otu-bdi boolean
    - otu-ber-sd boolean
    - otu-ber-sf boolean
    - otu-biae boolean
    - otu-iae boolean
    - otu-tim boolean
  - sd-threshold number
  - section-monitoring

```


configure port otu section-monitoring trail-trace-identifier

- **trail-trace-identifier**
 - **expected**
 - **auto-generated**
 - **bytes** *string*
 - **string** *string*
 - **mismatch-reaction** *keyword*
 - **transmit**
 - **auto-generated**
 - **bytes** *string*
 - **string** *string*
- **sf-sd-method** *keyword*
- **sf-threshold** *number*
- **sonet-sdh**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clock-source** *keyword*
 - **framing** *keyword*
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **payload** *keyword*
 - **hold-time**
 - **down** *number*
 - **up** *number*
 - **loopback** *keyword*
 - **path** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **crc** *number*
 - **description** *string*
 - **egress**
 - **port-scheduler-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **max-rate**
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
 - **policy-name** *reference*
 - **encap-type** *keyword*
 - **load-balancing-algorithm** *keyword*
 - **mac-address** *string*
 - **mode** *keyword*
 - **mtu** *number*
 - **network**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **queue-policy** *reference*
 - **payload** *keyword*
 - **ppp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure port sonet-sdh path ppp keepalive

```

    - keepalive
      - drop-count number
      - interval (number | keyword)
  - report-alarm
    - pais boolean
    - plcd boolean
    - plop boolean
    - pplm boolean
    - prdi boolean
    - prei boolean
    - puneq boolean
  - scramble boolean
  - signal-label string
  - trace-string (keyword | string)
- report-alarm
  - lais boolean
  - lb2er-sd boolean
  - lb2er-sf boolean
  - loc boolean
  - lrdi boolean
  - lrei boolean
  - slof boolean
  - slos boolean
  - sslf boolean
- sd-threshold number
- section-trace
  - byte string
  - increment-z0
  - string string
- sf-threshold number
- single-fiber boolean
- speed keyword
- suppress-low-order-alarms boolean
- tx-dus boolean
- tdm
  - apply-groups reference
  - apply-groups-exclude reference
  - buildout keyword
  - dsl string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - ber-threshold
    - signal-degrade number
    - signal-failure number
  - channel-group number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - crc number
    - description string
    - egress
      - port-scheduler-policy
        - overrides
          - apply-groups reference
          - apply-groups-exclude reference
          - level number
          - apply-groups reference
          - apply-groups-exclude reference
          - percent-rate
            - cir decimal-number
            - pir decimal-number
          - rate
            - cir (number | keyword)

```

configure port tdm ds1 channel-group egress port-scheduler-policy overrides level rate pir

```

        - pir (number | keyword)
    - max-rate
        - percent-rate decimal-number
        - rate (number | keyword)
    - policy-name reference
- encap-type keyword
- idle-cycle-flag keyword
- idle-payload-fill
    - all-ones
    - pattern number
- idle-signal-fill
    - all-ones
    - pattern number
- load-balancing-algorithm keyword
- mac-address string
- mode keyword
- mtu number
- network
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - queue-policy reference
- ppp
    - apply-groups reference
    - apply-groups-exclude reference
    - ber-sf-link-down boolean
    - compress
        - acfc boolean
        - pfc boolean
    - keepalive
        - drop-count number
        - interval (number | keyword)
- speed number
- timeslot number
- clock-source keyword
- framing keyword
- loopback keyword
- remote-loop-respond boolean
- report-alarm
    - ais boolean
    - ber-sd boolean
    - ber-sf boolean
    - looped boolean
    - los boolean
    - oof boolean
    - rai boolean
- signal-mode keyword
- ds3 string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - channelized keyword
    - clock-source keyword
    - crc number
    - description string
- egress
    - port-scheduler-policy
        - overrides
            - apply-groups reference
            - apply-groups-exclude reference
            - level number
            - apply-groups reference
            - apply-groups-exclude reference

```

configure port tdm ds3 egress port-scheduler-policy overrides level percent-rate

```

    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - max-rate
      - percent-rate decimal-number
      - rate (number | keyword)
    - policy-name reference
  - encap-type keyword
  - feac-loop-respond boolean
  - framing keyword
  - idle-cycle-flag keyword
  - load-balancing-algorithm keyword
  - loopback keyword
  - mac-address string
  - maintenance-data-link
    - equipment-id-code string
    - facility-id-code string
    - frame-id-code string
    - generator-string string
    - location-id-code string
    - port-string string
    - transmit-message-type
      - idle-signal boolean
      - path boolean
      - test-signal boolean
    - unit-id-code string
  - mode keyword
  - mtu number
  - network
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - queue-policy reference
  - ppp
    - apply-groups reference
    - apply-groups-exclude reference
    - keepalive
      - drop-count number
      - interval (number | keyword)
  - report-alarm
    - ais boolean
    - looped boolean
    - los boolean
    - oof boolean
    - rai boolean
  - scramble boolean
  - subrate
    - csu-mode keyword
    - rate-step number
  - e1 string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ber-threshold
      - signal-degrade number
      - signal-failure number
    - channel-group number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference

```

configure port tdm e1 channel-group crc

- **circ** *number*
- **description** *string*
- **egress**
 - **port-scheduler-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **max-rate**
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
 - **policy-name** *reference*
- **encap-type** *keyword*
- **idle-cycle-flag** *keyword*
- **idle-payload-fill**
 - **all-ones**
 - **pattern** *number*
- **idle-signal-fill**
 - **all-ones**
 - **pattern** *number*
- **load-balancing-algorithm** *keyword*
- **mac-address** *string*
- **mode** *keyword*
- **mtu** *number*
- **network**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **queue-policy** *reference*
- **ppp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ber-sf-link-down** *boolean*
 - **compress**
 - **acfc** *boolean*
 - **pfc** *boolean*
 - **keepalive**
 - **drop-count** *number*
 - **interval** (*number* | *keyword*)
- **speed** *number*
- **timeslot** *number*
- **clock-source** *keyword*
- **framing** *keyword*
- **loopback** *keyword*
- **national-bits**
 - **sa4** *boolean*
 - **sa5** *boolean*
 - **sa6** *boolean*
 - **sa7** *boolean*
 - **sa8** *boolean*
- **report-alarm**
 - **ais** *boolean*
 - **ber-sd** *boolean*
 - **ber-sf** *boolean*
 - **looped** *boolean*

configure port tdm e1 report-alarm los

```

    - los boolean
    - oof boolean
    - rai boolean
  - signal-mode keyword
- e3 string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - clock-source keyword
  - crc number
  - description string
  - egress
    - port-scheduler-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - level number
          - apply-groups reference
          - apply-groups-exclude reference
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
      - max-rate
        - percent-rate decimal-number
        - rate (number | keyword)
    - policy-name reference
  - encap-type keyword
  - framing keyword
  - idle-cycle-flag keyword
  - load-balancing-algorithm keyword
  - loopback keyword
  - mac-address string
  - mode keyword
  - mtu number
  - network
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - queue-policy reference
  - ppp
    - apply-groups reference
    - apply-groups-exclude reference
    - keepalive
      - drop-count number
      - interval (number | keyword)
  - report-alarm
    - ais boolean
    - looped boolean
    - los boolean
    - oof boolean
    - rai boolean
  - scramble boolean
- hold-time
  - down number
  - up number
- transceiver
  - apply-groups reference
  - apply-groups-exclude reference
  - digital-coherent-optics boolean

```

3.32.1 port command descriptions

port [[port-id](#)] *string*

Synopsis	Enter the port list instance
Context	configure port <i>string</i>
Tree	port
Introduced	16.0.R1
Platforms	All

[port-id] *string*

Synopsis	Port ID
Context	configure port <i>string</i>
Tree	port
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the access context
Context	configure port <i>string</i> access
Tree	access
Description	Commands in this context configure egress and ingress pool policy commands.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure port <i>string</i> access egress
Tree	egress

Description	Commands in this context specify the configuration of access egress buffer pools to determine how a CBS-reserved space is handled and the strategy for utilizing the shared buffer space.
Introduced	16.0.R1
Platforms	All

pool [*name*] *string*

Synopsis	Enter the pool list instance
Context	configure port <i>string</i> access egress pool <i>string</i>
Tree	pool
Description	Commands in this context configure pool policies for the pool instance.
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Pool name for the access port
Context	configure port <i>string</i> access egress pool <i>string</i>
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

amber-alarm-threshold *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	configure port <i>string</i> access egress pool <i>string</i> amber-alarm-threshold <i>number</i>
Tree	amber-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

red-alarm-threshold *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	configure <i>port string access egress pool string red-alarm-threshold number</i>
Tree	red-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the resv-cbs context
Context	configure <i>port string access egress pool string resv-cbs</i>
Tree	resv-cbs
Introduced	16.0.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the amber-alarm-action context
Context	configure <i>port string access egress pool string resv-cbs amber-alarm-action</i>
Tree	amber-alarm-action
Introduced	16.0.R1
Platforms	All

max *number*

Synopsis	Maximum percentage for reserved CBS of the pool
Context	configure <i>port string access egress pool string resv-cbs amber-alarm-action max number</i>
Tree	max
Description	<p>This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.</p> <p>To enable adaptive CBS sizing the max, step, and cbs commands must be configured. The cbs command must also be configured to a percentage other than the default value.</p>

When unconfigured, CBS adaptive sizing is not enabled.

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

step number

Synopsis	Step-size percentage for reserved CBS of the pool
Context	configure port string access egress pool string resv-cbs amber-alarm-action step number
Tree	step
Description	This command specifies the step-size percentage for the reserved CBS of the pool. To enable adaptive CBS sizing the max , step , and cbs commands must be configured. The cbs command must also be configured to a percentage other than the default value. When unconfigured, CBS adaptive sizing is not enabled.

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

cbs (number | keyword)

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	configure port string access egress pool string resv-cbs cbs (number keyword)
Tree	cbs
Range	0 to 100
Default	auto
Units	percent
Options	auto
Introduced	16.0.R1
Platforms	All

slope-policy *reference*

Synopsis	Policy for the RED slope and TAF values
Context	configure port <i>string</i> access egress pool <i>string</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure port <i>string</i> access ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

pool [[name](#)] *string*

Synopsis	Enter the pool list instance
Context	configure port <i>string</i> access ingress pool <i>string</i>
Tree	pool
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Pool name for the access port
Context	configure port <i>string</i> access ingress pool <i>string</i>
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

amber-alarm-threshold *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	configure port <i>string</i> access ingress pool <i>string</i> amber-alarm-threshold <i>number</i>
Tree	amber-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

red-alarm-threshold *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	configure port <i>string</i> access ingress pool <i>string</i> red-alarm-threshold <i>number</i>
Tree	red-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the resv-cbs context
Context	configure port <i>string</i> access ingress pool <i>string</i> resv-cbs
Tree	resv-cbs
Introduced	16.0.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the amber-alarm-action context
Context	configure port <i>string</i> access ingress pool <i>string</i> resv-cbs amber-alarm-action
Tree	amber-alarm-action
Introduced	16.0.R1
Platforms	All

max number

Synopsis	Maximum percentage for reserved CBS of the pool
Context	configure port string access ingress pool string resv-cbs amber-alarm-action max number
Tree	max
Description	<p>This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.</p> <p>To enable adaptive CBS sizing the max, step, and cbs commands must be configured. The cbs command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

step number

Synopsis	Step-size percentage for reserved CBS of the pool
Context	configure port string access ingress pool string resv-cbs amber-alarm-action step number
Tree	step
Description	<p>This command specifies the step-size percentage for the reserved CBS of the pool.</p> <p>To enable adaptive CBS sizing the max, step, and cbs commands must be configured. The cbs command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

cbs (number | keyword)

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	configure port string access ingress pool string resv-cbs cbs (number keyword)

Tree	cbs
Range	0 to 100
Default	auto
Units	percent
Options	auto
Introduced	16.0.R1
Platforms	All

slope-policy *reference*

Synopsis	Policy for the RED slope and TAF values
Context	configure port <i>string</i> access ingress pool <i>string</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the port
Context	configure port <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

connector

Synopsis	Enter the connector context
Context	configure port <i>string</i> connector
Tree	connector
Description	Commands in this context configure connector ports and modes.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

breakout keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port breakout of the transceiver used in the connector
Context	configure port string connector breakout keyword
Tree	breakout
Description	<p>This command defines the port breakout of the transceiver used in the connector. Specifying the type triggers the creation of the ports that will be accessible under the connector.</p> <p>When a QSFP28 connector uses an SFP+ optical module with the QSFP28-to-SFP+/SFP28 adapter, set this command to c1-10g. This value indicates the presence of the adapter.</p> <p>The options for breakout on specific connectors depend on both the card type and level (or XMA type and level). See the applicable installation guides for details.</p>
Options	c1-40g, c4-10g, c1-100g, c4-25g, c10-10g, c1-400g, c2-100g, c4-100g, c1-10g, c1-25g, c1-50g, c8-50g, c1-800g, c3-100g, c8-100g, c2-400g, c1-1g
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rs-fec-mode keyword

Synopsis	RS-FEC mode for the Ethernet connector
Context	configure port string connector rs-fec-mode keyword
Tree	rs-fec-mode
Description	<p>This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet connector.</p> <p>See "Forward Error Correction" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Interface Configuration Guide</i> for more information about FEC settings.</p>
Options	cl91-514-528, cl91-514-544
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ddm-events boolean

Synopsis	Enable Digital Diagnostic Monitoring (DDM) events
----------	---

Context	configure port string ddm-events boolean
Tree	ddm-events
Default	true
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure port string description string
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dist-cpu-protection

Synopsis	Enter the dist-cpu-protection context
Context	configure port string dist-cpu-protection
Tree	dist-cpu-protection
Introduced	21.5.R1
Platforms	All

policy reference

Synopsis	Distributed CPU protection policy name
Context	configure port string dist-cpu-protection policy reference
Tree	policy
Reference	configure system security dist-cpu-protection policy string
Introduced	21.5.R1
Platforms	All

dwdm

Synopsis	Enter the dwdm context
----------	-------------------------------

Context	configure port string dwdm
Tree	dwdm
Description	Commands in this context configure the Dense Wavelength Division Multiplexing (DWDM) parameters for the port.
Introduced	16.0.R1
Platforms	All

coherent

Synopsis	Enter the coherent context
Context	configure port string dwdm coherent
Tree	coherent
Description	Commands in this context configure the coherent optical module.
Introduced	16.0.R1
Platforms	All

compatibility *keyword*

Synopsis	Optical mode and rate of operation
Context	configure port string dwdm coherent compatibility keyword
Tree	compatibility
Default	long-haul
Options	long-haul, metro, access, interop, interop2, interop3, long-haul-non-differential
Introduced	16.0.R1
Platforms	All

cpr-window-size *number*

Synopsis	Window size for the carrier phase recovery
Context	configure port string dwdm coherent cpr-window-size number
Tree	cpr-window-size
Description	This command configures the window size for the carrier phase recovery. When this command is changed, the link bounces because the receiver needs to be reconfigured.
Range	2 4 8 16 32 64

Default	32
Units	symbols
Introduced	16.0.R1
Platforms	All

dispersion number

Synopsis	Residual chromatic dispersion compensation
Context	configure port string dwdm coherent dispersion number
Tree	dispersion
Description	This command specifies the residual chromatic dispersion compensation when the coherent receiver is operating in manual dispersion control mode.
Range	-50000 to 50000
Units	picoseconds per nanometer
Introduced	16.0.R1
Platforms	All

mode keyword

Synopsis	Mode used to compensate for chromatic dispersion
Context	configure port string dwdm coherent mode keyword
Tree	mode
Default	automatic
Options	automatic, manual
Introduced	16.0.R1
Platforms	All

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port string dwdm coherent report-alarm
Tree	report-alarm
Description	Commands in this context configure the alarms reported for the coherent module.
Introduced	16.0.R1
Platforms	All

hosttx *boolean*

Synopsis	Report the host (electrical side) transmit alarm
Context	configure port string dwdm coherent report-alarm hosttx <i>boolean</i>
Tree	hosttx
Default	true
Introduced	16.0.R1
Platforms	All

mod *boolean*

Synopsis	Report the module alarm
Context	configure port string dwdm coherent report-alarm mod <i>boolean</i>
Tree	mod
Default	true
Introduced	16.0.R1
Platforms	All

modflt *boolean*

Synopsis	Report the module fault alarm
Context	configure port string dwdm coherent report-alarm modflt <i>boolean</i>
Tree	modflt
Default	true
Introduced	16.0.R1
Platforms	All

netrx *boolean*

Synopsis	Report the network (optical side) receive alarm
Context	configure port string dwdm coherent report-alarm netrx <i>boolean</i>
Tree	netrx
Default	true
Introduced	16.0.R1
Platforms	All

nettx boolean

Synopsis	Report the network (optical side) transmit alarm
Context	configure port string <i>dwdm coherent report-alarm nettx boolean</i>
Tree	nettx
Default	true
Introduced	16.0.R1
Platforms	All

rx-los-reaction keyword

Synopsis	Reaction to an RX LOS
Context	configure port string <i>dwdm coherent rx-los-reaction keyword</i>
Tree	rx-los-reaction
Description	This command configures the reaction to an RX LOS. Note: If this command is disabled for some coherent DWDM transceivers, the transceiver only reports local fault alarms when an RX LOS condition occurs; however, the port returns to service faster after the LOS condition is cleared. For these transceivers, if this command is enabled, there is better visibility of individual alarms (for example, signal-fail, local fault, no-am-lock), but the port takes longer to service after the LOS condition is cleared.
Default	squelch
Options	none, squelch
Introduced	16.0.R1
Platforms	All

rx-los-thresh decimal-number

Synopsis	Average input power LOS threshold
Context	configure port string <i>dwdm coherent rx-los-thresh decimal-number</i>
Tree	rx-los-thresh
Range	-30 to -13
Default	-23
Units	decibel-milliwatts
Introduced	16.0.R1
Platforms	All

sweep

Synopsis	Enter the sweep context
Context	configure <i>port string</i> <i>dwdm coherent sweep</i>
Tree	<i>sweep</i>
Description	Commands in this context allow users to configure the dispersion sweep start and end values for the automatic mode of coherent control. If the user knows the approximate or theoretical residual dispersion of the link, these commands can be used to limit the range of sweeping for the automatic control mode and therefore achieve a faster link up.
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the dispersion compensation range
Context	configure <i>port string</i> <i>dwdm coherent sweep end number</i>
Tree	<i>end</i>
Range	-50000 to 50000
Default	2000
Units	picoseconds per nanometer
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the dispersion compensation range
Context	configure <i>port string</i> <i>dwdm coherent sweep start number</i>
Tree	<i>start</i>
Range	-50000 to 50000
Default	-25500
Units	picoseconds per nanometer
Introduced	16.0.R1
Platforms	All

target-power *decimal-number*

Synopsis	Average output power target for the port
Context	configure port <i>string</i> dwdm coherent target-power <i>decimal-number</i>
Tree	target-power
Range	-20 to 3
Default	1
Units	decibel-milliwatts
Introduced	16.0.R1
Platforms	All

frequency *number*

Synopsis	Center frequency for tunable DWDM optical interface
Context	configure port <i>string</i> dwdm frequency <i>number</i>
Tree	frequency
Description	<p>This command configures the center frequency to use for a tunable DWDM optical interface. This command can be used to specify any frequency in the C band.</p> <p>To set the DWDM frequency, the port must be a physical port and the provisioned MDA type must have DWDM tunable optics (for example, p1-100g-tun-b), or the MDA must support the option of tunable DWDM optic modules.</p> <p>This command replaces the configure port dwdm channel command.</p>
Range	191100000 to 196150000
Units	megahertz
Introduced	21.10.R3
Platforms	All

ethernet

Synopsis	Enter the ethernet context
Context	configure port <i>string</i> ethernet
Tree	ethernet
Description	<p>Commands in this context configure Ethernet port attributes.</p> <p>This context can only be used when configuring Fast Ethernet, Gigabit, or 10-Gb Ethernet LAN ports on an appropriate MDA.</p>
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the access context
Context	configure port string ethernet access
Tree	access
Description	Commands in this context configure Ethernet access port commands.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Administrative bandwidth assigned to Ethernet ports
Context	configure port string ethernet access bandwidth number
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

booking-factor *number*

Synopsis	Booking factor applied to the Ethernet port
Context	configure port string ethernet access booking-factor number
Tree	booking-factor
Range	1 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure port string ethernet access egress
Tree	egress
Description	Commands in this context configure Ethernet access egress port commands.

Introduced 16.0.R1
Platforms All

queue-group [[queue-group-name](#)] *reference* [instance-id](#) *number*

Synopsis Enter the **queue-group** list instance
Context **configure** [port](#) *string* [ethernet](#) [access](#) [egress](#) [queue-group](#) *reference* [instance-id](#) *number*
Tree [queue-group](#)
Introduced 16.0.R1
Platforms All

[queue-group-name] *reference*

Synopsis Queue group name
Context **configure** [port](#) *string* [ethernet](#) [access](#) [egress](#) [queue-group](#) *reference* [instance-id](#) *number*
Tree [queue-group](#)
Reference **configure** [qos](#) [queue-group-templates](#) [egress](#) [queue-group](#) *string*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

instance-id *number*

Synopsis Instance ID for the egress queue group
Context **configure** [port](#) *string* [ethernet](#) [access](#) [egress](#) [queue-group](#) *reference* [instance-id](#) *number*
Tree [queue-group](#)
Range 1 to 65535
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

accounting-policy *reference*

Synopsis Accounting policy for the Ethernet port

Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

aggregate-rate

Synopsis	Enter the aggregate-rate context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> aggregate-rate
Tree	aggregate-rate
Introduced	16.0.R1
Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Control unused bandwidth
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> aggregate-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on policers and queues
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> aggregate-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate (*number* | *keyword*)

Synopsis	Aggregate rate for all queues
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> aggregate-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

host-match

Synopsis	Enter the host-match context
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Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> host-match
Tree	host-match
Introduced	16.0.R1
Platforms	All

int-dest-id [*destination-string*] *string*

Synopsis	Add a list entry for int-dest-id
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> host-match int-dest-id <i>string</i>
Tree	int-dest-id
Introduced	16.0.R1
Platforms	All

[destination-string] *string*

Synopsis	Host match destination ID
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> host-match int-dest-id <i>string</i>
Tree	int-dest-id
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hs-turbo *boolean*

Synopsis	Enable HS turbo queues for higher throughput
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> hs-turbo <i>boolean</i>
Tree	hs-turbo
Description	<p>When configured to true, this command enables HS turbo queues that allow the corresponding HSQ queue group queues to achieve a higher throughput.</p> <p>This command is not applicable to 10G ports and is ignored when it is configured under a queue group instance on a 10G port.</p> <p>When configured to false, HS turbo queues are disabled.</p>

Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

queue-overrides

Synopsis	Enter the queue-overrides context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides
Tree	queue-overrides
Introduced	16.0.R1
Platforms	All

queue [queue-id] reference

Synopsis	Enter the queue list instance
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] reference

Synopsis	Queue ID
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
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Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

burst-limit (*number* | *keyword*)

Synopsis	Override for the shaping burst size for the queue
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1

Platforms All

cbs (*number* | *keyword*)

Synopsis CBS for the template queue

Context **configure** *port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference cbs (number | keyword)*

Tree [cbs](#)

Range 0 to 1048576

Units kilobytes

Options auto

Introduced 16.0.R1

Platforms All

drop-tail

Synopsis Enter the **drop-tail** context

Context **configure** *port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference drop-tail*

Tree [drop-tail](#)

Description Commands in this context configure queue drop tail commands.

Introduced 16.0.R1

Platforms All

low

Synopsis Enter the **low** context

Context **configure** *port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference drop-tail low*

Tree [low](#)

Description Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.

Introduced 16.0.R1

Platforms All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, then the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure <i>port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference monitor-queue-depth fast-polling boolean</i>
Tree	fast-polling
Description	When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to false , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure <i>port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference monitor-queue-depth violation-threshold decimal-number</i>
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure <i>port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference parent</i>
Tree	parent
Description	Commands in this context define the weight of the queue treatment by the parent scheduler that further governs the available bandwidth given to the queue, aside from the queue PIR setting. When multiple schedulers or queues share a child status with the parent scheduler, the weight or level commands define how the queue contends with the other children for the parent bandwidth.

Introduced 16.0.R1
Platforms All

cir-weight *number*

Synopsis CIR that overrides the parent for the queue group
Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* parent cir-weight *number*
Tree [cir-weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

weight *number*

Synopsis PIR that overrides the parent for the queue group
Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* parent weight *number*
Tree [weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

percent-rate

Synopsis Enter the **percent-rate** context
Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* percent-rate
Tree [percent-rate](#)
Description Commands in this context specify percent rates.

This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the percent rate is performed under the **hs-wrr-group** command within the egress queue group template.

Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms All

cir *decimal-number*

Synopsis	CIR for the queue
Context	configure port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR for the queue
Context	configure port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR for the queue
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Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	<p>This command specifies the administrative CIR used by the queue. When the rate command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent cir-level and cir-weight commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the queue
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Description	<p>This command specifies the administrative PIR used by the queue. When the rate command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's adaptation-rule commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure port string ethernet access egress queue-group reference instance-id number scheduler-policy
Tree	scheduler-policy
Description	Commands in this context configure a scheduler policy for the egress queue group.
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure port string ethernet access egress queue-group reference instance-id number scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [**scheduler-name**] *string*

Synopsis	Enter the scheduler list instance
Context	configure port string ethernet access egress queue-group reference instance-id number scheduler-policy overrides scheduler string
Tree	scheduler
Description	<p>Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created within the hierarchical tiers of the policy. It is assumed that each scheduler created has queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier.</p> <p>A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.</p>
Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i> parent
Tree	parent
Description	<p>Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy.</p> <p>The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.</p>
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR that overrides the parent
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1

Platforms All

weight *number*

Synopsis PIR that overrides the parent

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* parent weight *number*

Tree **weight**

Range 0 to 100

Introduced 16.0.R1

Platforms All

rate

Synopsis Enter the **rate** context

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* rate

Tree **rate**

Description Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.

Introduced 16.0.R1

Platforms All

cir (*number* | *keyword*)

Synopsis CIR for the scheduler

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* rate cir (*number* | *keyword*)

Tree **cir**

Description This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent scheduler's within-cir distribution phase. When the **rate** command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to **max**, the CIR rate is set to infinity.

The **sum** keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.

Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Description	This command specifies the PIR. When the rate command is executed, a valid PIR setting must be explicitly defined. Any other value will result in an error without modifying the current PIR rate.
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy <i>policy-name</i> <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

virtual-port [*vport-name*] *string*

Synopsis	Enter the virtual-port list instance
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Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i>
Tree	virtual-port
Introduced	16.0.R4
Platforms	All

[vport-name] *string*

Synopsis	Vport scheduling node name
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i>
Tree	virtual-port
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

aggregate-rate

Synopsis	Enter the aggregate-rate context
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> aggregate-rate
Tree	aggregate-rate
Introduced	16.0.R4
Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Control unused bandwidth
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> aggregate-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R4
Platforms	All

rate (*number* | *keyword*)

Synopsis	Enforced aggregate rate for the queue
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> aggregate-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

host-match

Synopsis	Enter the host-match context
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> host-match
Tree	host-match
Introduced	16.0.R4
Platforms	All

int-dest-id [*destination-string*] *string*

Synopsis	Add a list entry for int-dest-id
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> host-match int-dest-id <i>string</i>
Tree	int-dest-id

Introduced 16.0.R4
Platforms All

[destination-string] *string*

Synopsis Host match destination ID
Context **configure** port *string* ethernet access egress virtual-port *string* host-match int-dest-id *string*
Tree [int-dest-id](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

hw-agg-shaper-scheduler-policy *reference*

Synopsis Hardware aggregate shaper scheduler policy to apply
Context **configure** port *string* ethernet access egress virtual-port *string* hw-agg-shaper-scheduler-policy *reference*
Tree [hw-agg-shaper-scheduler-policy](#)
Reference **configure** qos hw-agg-shaper-scheduler-policy *string*
Introduced 21.7.R1
Platforms 7750 SR-1, 7750 SR-s

lag-per-link-hash

Synopsis Enter the **lag-per-link-hash** context
Context **configure** port *string* ethernet access egress virtual-port *string* lag-per-link-hash
Tree [lag-per-link-hash](#)
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

class *number*

Synopsis Class used on LAG egress using weighted per-link-hash

Context	configure port string ethernet access egress virtual-port string lag-per-link-hash class number
Tree	class
Range	1 to 3
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight number

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	configure port string ethernet access egress virtual-port string lag-per-link-hash weight number
Tree	weight
Range	1 to 1024
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-hw-agg-shaper-scheduler boolean

Synopsis	Enable monitoring hardware aggregate shaper scheduler
Context	configure port string ethernet access egress virtual-port string monitor-hw-agg-shaper-scheduler boolean
Tree	monitor-hw-agg-shaper-scheduler
Description	When configured to true , enables congestion monitoring of the hardware aggregate shaper scheduler on the specified vport.
Default	false
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

monitor-port-scheduler boolean

Synopsis	Enable congestion monitoring on egress port scheduler
Context	configure port string ethernet access egress virtual-port string monitor-port-scheduler boolean

Tree	monitor-port-scheduler
Description	The command enables congestion monitoring on an EPS that is applied to a Vport. Congestion monitoring must be further configured under the port-scheduler CLI hierarchy. Once the congestion monitoring is in effect, the offered rate (incoming traffic) is compared to the configured port-scheduler congestion threshold. The results of these measurements are stored as the number of samples representing the number of times the offered rates exceeded the configured congestion threshold since the last clearing of the stats. Therefore, the results represent the number of times that the port-scheduler that is applied to a Vport was congested since the last reset of the stats using a clear command.
Default	false
Introduced	16.0.R4
Platforms	All

multicast-hqos-adjustment *boolean*

Synopsis	Apply HQoS Adjustment (egress rate modification)
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> multicast-hqos-adjustment <i>boolean</i>
Tree	multicast-hqos-adjustment
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-scheduler-policy *reference*

Synopsis	Port scheduler policy name
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> port-scheduler-policy <i>reference</i>
Tree	port-scheduler-policy
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	16.0.R4
Platforms	All

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> scheduler-policy

Tree	scheduler-policy
Introduced	16.0.R4
Platforms	All

policy-name *reference*

Synopsis	Egress scheduler policy
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	22.2.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure port <i>string</i> ethernet access ingress
Tree	ingress
Description	Commands in this context configure Ethernet access ingress port commands.
Introduced	16.0.R1
Platforms	All

queue-group [[queue-group-name](#)] *reference*

Synopsis	Enter the queue-group list instance
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i>
Tree	queue-group
Description	<p>Commands in this context create an ingress queue group on the Ethernet port. Queue groups created on access ports are used as an alternative queue destination for SAPs.</p> <p>Queue groups can be created on both access and network oriented ports. When the port is in access mode, the queue groups must be created within the port access node. Access ingress queue groups can only be used by ingress SAP forwarding classes and only a single ingress queue group per port is supported. When the queue group is created in an ingress port context, the queue group name must be an existing ingress queue group template. Two ingress queue groups with the same name cannot be created on the same port.</p>

When creating a queue group, the system will attempt to allocate queue resources based on the queues defined in the queue group template. If the appropriate queue resources do not currently exist, the queue group will not be created. Ingress port queue groups do not support shared-queuing or multipoint shared queuing behavior.

A port queue group cannot be removed from the port when a forwarding class is currently redirected to the group. All forwarding class redirections must first be removed prior to removing the queue group.

Introduced 16.0.R1
Platforms All

[queue-group-name] reference

Synopsis Queue group name
Context **configure** port string ethernet access ingress queue-group reference
Tree queue-group
Description This command specifies the queue group name. The specified queue group name must exist as an ingress or egress queue group template depending on the ingress or egress context of the port queue group. Only a single queue group may be created on an ingress port.
Reference **configure** qos queue-group-templates ingress queue-group string
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

accounting-policy reference

Synopsis Accounting policy for the Ethernet port
Context **configure** port string ethernet access ingress queue-group reference accounting-policy reference
Tree accounting-policy
Reference **configure** log accounting-policy number
Introduced 16.0.R1
Platforms All

collect-stats boolean

Synopsis Collect accounting and statistical data

Context	configure port string ethernet access ingress queue-group reference collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

description [string](#)

Synopsis	Text description
Context	configure port string ethernet access ingress queue-group reference description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

queue-overrides

Synopsis	Enter the queue-overrides context
Context	configure port string ethernet access ingress queue-group reference queue-overrides
Tree	queue-overrides
Description	Commands in this context define queue command overrides for each queue within the queue group.
Introduced	16.0.R1
Platforms	All

queue [[queue-id](#)] [reference](#)

Synopsis	Enter the queue list instance
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference
Tree	queue
Description	Commands in this context associate a queue for use in a queue group template. The template queue is created on each queue group object that is created with the queue group template name. Each queue is identified within the template by a queue ID number. The template ensures that all queue groups created with the template's name have the same queue IDs, providing a uniform structure for the forwarding class

redirection commands in the SAP egress QoS policies. The queue commands can be individually changed for each queue in each queue group using per queue overrides.

Introduced 16.0.R1
Platforms All

[queue-id] *reference*

Synopsis Queue ID for the queue group template
Context **configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference*
Tree queue
Reference **configure** qos queue-group-templates ingress queue-group *string* queue *number*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

adaptation-rule

Synopsis Enter the **adaptation-rule** context
Context **configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* adaptation-rule
Tree adaptation-rule
Introduced 16.0.R1
Platforms All

cir *keyword*

Synopsis Constraint used when deriving the operational CIR value
Context **configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* adaptation-rule cir *keyword*
Tree cir
Options max, min, closest
Introduced 16.0.R1
Platforms All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

cbs (number | keyword)

Synopsis	CBS for the template queue
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference cbs (number keyword)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference drop-tail low
Tree	low

Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which out-of-profile packets are accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, then the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
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Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR for the queue
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	<p>This command specifies the administrative CIR used by the queue. When the rate command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where</p>

the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.

The CIR can be used by the queue's parent **cir-level** and **cir-weight** commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.

Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the queue
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Description	<p>This command specifies the administrative PIR used by the queue. When the rate command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's adaptation-rule commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure port string ethernet access ingress queue-group reference scheduler-policy
Tree	scheduler-policy
Description	Commands in this context configure a scheduler policy for the ingress queue group.

Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides
Tree	overrides
Description	Commands in this context specify the set of attributes specifying values specific to the given queue-group instance.
Introduced	16.0.R1
Platforms	All

scheduler [*scheduler-name*] *string*

Synopsis	Enter the scheduler list instance
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	<p>Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created within the hierarchical tiers of the policy. It is assumed that each scheduler created has queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier.</p> <p>A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.</p>
Introduced	16.0.R1
Platforms	All

[*scheduler-name*] *string*

Synopsis	Scheduler name
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler

Description	This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> parent
Tree	parent
Description	<p>Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy.</p> <p>The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.</p>
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR that overrides the parent
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR that overrides the parent
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Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> rate
Tree	rate
Description	Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR for the scheduler
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent scheduler's within-cir distribution phase. When the rate command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to max , the CIR rate is set to infinity. The sum keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.
Range	0 to 6400000000
Units	kilobps

Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Description	This command specifies the PIR. When the rate command is executed, a valid PIR setting must be explicitly defined. Any other value will result in an error without modifying the current PIR rate.
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy <i>policy-name</i> <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy for the Ethernet port
Context	configure port <i>string</i> ethernet accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1

Platforms All

autonegotiate *keyword*

Synopsis Speed and duplex autonegotiation on the Ethernet port

Context **configure** port *string* ethernet autonegotiate *keyword*

Tree autonegotiate

Description This command enables speed and duplex autonegotiation on Fast Ethernet ports and enables far-end fault indicator support on Gb ports. When autonegotiation is enabled on a port, the link attempts to automatically negotiate the link **speed** and **duplex** commands. If autonegotiation is enabled, the configured **duplex** and **speed** commands are ignored.

When autonegotiation is disabled on a port, the port does not attempt to autonegotiate and will only operate at the **speed** and **duplex** command settings configured for the port. Note that disabling autonegotiation on Gb ports is not allowed as the IEEE 802.3 specification for Gb Ethernet requires autonegotiation be enabled for far end fault indication.

It is required for autonegotiation to be limited for ports in a LAG to guarantee a specific port speed.

Options true, false, limited

Introduced 16.0.R1

Platforms All

collect-stats *boolean*

Synopsis Collect accounting and statistical data

Context **configure** port *string* ethernet collect-stats *boolean*

Tree collect-stats

Default false

Introduced 16.0.R1

Platforms All

crc-monitor

Synopsis Enter the **crc-monitor** context

Context **configure** port *string* ethernet crc-monitor

Tree crc-monitor

Description	Commands in this context configure Ethernet Cyclic Redundancy Check (CRC) monitoring.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-degrade

Synopsis	Enter the signal-degrade context
Context	configure port <i>string</i> ethernet crc-monitor signal-degrade
Tree	signal-degrade
Description	Commands in this context specify the error rate at which to declare the Signal Degrade (SD) condition on an Ethernet interface. The value represents $M \cdot 10^E - N$, which is the ratio of errored frames over the total frames received over W seconds of the sliding window. The CRC errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	SD multiplier
Context	configure port <i>string</i> ethernet crc-monitor signal-degrade multiplier <i>number</i>
Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	SD threshold
Context	configure port <i>string</i> ethernet crc-monitor signal-degrade threshold <i>number</i>
Tree	threshold
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-failure

Synopsis	Enter the signal-failure context
Context	configure port <i>string</i> ethernet crc-monitor signal-failure
Tree	signal-failure
Description	Commands in this context specify the error rate at which to declare the Signal Fail (SF) condition on an Ethernet interface. The value represents M*10E-N errored frames over total frames received over W seconds of the sliding window. The CRC errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	SF multiplier
Context	configure port <i>string</i> ethernet crc-monitor signal-failure multiplier <i>number</i>
Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	SF threshold
Context	configure port <i>string</i> ethernet crc-monitor signal-failure threshold <i>number</i>
Tree	threshold
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window-size *number*

Synopsis	Sliding window size over which errors are measured
Context	configure port <i>string</i> ethernet crc-monitor window-size <i>number</i>
Tree	window-size

Description	This command specifies the sliding window size over which the Ethernet frames are sampled to detect SF or SD conditions. The command is used jointly with the signal-failure and the signal-degrade commands to configure the sliding window size.
Range	5 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dampening

Synopsis	Enter the dampening context
Context	configure port string ethernet dampening
Tree	dampening
Description	Commands in this context configure Exponential Port Dampening (EPD) for the Ethernet port.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of exponential port dampening
Context	configure port string ethernet dampening admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

half-life *number*

Synopsis	Half-life decay time
Context	configure port string ethernet dampening half-life number
Tree	half-life
Description	This command specifies the time that must pass before penalties decay to one-half the initial amount. The half-life and maximum suppression time values must be set at the

same time and the ratio of the maximum suppression time and half-life must be less than or equal to 49 and greater than or equal to one.

Range	1 to 2000
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

max-suppress-time *number*

Synopsis	Maximum suppression time
Context	configure <i>port string ethernet dampening max-suppress-time number</i>
Tree	max-suppress-time
Description	<p>This command specifies the maximum suppression time, which is the time it can take after the physical link comes up before the worst case accumulated penalties have decayed to the reuse threshold. The maximum penalty is derived from the maximum suppression time, half life, and reuse threshold, using the following equation:</p> $\text{maximum penalty} = (\text{reuse threshold})^2 \exp(-(\text{maximum suppression time}/\text{half life}))$ <p>The half life and maximum suppression time values must be set at the same time and the ratio of the maximum suppression time and half life must be less than or equal to 49 and greater than or equal to one.</p>
Range	1 to 43200
Default	20
Units	seconds
Introduced	16.0.R1
Platforms	All

reuse-threshold *number*

Synopsis	Threshold which port-up state is no longer suppressed
Context	configure <i>port string ethernet dampening reuse-threshold number</i>
Tree	reuse-threshold
Description	<p>This command specifies the threshold at which the port-up state is no longer suppressed, after the port has been in a suppressed state and the accumulated penalties decay drops below this threshold. The reuse threshold value must be less than the suppress threshold value.</p>
Range	1 to 20000
Default	1000

Units	penalties
Introduced	16.0.R1
Platforms	All

suppress-threshold *number*

Synopsis	Threshold at which the port-up state is suppressed
Context	configure port <i>string</i> ethernet dampening suppress-threshold <i>number</i>
Tree	suppress-threshold
Description	This command specifies the threshold at which the port-up state is suppressed until the accumulated penalties drop below the reuse threshold. The reuse threshold value must be less than the suppress threshold value.
Range	1 to 20000
Default	2000
Units	penalties
Introduced	16.0.R1
Platforms	All

discard-rx-pause-frames *boolean*

Synopsis	Discard received pause frames
Context	configure port <i>string</i> ethernet discard-rx-pause-frames <i>boolean</i>
Tree	discard-rx-pause-frames
Description	When configured to true , the router discards received pause frames. Pause frames are used for local link flow control. When configured to false , pause frames are processed upon reception and the transmit side of the receiving port pauses in its transmissions.
Default	false
Introduced	20.10.R1
Platforms	All

dot1q-etype *string*

Synopsis	Ethertype expected if port encapsulation type is dot1q
Context	configure port <i>string</i> ethernet dot1q-etype <i>string</i>
Tree	dot1q-etype

Description	This command specifies the Ethertype expected when the port encapsulation type is dot1q. Dot1q encapsulation is supported only on Ethernet interfaces.
Default	33024
Introduced	16.0.R1
Platforms	All

dot1x

Synopsis	Enter the dot1x context
Context	configure port string ethernet dot1x
Tree	dot1x
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of dot1x packet extraction to CPM
Context	configure port string ethernet dot1x admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.10.R1
Platforms	All

macsec

Synopsis	Enter the macsec context
Context	configure port string ethernet dot1x macsec
Tree	macsec
Description	Commands in this context configure Media Access Control Security (MACsec) under the port.
Introduced	16.0.R1
Platforms	All

exclude-mac-policy *reference*

Synopsis	MAC policy excluded from MACsec encryption
Context	configure port string ethernet dot1x macsec exclude-mac-policy <i>reference</i>
Tree	exclude-mac-policy
Reference	configure macsec mac-policy <i>number</i>
Introduced	16.0.R5
Platforms	All

exclude-protocol

Synopsis	Enter the exclude-protocol context
Context	configure port string ethernet dot1x macsec exclude-protocol
Tree	exclude-protocol
Introduced	16.0.R1
Platforms	All

cdp *boolean*

Synopsis	Disable MACsec for all packets on the link for CDP
Context	configure port string ethernet dot1x macsec exclude-protocol cdp <i>boolean</i>
Tree	cdp
Default	false
Introduced	16.0.R1
Platforms	All

eapol-start *boolean*

Synopsis	Disable MACsec for all packets on the link for EAPOL
Context	configure port string ethernet dot1x macsec exclude-protocol eapol-start <i>boolean</i>
Tree	eapol-start
Default	false
Introduced	16.0.R1
Platforms	All

efm-oam *boolean*

Synopsis	Disable MACsec for all packets on the link for EFM-OAM
Context	configure port string ethernet dot1x macsec exclude-protocol efm-oam <i>boolean</i>
Tree	efm-oam
Default	false
Introduced	16.0.R1
Platforms	All

eth-cfm *boolean*

Synopsis	Disable MACsec for all packets on the link for ETH-CFM
Context	configure port string ethernet dot1x macsec exclude-protocol eth-cfm <i>boolean</i>
Tree	eth-cfm
Default	false
Introduced	16.0.R1
Platforms	All

lACP *boolean*

Synopsis	Disable MACsec for all packets on the link for LACP
Context	configure port string ethernet dot1x macsec exclude-protocol lACP <i>boolean</i>
Tree	lACP
Default	false
Introduced	16.0.R1
Platforms	All

lldp *boolean*

Synopsis	Disable MACsec for all packets on the link for LLDP
Context	configure port string ethernet dot1x macsec exclude-protocol lldp <i>boolean</i>
Tree	lldp
Default	false
Introduced	16.0.R1
Platforms	All

ptp *boolean*

Synopsis	Disable MACsec for all packets on the link for PTP
Context	configure <i>port string ethernet dot1x macsec exclude-protocol ptp boolean</i>
Tree	ptp
Default	false
Introduced	19.5.R1
Platforms	All

ubfd *boolean*

Synopsis	Disable MACsec for all packets on the link for uBFD
Context	configure <i>port string ethernet dot1x macsec exclude-protocol ubfd boolean</i>
Tree	ubfd
Default	false
Introduced	19.5.R1
Platforms	All

rx-must-be-encrypted *boolean*

Synopsis	Drop all port traffic that is not MACsec-secured
Context	configure <i>port string ethernet dot1x macsec rx-must-be-encrypted boolean</i>
Tree	rx-must-be-encrypted
Default	false
Introduced	16.0.R1
Platforms	All

sub-port [*sub-port-id*] *number*

Synopsis	Enter the sub-port list instance
Context	configure <i>port string ethernet dot1x macsec sub-port number</i>
Tree	sub-port
Introduced	16.0.R1
Platforms	All

[sub-port-id] *number*

Synopsis	Sub-port ID
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i>
Tree	sub-port
Range	1 to 1023
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MACsec on the port
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

ca-name *reference*

Synopsis	Connectivity association linked to the MACsec sub-port
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> ca-name <i>reference</i>
Tree	ca-name
Reference	configure macsec connectivity-association <i>string</i>
Introduced	16.0.R1
Platforms	All

eapol-destination-address *string*

Synopsis	EAPOL destination MAC address
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> eapol-destination-address <i>string</i>
Tree	eapol-destination-address

Introduced 16.0.R1
Platforms All

encap-match

Synopsis Enter the **encap-match** context
Context **configure** port *string* ethernet dot1x macsec sub-port *number* encap-match
Tree [encap-match](#)
Introduced 19.5.R1
Platforms All

all-match *boolean*

Synopsis Match and encrypt all traffic patterns
Context **configure** port *string* ethernet dot1x macsec sub-port *number* encap-match all-match *boolean*
Tree [all-match](#)
Default true
Notes The following elements are part of a choice: **all-match**, **double-tag**, **single-tag**, or **untagged**.
Introduced 19.5.R1
Platforms All

double-tag *string*

Synopsis QinQ double tag traffic pattern to match
Context **configure** port *string* ethernet dot1x macsec sub-port *number* encap-match double-tag *string*
Tree [double-tag](#)
String Length 1 to 11
Notes The following elements are part of a choice: **all-match**, **double-tag**, **single-tag**, or **untagged**.
Introduced 19.5.R1
Platforms All

single-tag *string*

Synopsis	Dot1q single tag traffic pattern to match
Context	configure port string ethernet dot1x macsec sub-port number encap-match single-tag string
Tree	single-tag
String Length	1 to 11
Notes	The following elements are part of a choice: all-match , double-tag , single-tag , or untagged .
Introduced	19.5.R1
Platforms	All

untagged *boolean*

Synopsis	Match and encrypt untagged traffic only
Context	configure port string ethernet dot1x macsec sub-port number encap-match untagged boolean
Tree	untagged
Notes	The following elements are part of a choice: all-match , double-tag , single-tag , or untagged .
Introduced	19.5.R1
Platforms	All

max-peers *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of peers supported on the port
Context	configure port string ethernet dot1x macsec sub-port number max-peers number
Tree	max-peers
Range	1 to 32
Introduced	16.0.R1
Platforms	All

max-authentication-requests *number*

Synopsis	Maximum number of RADIUS retries
Context	configure port <i>string</i> ethernet dot1x max-authentication-requests <i>number</i>
Tree	max-authentication-requests
Range	1 to 10
Default	2
Introduced	16.0.R1
Platforms	All

per-host-authentication

Synopsis	Enter the per-host-authentication context
Context	configure port <i>string</i> ethernet dot1x per-host-authentication
Tree	per-host-authentication
Introduced	20.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of per-host authentication
Context	configure port <i>string</i> ethernet dot1x per-host-authentication admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.2.R1
Platforms	All

allowed-source-macs

Synopsis	Enter the allowed-source-macs context
Context	configure port <i>string</i> ethernet dot1x per-host-authentication allowed-source-macs
Tree	allowed-source-macs
Introduced	20.7.R1
Platforms	All

mac-address [[mac](#)] *string*

Synopsis	Add a list entry for mac-address
Context	configure port string ethernet dot1x per-host-authentication allowed-source-macs mac-address string
Tree	mac-address
Introduced	20.7.R1
Platforms	All

[mac] *string*

Synopsis	Source MAC address of a host selected for authentication
Context	configure port string ethernet dot1x per-host-authentication allowed-source-macs mac-address string
Tree	mac-address
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

authenticator-init *boolean*

Synopsis	Initiate per-host authentication
Context	configure port string ethernet dot1x per-host-authentication authenticator-init boolean
Tree	authenticator-init
Default	true
Introduced	21.2.R1
Platforms	All

port-control *keyword*

Synopsis	802.1x authentication mode
Context	configure port string ethernet dot1x port-control keyword
Tree	port-control
Default	force-authorized
Options	force-unauthorized, auto, force-authorized
Introduced	16.0.R1

Platforms All

quiet-period *number*

Synopsis Time between two sessions when no EAPOL frames are sent
Context **configure** port string ethernet dot1x quiet-period number
Tree quiet-period
Range 1 to 3600
Default 60
Units seconds
Introduced 16.0.R1
Platforms All

radius-policy *reference*

Synopsis RADIUS policy used for 802.1x authentication
Context **configure** port string ethernet dot1x radius-policy reference
Tree radius-policy
Reference **configure** system security dot1x radius-policy string
Introduced 16.0.R1
Platforms All

radius-server-policy *reference*

Synopsis RADIUS server policy name
Context **configure** port string ethernet dot1x radius-server-policy reference
Tree radius-server-policy
Reference **configure** aaa radius server-policy string
Notes The following elements are part of a choice: **radius-server-policy** or (**radius-server-policy-acct** and **radius-server-policy-auth**).
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy-acct *reference*

Synopsis	RADIUS server policy name for accounting
Context	configure port string ethernet dot1x radius-server-policy-acct <i>reference</i>
Tree	radius-server-policy-acct
Reference	configure aaa radius server-policy <i>string</i>
Notes	The following elements are part of a choice: radius-server-policy or (radius-server-policy-acct and radius-server-policy-auth).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy-auth *reference*

Synopsis	RADIUS server policy name for authentication
Context	configure port string ethernet dot1x radius-server-policy-auth <i>reference</i>
Tree	radius-server-policy-auth
Reference	configure aaa radius server-policy <i>string</i>
Notes	The following elements are part of a choice: radius-server-policy or (radius-server-policy-acct and radius-server-policy-auth).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

re-authentication

Synopsis	Enable the re-authentication context
Context	configure port string ethernet dot1x re-authentication
Tree	re-authentication
Introduced	16.0.R1
Platforms	All

period *number*

Synopsis	Delay before re-authentication is performed
Context	configure port string ethernet dot1x re-authentication period <i>number</i>
Tree	period
Range	1 to 9000

Default	3600
Units	seconds
Introduced	16.0.R1
Platforms	All

server-timeout *number*

Synopsis	Wait time for a response from the RADIUS server
Context	configure <i>port string ethernet dot1x server-timeout number</i>
Tree	server-timeout
Range	1 to 300
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

supplicant-timeout *number*

Synopsis	Wait time for a response to EAPOL messages
Context	configure <i>port string ethernet dot1x supplicant-timeout number</i>
Tree	supplicant-timeout
Range	1 to 300
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

transmit-period *number*

Synopsis	Time after which a new EAPOL request message is sent
Context	configure <i>port string ethernet dot1x transmit-period number</i>
Tree	transmit-period
Range	1 to 3600
Default	30
Units	seconds

Introduced 16.0.R1
Platforms All

tunnel-dot1q *boolean*

Synopsis Enable dot1x tunneling for 802.1q tagged packets
Context **configure** port string ethernet dot1x tunnel-dot1q boolean
Tree tunnel-dot1q
Default true
Introduced 21.2.R1
Platforms All

tunnel-qinq *boolean*

Synopsis Enable dot1x tunneling for QinQ tagged packets
Context **configure** port string ethernet dot1x tunnel-qinq boolean
Tree tunnel-qinq
Default true
Introduced 21.2.R1
Platforms All

tunneling *boolean*

Synopsis Allow tunneling of untagged 802.1x frames
Context **configure** port string ethernet dot1x tunneling boolean
Tree tunneling
Default false
Introduced 16.0.R1
Platforms All

down-on-internal-error

Synopsis Enable the **down-on-internal-error** context
Context **configure** port string ethernet down-on-internal-error
Tree down-on-internal-error

Introduced 16.0.R1
Platforms All

tx-laser *keyword*

Synopsis Remote laser state on internal MAC transmit error
Context **configure** [port](#) [string](#) [ethernet](#) [down-on-internal-error](#) **tx-laser** *keyword*
Tree [tx-laser](#)
Default on
Options off, on
Introduced 16.0.R1
Platforms All

down-when-looped

Synopsis Enter the **down-when-looped** context
Context **configure** [port](#) [string](#) [ethernet](#) [down-when-looped](#)
Tree [down-when-looped](#)
Description Commands in this context configure Ethernet loop detection.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of Ethernet loop detection
Context **configure** [port](#) [string](#) [ethernet](#) [down-when-looped](#) **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

keep-alive *number*

Synopsis Time interval between keep-alive PDUs

Context	configure port <i>string</i> ethernet down-when-looped keep-alive <i>number</i>
Tree	keep-alive
Range	1 to 120
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

retry-timeout *number*

Synopsis	Wait time before re-enabling port after loop detection
Context	configure port <i>string</i> ethernet down-when-looped retry-timeout <i>number</i>
Tree	retry-timeout
Range	0 10 to 160
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	All

use-broadcast-address *boolean*

Synopsis	Use broadcast MAC address for destination MAC address
Context	configure port <i>string</i> ethernet down-when-looped use-broadcast-address <i>boolean</i>
Tree	use-broadcast-address
Default	false
Introduced	16.0.R1
Platforms	All

duplex *keyword*

Synopsis	Duplex type for the fast Ethernet port
Context	configure port <i>string</i> ethernet duplex <i>keyword</i>
Tree	duplex
Description	This command configures the duplex of a Fast Ethernet port when autonegotiation is disabled.

This command setting is ignored if autonegotiation is enabled for the port.

Options	full, half
Introduced	16.0.R1
Platforms	All

efm-oam

Synopsis	Enter the efm-oam context
Context	configure port string ethernet efm-oam
Tree	efm-oam
Introduced	16.0.R1
Platforms	All

accept-remote-loopback *boolean*

Synopsis	Enable reactions to loopback control OAMPDUs from peers
Context	configure port string ethernet efm-oam accept-remote-loopback <i>boolean</i>
Tree	accept-remote-loopback
Default	false
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EFM OAM operation
Context	configure port string ethernet efm-oam admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

discovery

Synopsis	Enter the discovery context
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Context	configure port <i>string</i> ethernet efm-oam discovery
Tree	discovery
Introduced	16.0.R1
Platforms	All

advertise-capabilities

Synopsis	Enter the advertise-capabilities context
Context	configure port <i>string</i> ethernet efm-oam discovery advertise-capabilities
Tree	advertise-capabilities
Description	Commands in this context specify settings that enable the advertisement of specific capabilities.
Introduced	16.0.R1
Platforms	All

link-monitoring *boolean*

Synopsis	Advertise link monitoring capabilities to peer
Context	configure port <i>string</i> ethernet efm-oam discovery advertise-capabilities link-monitoring <i>boolean</i>
Tree	link-monitoring
Description	When configured to true , the link monitoring capability is advertised to the peer through the EFM-OAM protocol. When configured to false , this command suppresses the advertisement of capabilities to a remote peer.
Default	true
Introduced	16.0.R1
Platforms	All

dying-gasp-tx-on-reset *boolean*

Synopsis	Enable generation of the Information OAMPDU off-cycle
Context	configure port <i>string</i> ethernet efm-oam dying-gasp-tx-on-reset <i>boolean</i>
Tree	dying-gasp-tx-on-reset
Description	When configured to true , this command enables the generation of the Information OAMPDU off-cycle when the soft reset notification is received by the EFM application.

The local port state remains under the control of the soft reset application and does not change based on the EFM function. If the port is operationally up, then the local node will continue to consider the port as available for service data and forwarding. If the upstream node requires a notification to route around the local node undergoing the soft reset, then a notification must be sent to those nodes. This is a disruptive function.

When both the **grace-tx** and **dying-gasp-tx-on-reset** commands are active on the same port, the **grace-tx** command takes precedence when a soft reset is invoked if the peer vendor OUI being received is 00:16:4D or the configured **grace-vendor-oui** value.

When configured to **false**, the generation of the Information OAMPDU off-cycle is disabled.

Default	true
Introduced	16.0.R1
Platforms	All

grace-tx *boolean*

Synopsis	Enable the sending of Grace TLV for EFM-OAM
Context	configure <i>port string ethernet efm-oam grace-tx boolean</i>
Tree	grace-tx
Description	<p>When configured to true, the system sends the Nokia Vendor specific Grace TLV in the information PDU after an ISSU or a soft reset. The Grace TLV informs a remote peer to ignore the negotiated interval and multiplier and instead use the new timeout interval.</p> <p>By default, the command is disabled at the system level and enabled at the port level. Both the system and port level must be enabled to support grace on a specific port. When configured to true, the EFM-OAM protocol does not enter a non-operational state when both nodes acknowledge the grace function. This feature minimizes service interruption by giving the restarting router time to become operationally and administratively up within the grace period.</p> <p>The peer receiving the Grace TLV must be able to parse and process the vendor-specific messaging. Do not configure grace if the Nokia Vendor Specific Grace TLV is not supported on the remote peer.</p> <p>When configured to false, the Nokia Vendor Specific Grace TLV is not sent.</p>
Introduced	16.0.R1
Platforms	All

grace-vendor-oui *string*

Synopsis	Peer vendor OUI to support grace function
Context	configure <i>port string ethernet efm-oam grace-vendor-oui string</i>
Tree	grace-vendor-oui

Default	00:16:4D
Introduced	16.0.R1
Platforms	All

hold-time *number*

Synopsis	Wait time before protocol returns to operational state
Context	configure port <i>string</i> ethernet efm-oam hold-time <i>number</i>
Tree	hold-time
Range	1 to 50
Units	seconds
Introduced	16.0.R1
Platforms	All

ignore-efm-state *boolean*

Synopsis	Suppress port state changes for EFM-OAM faults
Context	configure port <i>string</i> ethernet efm-oam ignore-efm-state <i>boolean</i>
Tree	ignore-efm-state
Description	<p>When configured to true, the ETH-OAM protocol does not impact the state of the port when there is a failure in the protocol state machine (discovery, configuration, timeout, loops, and so on). There is only a protocol warning message on the port.</p> <p>When configured to false, the port state is affected by any existing EFM-OAM protocol fault condition.</p>
Default	false
Introduced	16.0.R1
Platforms	All

link-monitoring

Synopsis	Enter the link-monitoring context
Context	configure port <i>string</i> ethernet efm-oam link-monitoring
Tree	link-monitoring
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	configure port string ethernet efm-oam link-monitoring admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

errored-frame

Synopsis	Enter the errored-frame context
Context	configure port string ethernet efm-oam link-monitoring errored-frame
Tree	errored-frame
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	configure port string ethernet efm-oam link-monitoring errored-frame admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	configure port string ethernet efm-oam link-monitoring errored-frame event-notification <i>boolean</i>
Tree	event-notification
Default	true

Introduced 16.0.R4
Platforms All

sd-threshold *number*

Synopsis SD threshold
Context **configure** port *string* ethernet efm-oam link-monitoring errored-frame sd-threshold *number*
Tree [sd-threshold](#)
Range 1 to 1000000
Introduced 16.0.R4
Platforms All

sf-threshold *number*

Synopsis SF threshold
Context **configure** port *string* ethernet efm-oam link-monitoring errored-frame sf-threshold *number*
Tree [sf-threshold](#)
Range 1 to 1000000
Default 1
Introduced 16.0.R4
Platforms All

window *number*

Synopsis Window size
Context **configure** port *string* ethernet efm-oam link-monitoring errored-frame window *number*
Tree [window](#)
Range 10 to 600
Default 10
Units deciseconds
Introduced 16.0.R4
Platforms All

errored-frame-period

Synopsis	Enter the errored-frame-period context
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period
Tree	errored-frame-period
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period event-notification <i>boolean</i>
Tree	event-notification
Default	true
Introduced	16.0.R4
Platforms	All

sd-threshold *number*

Synopsis	SD threshold
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period sd-threshold <i>number</i>
Tree	sd-threshold
Range	1 to 1000000
Introduced	16.0.R4

Platforms All

sf-threshold *number*

Synopsis SF threshold

Context **configure** port *string* ethernet efm-oam link-monitoring errored-frame-period sf-threshold *number*

Tree sf-threshold

Range 1 to 1000000

Default 1

Introduced 16.0.R4

Platforms All

window *number*

Synopsis Window size

Context **configure** port *string* ethernet efm-oam link-monitoring errored-frame-period window *number*

Tree window

Range 1 to 4294967295

Default 1488095

Units packets

Introduced 16.0.R4

Platforms All

errored-frame-seconds

Synopsis Enter the **errored-frame-seconds** context

Context **configure** port *string* ethernet efm-oam link-monitoring errored-frame-seconds

Tree errored-frame-seconds

Introduced 16.0.R4

Platforms All

admin-state *keyword*

Synopsis Administrative state of link monitoring on the port

Context	configure port string ethernet efm-oam link-monitoring errored-frame-seconds admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	configure port string ethernet efm-oam link-monitoring errored-frame-seconds event-notification boolean
Tree	event-notification
Default	true
Introduced	16.0.R4
Platforms	All

sd-threshold *number*

Synopsis	SD threshold
Context	configure port string ethernet efm-oam link-monitoring errored-frame-seconds sd-threshold number
Tree	sd-threshold
Range	1 to 900
Introduced	16.0.R4
Platforms	All

sf-threshold *number*

Synopsis	SF threshold
Context	configure port string ethernet efm-oam link-monitoring errored-frame-seconds sf-threshold number
Tree	sf-threshold
Range	1 to 900
Default	1

Introduced 16.0.R4
Platforms All

window *number*

Synopsis Window size
Context **configure** port *string* ethernet efm-oam link-monitoring errored-frame-seconds window *number*
Tree [window](#)
Range 100 to 9000
Default 600
Units deciseconds
Introduced 16.0.R4
Platforms All

errored-symbols

Synopsis Enter the **errored-symbols** context
Context **configure** port *string* ethernet efm-oam link-monitoring errored-symbols
Tree [errored-symbols](#)
Introduced 16.0.R4
Platforms All

admin-state *keyword*

Synopsis Administrative state of link monitoring on the port
Context **configure** port *string* ethernet efm-oam link-monitoring errored-symbols admin-state *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R4
Platforms All

event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-symbols event-notification <i>boolean</i>
Tree	event-notification
Default	true
Introduced	16.0.R4
Platforms	All

sd-threshold *number*

Synopsis	SD threshold
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-symbols sd-threshold <i>number</i>
Tree	sd-threshold
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

sf-threshold *number*

Synopsis	SF threshold
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-symbols sf-threshold <i>number</i>
Tree	sf-threshold
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

window *number*

Synopsis	Window size
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-symbols window <i>number</i>
Tree	window
Range	10 to 600

Default	10
Units	deciseconds
Introduced	16.0.R4
Platforms	All

local-sf-action

Synopsis	Enter the local-sf-action context
Context	configure port <i>string</i> ethernet efm-oam link-monitoring local-sf-action
Tree	local-sf-action
Introduced	16.0.R4
Platforms	All

event-notification-burst *number*

Synopsis	Number of OAMPDUs to send when SF threshold is reached
Context	configure port <i>string</i> ethernet efm-oam link-monitoring local-sf-action event-notification-burst <i>number</i>
Tree	event-notification-burst
Range	1 to 5
Default	1
Units	packets
Introduced	16.0.R4
Platforms	All

info-notification

Synopsis	Enter the info-notification context
Context	configure port <i>string</i> ethernet efm-oam link-monitoring local-sf-action info-notification
Tree	info-notification
Introduced	16.0.R4
Platforms	All

critical-event *boolean*

Synopsis	Set critical event flag when SF threshold is reached
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Context	configure port <i>string</i> ethernet efm-oam link-monitoring local-sf-action info-notification critical-event <i>boolean</i>
Tree	critical-event
Default	false
Introduced	16.0.R4
Platforms	All

dying-gasp *boolean*

Synopsis	Set dying gasp flag when SF threshold is reached
Context	configure port <i>string</i> ethernet efm-oam link-monitoring local-sf-action info-notification dying-gasp <i>boolean</i>
Tree	dying-gasp
Default	false
Introduced	16.0.R4
Platforms	All

local-port-action *keyword*

Synopsis	Local port action when SF threshold is reached
Context	configure port <i>string</i> ethernet efm-oam link-monitoring local-sf-action local-port-action <i>keyword</i>
Tree	local-port-action
Default	port-out-of-service
Options	log-only, port-out-of-service
Introduced	16.0.R4
Platforms	All

mode *keyword*

Synopsis	Mode of OAM operation for the Ethernet port
Context	configure port <i>string</i> ethernet efm-oam mode <i>keyword</i>
Tree	mode
Default	active
Options	passive, active
Introduced	16.0.R1

Platforms All

multiplier *number*

Synopsis Multiplier for the transmit interval of OAMPDUs
Context **configure** port *string* ethernet efm-oam multiplier *number*
Tree multiplier
Range 2 to 5
Default 5
Introduced 16.0.R1
Platforms All

peer-rdi-rx

Synopsis Enter the **peer-rdi-rx** context
Context **configure** port *string* ethernet efm-oam peer-rdi-rx
Tree peer-rdi-rx
Introduced 16.0.R1
Platforms All

critical-event *keyword*

Synopsis Action taken upon receipt of critical event flag
Context **configure** port *string* ethernet efm-oam peer-rdi-rx critical-event *keyword*
Tree critical-event
Default port-out-of-service
Options log-only, port-out-of-service
Introduced 16.0.R1
Platforms All

dying-gasp *keyword*

Synopsis Action taken upon receipt of dying gasp flag
Context **configure** port *string* ethernet efm-oam peer-rdi-rx dying-gasp *keyword*
Tree dying-gasp

Default	port-out-of-service
Options	log-only, port-out-of-service
Introduced	16.0.R1
Platforms	All

event-notification *keyword*

Synopsis	Action taken upon receipt of event TLVs
Context	configure port <i>string</i> ethernet efm-oam peer-rdi-rx event-notification <i>keyword</i>
Tree	event-notification
Default	log-only
Options	log-only, port-out-of-service
Introduced	16.0.R1
Platforms	All

link-fault *keyword*

Synopsis	Action taken upon receipt of link fault flag
Context	configure port <i>string</i> ethernet efm-oam peer-rdi-rx link-fault <i>keyword</i>
Tree	link-fault
Default	port-out-of-service
Options	log-only, port-out-of-service
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit interval of OAMPDUs
Context	configure port <i>string</i> ethernet efm-oam transmit-interval <i>number</i>
Tree	transmit-interval
Range	1 to 600
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

trigger-fault *keyword*

Synopsis	Flag setting in the information OAMPDU
Context	configure port string ethernet efm-oam trigger-fault <i>keyword</i>
Tree	trigger-fault
Options	dying-gasp, critical-event
Introduced	16.0.R1
Platforms	All

tunneling *boolean*

Synopsis	Enable EFM-OAM PDU tunneling
Context	configure port string ethernet efm-oam tunneling <i>boolean</i>
Tree	tunneling
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure port string ethernet egress
Tree	egress
Introduced	16.0.R1
Platforms	All

eth-bn-rate-changes *boolean*

Synopsis	Allow rate changes in ETH-BN messages on port-based MEP
Context	configure port string ethernet egress eth-bn-rate-changes <i>boolean</i>
Tree	eth-bn-rate-changes
Description	When configured to true , this command allows rate changes received in ETH-BN messages on a port-based MEP to update the egress rate used on the port. This command is not supported for all MDA types. When configured to false , rate changes in ETH-BN messages are denied.

Default	false
Introduced	16.0.R1
Platforms	All

hs-port-pool-policy *reference*

Synopsis	HS port pool policy
Context	configure port string ethernet egress hs-port-pool-policy reference
Tree	hs-port-pool-policy
Reference	configure qos hs-port-pool-policy string
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-scheduler-policy

Synopsis	Enter the hs-scheduler-policy context
Context	configure port string ethernet egress hs-scheduler-policy
Tree	hs-scheduler-policy
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

overrides

Synopsis	Enable the overrides context
Context	configure port string ethernet egress hs-scheduler-policy overrides
Tree	overrides
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

group [[group-id](#)] *number*

Synopsis	Enter the group list instance
Context	configure port string ethernet egress hs-scheduler-policy overrides group number
Tree	group
Introduced	19.10.R1

Platforms 7750 SR-7/12/12e

[group-id] *number*

Synopsis Group ID
Context **configure** [port string ethernet egress hs-scheduler-policy overrides group number](#)
Tree [group](#)
Range 1
Notes This element is part of a list key.
Introduced 19.10.R1
Platforms 7750 SR-7/12/12e

rate (*number | keyword*)

Synopsis Maximum rate
Context **configure** [port string ethernet egress hs-scheduler-policy overrides group number rate \(number | keyword\)](#)
Tree [rate](#)
Range 1 to 100000
Units megabps
Options max
Introduced 19.10.R1
Platforms 7750 SR-7/12/12e

max-rate (*number | keyword*)

Synopsis Maximum frame-based bandwidth limit
Context **configure** [port string ethernet egress hs-scheduler-policy overrides max-rate \(number | keyword\)](#)
Tree [max-rate](#)
Range 1 to 100000
Units megabps
Options max
Introduced 19.10.R1
Platforms 7750 SR-7/12/12e

scheduling-class [*class-number*] *number*

Synopsis	Enter the scheduling-class list instance
Context	configure port <i>string</i> ethernet egress hs-scheduler-policy overrides scheduling-class <i>number</i>
Tree	scheduling-class
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

[class-number] *number*

Synopsis	Scheduling class value
Context	configure port <i>string</i> ethernet egress hs-scheduler-policy overrides scheduling-class <i>number</i>
Tree	scheduling-class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure port <i>string</i> ethernet egress hs-scheduler-policy overrides scheduling-class <i>number</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 100000
Units	megabps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

weight *number*

Synopsis	Weight of the scheduling class within the group
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Context	configure port <i>string</i> ethernet egress hs-scheduler-policy overrides scheduling-class number weight number
Tree	weight
Range	1 to 127
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

policy-name *reference*

Synopsis	HS scheduler policy name
Context	configure port <i>string</i> ethernet egress hs-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos hs-scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-secondary-shaper [*secondary-shaper-name*] *string*

Synopsis	Enter the hs-secondary-shaper list instance
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i>
Tree	hs-secondary-shaper
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

[*secondary-shaper-name*] *string*

Synopsis	Secondary shaper name
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i>
Tree	hs-secondary-shaper
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

aggregate

Synopsis	Enter the aggregate context
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> aggregate
Tree	aggregate
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

low-burst-max-class *number*

Synopsis	Highest scheduling class mapped to the low burst limit
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> aggregate low-burst-max-class <i>number</i>
Tree	low-burst-max-class
Range	1 to 6
Default	6
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Rate allowed for the HS secondary shaper aggregate
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> aggregate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

class [*class-number*] *number*

Synopsis	Enter the class list instance
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> class <i>number</i>

Tree	class
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

[class-number] *number*

Synopsis	HS secondary shaper class ID
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> class <i>number</i>
Tree	class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Rate allowed for the HS secondary shaper class
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> class <i>number</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

hw-agg-shaper-scheduler

Synopsis	Enter the hw-agg-shaper-scheduler context
Context	configure port string ethernet egress hw-agg-shaper-scheduler
Tree	hw-agg-shaper-scheduler
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

monitor *boolean*

Synopsis	Allow monitoring of the HW aggregate shaper scheduler
Context	configure port string ethernet egress hw-agg-shaper-scheduler monitor <i>boolean</i>
Tree	monitor
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

policy-name *reference*

Synopsis	Name of HW aggregate shaper scheduler policy
Context	configure port string ethernet egress hw-agg-shaper-scheduler policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos hw-agg-shaper-scheduler-policy <i>string</i>
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

monitor-port-scheduler *boolean*

Synopsis	Enable monitoring of egress scheduler
Context	configure port string ethernet egress monitor-port-scheduler <i>boolean</i>
Tree	monitor-port-scheduler
Default	false
Introduced	16.0.R1
Platforms	All

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port <i>string</i> ethernet egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enable the overrides context
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides
Tree	overrides
Description	Commands in this context configure egress scheduler overrides.
Introduced	16.0.R4
Platforms	All

level [*priority-level*] *number*

Synopsis	Enter the level list instance
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Introduced	16.0.R4
Platforms	All

[*priority-level*] *number*

Synopsis	Port priority level to be overridden
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R4
Platforms	All

cir decimal-number

Synopsis	CIR for the port scheduler policy
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R4
Platforms	All

pir decimal-number

Synopsis	PIR for the the port scheduler policy
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R4
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> rate

Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R4
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR
Context	configure port string ethernet egress port-scheduler-policy overrides level <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R4
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR
Context	configure port string ethernet egress port-scheduler-policy overrides level <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R4
Platforms	All

max-rate

Synopsis	Enter the max-rate context
Context	configure port string ethernet egress port-scheduler-policy overrides max-rate
Tree	max-rate

Description	Commands in this context override the max-rate command found in the port scheduler policy associated with the port. When a maximum rate is defined at the port or channel level, the port scheduler's policy max-rate command is ignored.
Introduced	16.0.R4
Platforms	All

percent-rate *decimal-number*

Synopsis	PIR rate
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Default	100
Units	percent
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R4
Platforms	All

rate (*number* | *keyword*)

Synopsis	PIR rate
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides max-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R4
Platforms	All

policy-name *reference*

Synopsis	Egress scheduler policy name
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Context	configure port string ethernet egress port-scheduler-policy policy-name reference
Tree	policy-name
Reference	configure qos port-scheduler-policy string
Introduced	16.0.R1
Platforms	All

rate number

Synopsis	Rate of egress traffic
Context	configure port string ethernet egress rate number
Tree	rate
Description	This command configures the rate of traffic leaving the network. An event log is generated each time the egress rate is modified unless the port is part of a LAG. This command is not supported for all MDA types.
Max. Range	-2147483648 to 2147483647
Units	kilobps
Introduced	16.0.R1
Platforms	All

elmi

Synopsis	Enter the elmi context
Context	configure port string ethernet elmi
Tree	elmi
Introduced	16.0.R4
Platforms	All

mode keyword

Synopsis	Ethernet LMI mode
Context	configure port string ethernet elmi mode keyword
Tree	mode
Options	uni-n
Introduced	16.0.R4
Platforms	All

n393 *number*

Synopsis	Monitored count of consecutive errors
Context	configure <i>port string ethernet elmi n393 number</i>
Tree	n393
Range	2 to 10
Default	4
Introduced	16.0.R4
Platforms	All

t391 *number*

Synopsis	Polling timer for UNI-C
Context	configure <i>port string ethernet elmi t391 number</i>
Tree	t391
Range	5 to 30
Default	10
Units	seconds
Introduced	16.0.R4
Platforms	All

t392 *number*

Synopsis	Polling verification timer for UNI-N
Context	configure <i>port string ethernet elmi t392 number</i>
Tree	t392
Range	5 to 30
Default	15
Units	seconds
Introduced	16.0.R4
Platforms	All

encap-type *keyword*

Synopsis	Encapsulation method for the Ethernet port
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Context	configure port <i>string</i> ethernet encap-type <i>keyword</i>
Tree	encap-type
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure port <i>string</i> ethernet eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the mep list instance
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure port string ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number
Tree	mep
Reference	configure eth-cfm domain string association string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure port string ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure port string ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the ais context
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Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level number

Synopsis	Client MEG level for AIS message generation
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level number
Tree	client-meg-level
Range	1 to 7
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support boolean

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support boolean
Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval number

Synopsis	Transmission interval for AIS messages
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval number
Tree	interval
Range	1 60
Default	1
Units	seconds

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	all-def
Options	all-def, mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais priority <i>number</i>
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis Time that must expire before an FNG alarm is raised

Context **configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*

Tree [fng-alarm-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis Time that must expire before an FNG alarm is reset

Context **configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*

Tree [fng-reset-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis Generate CCM messages

Context **configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number ccm-ltm-priority number
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number ccm-padding-size number
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-tlv-ignore *keyword*

Synopsis	TLV to ignore on reception
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number ccm-tlv-ignore keyword
Tree	ccm-tlv-ignore
Description	This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine. When unconfigured, the MEP processes all the recognized TLVs.
Options	interface-status, port-status

Max. Instances	2
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the csf context
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf multiplier <i>decimal-number</i>
Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-bn

Synopsis	Enter the eth-bn context
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-bn
Tree	eth-bn
Description	Commands in this context configure Ethernet Bandwidth Notification (ETH-BN) message handling.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

receive *boolean*

Synopsis	Enable the reception and processing of ETH-BN messages
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-bn receive boolean
Tree	receive
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-update-pacing *number*

Synopsis	Pace of messages to and from ETH-CFM to QoS subsystems
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-bn rx-update-pacing number
Tree	rx-update-pacing

Range	1 to 600
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-fault *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number facility-fault <i>boolean</i>
Tree	facility-fault
Description	When configured to true , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition. When configured to false , the system monitors transmissions and reports fault conditions.
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed boolean

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed boolean

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace

Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure port string ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure port string ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace
Description	When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to false , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number mac-address <i>string</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan (*number* | *keyword*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outer VLAN ID of the tunnel
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number vlan (<i>number</i> <i>keyword</i>)
Tree	vlan
Range	1 to 4094
Default	none
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hold-time

Synopsis	Enter the hold-time context
Context	configure port <i>string</i> ethernet hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

down *number*

Synopsis	Delay after interface goes from up state to down state
Context	configure port <i>string</i> ethernet hold-time down <i>number</i>
Tree	down
Description	<p>This command specifies the delay to notify the upper layers after an interface transitions from an up state to a down state.</p> <p>When an interface transitions from an up state to a down state, it is immediately advertised to the rest of the system if the down interval is zero, but if the down interval is greater than zero, interface down transitions are not advertised to upper layers until the down interval has expired.</p>
Range	1 to 3600000
Introduced	16.0.R1
Platforms	All

units keyword

Synopsis	Hold time units
Context	configure port string ethernet hold-time units keyword
Tree	units
Default	seconds
Options	seconds, centiseconds
Introduced	16.0.R1
Platforms	All

up number

Synopsis	Delay after interface goes from down state to up state
Context	configure port string ethernet hold-time up number
Tree	up
Description	This command specifies the delay to notify the upper layers after an interface transitions from a down state to an up state. When an interface transitions from a down state to an up state, it is immediately advertised as up to the rest of the system if the up interval is zero, but if the up interval is greater than zero, up transitions are not advertised until the up interval has expired.
Range	1 to 3600000
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure port string ethernet ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

rate number

Synopsis	Maximum ingress bandwidth
Context	configure port string ethernet ingress rate number

Tree	rate
Max. Range	-2147483648 to 2147483647
Units	megabps
Introduced	16.0.R1
Platforms	All

lACP-tunnel *boolean*

Synopsis	Enable LACP packet tunneling for the Ethernet port
Context	configure port <i>string</i> ethernet lACP-tunnel <i>boolean</i>
Tree	lACP-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

lldp

Synopsis	Enter the lldp context
Context	configure port <i>string</i> ethernet lldp
Tree	lldp
Description	Commands in this context configure the Link Layer Discovery Protocol (LLDP) on the port.
Introduced	16.0.R1
Platforms	All

dest-mac [[mac-type](#)] *keyword*

Synopsis	Enter the dest-mac list instance
Context	configure port <i>string</i> ethernet lldp dest-mac <i>keyword</i>
Tree	dest-mac
Description	Commands in this context configure destination MAC address commands.
Introduced	16.0.R1
Platforms	All

[mac-type] keyword

Synopsis	Destination MAC address type
Context	configure port string ethernet lldp dest-mac keyword
Tree	dest-mac
Options	nearest-bridge, nearest-non-tpmr, nearest-customer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

notification boolean

Synopsis	Enable LLDP notifications
Context	configure port string ethernet lldp dest-mac keyword notification boolean
Tree	notification
Default	false
Introduced	16.0.R1
Platforms	All

port-id-subtype keyword

Synopsis	Port ID TLV encoding method for transmission to peer
Context	configure port string ethernet lldp dest-mac keyword port-id-subtype keyword
Tree	port-id-subtype
Default	tx-local
Options	tx-if-alias, tx-if-name, tx-local
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Enable LLDP agent to receive but not transmit frames
Context	configure port string ethernet lldp dest-mac keyword receive boolean
Tree	receive
Default	false
Introduced	16.0.R1

Platforms All

transmit *boolean*

Synopsis Enable the LLDP agent to transmit frames
Context **configure** port string ethernet lldp dest-mac keyword transmit boolean
Tree transmit
Default false
Introduced 16.0.R1
Platforms All

tunnel-nearest-bridge *boolean*

Synopsis Allow received LLDP packets to be tunneled
Context **configure** port string ethernet lldp dest-mac keyword tunnel-nearest-bridge boolean
Tree tunnel-nearest-bridge
Default false
Introduced 16.0.R1
Platforms All

tx-mgmt-address [**mgmt-address-system-type**] keyword

Synopsis Enter the **tx-mgmt-address** list instance
Context **configure** port string ethernet lldp dest-mac keyword tx-mgmt-address keyword
Tree tx-mgmt-address
Introduced 16.0.R1
Platforms All

[**mgmt-address-system-type**] keyword

Synopsis Management address to transmit
Context **configure** port string ethernet lldp dest-mac keyword tx-mgmt-address keyword
Tree tx-mgmt-address
Options oob, system, system-ipv6, oob-ipv6
Notes This element is part of a list key.

Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of transmitting management address
Context **configure** port string ethernet lldp dest-mac keyword tx-mgmt-address keyword admin-state keyword
Tree admin-state
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

tx-tlvs

Synopsis Enter the **tx-tlvs** context
Context **configure** port string ethernet lldp dest-mac keyword tx-tlvs
Tree tx-tlvs
Introduced 16.0.R1
Platforms All

port-desc *boolean*

Synopsis Transmit port description TLVs
Context **configure** port string ethernet lldp dest-mac keyword tx-tlvs port-desc boolean
Tree port-desc
Default false
Introduced 16.0.R1
Platforms All

sys-cap *boolean*

Synopsis Transmit system capabilities TLVs
Context **configure** port string ethernet lldp dest-mac keyword tx-tlvs sys-cap boolean
Tree sys-cap

Default	false
Introduced	16.0.R1
Platforms	All

sys-desc *boolean*

Synopsis	Transmit system description TLVs
Context	configure port string ethernet lldp dest-mac keyword tx-tlvs sys-desc <i>boolean</i>
Tree	sys-desc
Default	false
Introduced	16.0.R1
Platforms	All

sys-name *boolean*

Synopsis	Transmit system name TLVs
Context	configure port string ethernet lldp dest-mac keyword tx-tlvs sys-name <i>boolean</i>
Tree	sys-name
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm for the Ethernet port
Context	configure port string ethernet load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address of the Ethernet port
Context	configure port string ethernet mac-address <i>string</i>

Tree	mac-address
Description	This command specifies the MAC address of the Ethernet port. Allowed values are any non-broadcast, non-multicast MAC, and non-IEEE reserved MAC addresses. The default value indicates that an operation MAC address is to be assigned from the chassis MAC address pool.
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

min-frame-length *number*

Synopsis	Minimum transmitted frame length
Context	configure port <i>string</i> ethernet min-frame-length <i>number</i>
Tree	min-frame-length
Range	64 68 72
Default	64
Units	bytes
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Operation mode for the Ethernet port
Context	configure port <i>string</i> ethernet mode <i>keyword</i>
Tree	mode
Options	access, network, hybrid
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	Maximum payload MTU size for the Ethernet port
Context	configure port <i>string</i> ethernet mtu <i>number</i>
Tree	mtu
Description	This command configures the maximum payload MTU size for the Ethernet port. This command indirectly defines the largest physical packet the port can transmit or the far-

end Ethernet port can receive. Packets that cannot be fragmented at egress and exceed the MTU size are discarded.

The MTU size includes the destination MAC address, source MAC address, the Ethertype or length field, and the complete Ethernet payload. This value does not include the preamble, start of frame delimiter, or the trailing CRC.

Range	512 to 9800
Units	bytes
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure port string ethernet network
Tree	network
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy that applies to the network port
Context	configure port string ethernet network accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port string ethernet network collect-stats boolean
Tree	collect-stats
Description	<p>When configured to true, this command enables the collection of accounting and statistical data for the network interface. When applying accounting policies, by default the data is collected in the appropriate records and written to the designated billing file.</p> <p>When configured to false, the statistics are still accumulated by the XCM or IOM cards. However, the CPU does not obtain the results and write them to the billing file.</p>

Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure port <i>string</i> ethernet network egress
Tree	egress
Introduced	16.0.R1
Platforms	All

port-queues

Synopsis	Enter the port-queues context
Context	configure port <i>string</i> ethernet network egress port-queues
Tree	port-queues
Introduced	20.10.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure port <i>string</i> ethernet network egress port-queues overrides
Tree	overrides
Description	Commands in this context configure Ethernet network egress port queue override parameters.
Introduced	20.10.R1
Platforms	All

queue [[queue-id](#)] *number*

Synopsis	Enter the queue list instance
Context	configure port <i>string</i> ethernet network egress port-queues overrides queue <i>number</i>
Tree	queue

Description	Commands in this context configure an Ethernet network queue.
Introduced	20.10.R1
Platforms	All

[queue-id] number

Synopsis	Queue ID
Context	configure port <i>string</i> ethernet network egress port-queues overrides queue <i>number</i>
Tree	queue
Range	1 to 16
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
Context	configure port <i>string</i> ethernet network egress port-queues overrides queue <i>number</i> monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling boolean

Synopsis	Enable fast polling of the queue depth
Context	configure port <i>string</i> ethernet network egress port-queues overrides queue <i>number</i> monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to false , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure port <i>string</i> ethernet network egress port-queues overrides queue <i>number</i> monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

queue-group [*queue-group-name*] *reference* instance-id *number*

Synopsis	Enter the queue-group list instance
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Introduced	16.0.R1
Platforms	All

[*queue-group-name*] *reference*

Synopsis	Queue group name
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Reference	configure qos queue-group-templates egress queue-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

instance-id *number*

Synopsis	Instance ID for the egress queue group
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Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy for the Ethernet port
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

aggregate-rate

Synopsis	Enter the aggregate-rate context
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> aggregate-rate
Tree	aggregate-rate
Introduced	16.0.R1
Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Control unused bandwidth
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> aggregate-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on policers and queues
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> aggregate-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate (*number* | *keyword*)

Synopsis	Aggregate rate for all queues
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> aggregate-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
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Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> <i>description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

hs-turbo *boolean*

Synopsis	Enable HS turbo queues for higher throughput
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> hs-turbo <i>boolean</i>
Tree	hs-turbo
Description	<p>When configured to true, this command enables HS turbo queues that allow the corresponding HSQ queue group queues to achieve a higher throughput.</p> <p>This command is not applicable to 10G ports and is ignored when it is configured under a queue group instance on a 10G port.</p> <p>When configured to false, HS turbo queues are disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer-control-policy *reference*

Synopsis	Policer control policy for the QoS egress queue group
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> policer-control-policy <i>reference</i>
Tree	policer-control-policy
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-overrides

Synopsis	Enter the queue-overrides context
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides

Tree	queue-overrides
Description	Commands in this context define queue command overrides for each queue within the queue group.
Introduced	16.0.R1
Platforms	All

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *reference*

Synopsis	Queue ID
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Description	Commands in this context specify the method used by the system to derive the operational CIR and PIR settings when the queue is provisioned in hardware. For the CIR and PIR commands individually, the system attempts to find the best operational rate depending on the defined constraint.

Commands in this context are ignored for egress HSQ queue group queues that are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the adaptation rule is performed under the **hs-wrr-group** command within the egress queue group template.

Introduced 16.0.R1
Platforms All

cir keyword

Synopsis Constraint used when deriving the operational CIR value
Context **configure** port *string* ethernet network egress queue-group *reference* instance-id number queue-overrides queue *reference* adaptation-rule cir keyword
Tree [cir](#)
Options max, min, closest
Introduced 16.0.R1
Platforms All

pir keyword

Synopsis Constraint used when deriving the operational PIR value
Context **configure** port *string* ethernet network egress queue-group *reference* instance-id number queue-overrides queue *reference* adaptation-rule pir keyword
Tree [pir](#)
Options max, min, closest
Introduced 16.0.R1
Platforms All

cbs (*number* | *keyword*)

Synopsis CBS for the template queue
Context **configure** port *string* ethernet network egress queue-group *reference* instance-id number queue-overrides queue *reference* cbs (*number* | *keyword*)
Tree [cbs](#)
Range 0 to 1048576
Units kilobytes
Options auto
Introduced 16.0.R1

Platforms All

drop-tail

Synopsis Enter the **drop-tail** context

Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* drop-tail

Tree [drop-tail](#)

Description Commands in this context configure queue drop tail commands.

Introduced 16.0.R1

Platforms All

low

Synopsis Enter the **low** context

Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* drop-tail low

Tree [low](#)

Description Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.

Introduced 16.0.R1

Platforms All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis Percentage reduction from the MBS for a queue drop tail

Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* drop-tail low percent-reduction-from-mbs (*number* | *keyword*)

Tree [percent-reduction-from-mbs](#)

Description This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, then the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.

Range 0 to 100

Options auto

Introduced 16.0.R1
Platforms All

mbs (*number* | *keyword*)

Synopsis MBS for the template queue
Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* mbs (*number* | *keyword*)
Tree [mbs](#)
Range 0 to 1073741824
Units bytes
Options auto
Introduced 16.0.R1
Platforms All

monitor-queue-depth

Synopsis Enable the **monitor-queue-depth** context
Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* monitor-queue-depth
Tree [monitor-queue-depth](#)
Introduced 20.10.R1
Platforms All

fast-polling *boolean*

Synopsis Enable fast polling of the queue depth
Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree [fast-polling](#)
Description When configured to **true**, this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
When configured to **false**, fast queue polling is not enabled.
Default false
Introduced 20.10.R1
Platforms All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate
Tree	percent-rate
Description	Commands in this context specify percent rates. This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the percent rate is performed under the hs-wrr-group command within the egress queue group template.
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR for the queue
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R1

Platforms All

pir *decimal-number*

Synopsis PIR for the queue

Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* percent-rate pir *decimal-number*

Tree [pir](#)

Range 0.01 to 100.00

Units percent

Introduced 16.0.R1

Platforms All

rate

Synopsis Enter the **rate** context

Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* rate

Tree [rate](#)

Description Commands in this context specify the administrative PIR and CIR for the queue. Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.

This command can be executed at anytime, altering the PIR and CIR rates for all queues created through the association of the SAP egress QoS policy with the queue ID.

This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the rate is performed under the **hs-wrr-group** command within the egress queue group template.

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

cir (*number* | *keyword*)

Synopsis CIR for the queue

Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	<p>This command specifies the administrative CIR used by the queue. When the rate command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent cir-level and cir-weight commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the queue
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Description	<p>This command specifies the administrative PIR used by the queue. When the rate command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's adaptation-rule commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure <i>port string ethernet network egress queue-group reference instance-id number scheduler-policy</i>
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

policy-name reference

Synopsis	Scheduler policy for the QoS egress queue group
Context	configure <i>port string ethernet network egress queue-group reference instance-id number scheduler-policy policy-name reference</i>
Tree	policy-name
Reference	configure <i>qos scheduler-policy string</i>
Introduced	22.2.R1
Platforms	All

queue-policy reference

Synopsis	Network queue policy
Context	configure <i>port string ethernet network egress queue-policy reference</i>
Tree	queue-policy
Reference	configure <i>qos network-queue string</i>
Introduced	16.0.R1
Platforms	All

pbb-etype string

Synopsis	Ethertype for PBB encapsulation
Context	configure <i>port string ethernet pbb-etype string</i>
Tree	pbb-etype
Default	35047
Introduced	16.0.R1

Platforms All

ptp-asymmetry *number*

Synopsis PTP asymmetry delay on the Ethernet port

Context **configure** port *string* ethernet ptp-asymmetry *number*

Tree ptp-asymmetry

Description This command configures the PTP asymmetry delay on the Ethernet port. This command is used to correct known asymmetry as part of time of day or phase recovery using PTP packets on both local and downstream PTP clocks.

Max. Range -2147483648 to 2147483647

Units nanoseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qinq-etype *string*

Synopsis Ethertype for QinQ encapsulation

Context **configure** port *string* ethernet qinq-etype *string*

Tree qinq-etype

Default 33024

Introduced 16.0.R1

Platforms All

report-alarm

Synopsis Enter the **report-alarm** context

Context **configure** port *string* ethernet report-alarm

Tree report-alarm

Description Commands in this context specify the settings for alarm generation and alarm clear notifications for the port.

Note: For some DWDM transceivers, if the **configure port dwdm coherent rx-los-reaction squelch** command is disabled, the signal-fail and no-am-lock alarm conditions are not reported when the media side of the transceiver has an RX LOS condition.

Introduced 16.0.R1

Platforms All

alignment-marker-not-locked *boolean*

Synopsis	Report 40G/100G PCS Alignment Marker Loss of Lock
Context	configure port <i>string</i> ethernet report-alarm alignment-marker-not-locked <i>boolean</i>
Tree	alignment-marker-not-locked
Description	When configured to true , Alignment Marker Loss of Lock alarms are reported for this port.
Introduced	16.0.R2
Platforms	All

block-not-locked *boolean*

Synopsis	Report 40G/100G PCS Lanes Not Block Locked
Context	configure port <i>string</i> ethernet report-alarm block-not-locked <i>boolean</i>
Tree	block-not-locked
Introduced	16.0.R2
Platforms	All

duplicate-lane *boolean*

Synopsis	Report 40G/100G PCS Duplicate Lane Marker alarm
Context	configure port <i>string</i> ethernet report-alarm duplicate-lane <i>boolean</i>
Tree	duplicate-lane
Introduced	16.0.R1
Platforms	All

frame-not-locked *boolean*

Synopsis	Report "not locked on the Ethernet framing sequence"
Context	configure port <i>string</i> ethernet report-alarm frame-not-locked <i>boolean</i>
Tree	frame-not-locked
Introduced	16.0.R2
Platforms	All

high-ber *boolean*

Synopsis	Report High Bit Error Rate
Context	configure port string ethernet report-alarm high-ber boolean
Tree	high-ber
Introduced	16.0.R1
Platforms	All

local *boolean*

Synopsis	Report local faults
Context	configure port string ethernet report-alarm local boolean
Tree	local
Introduced	16.0.R1
Platforms	All

remote *boolean*

Synopsis	Report remote faults
Context	configure port string ethernet report-alarm remote boolean
Tree	remote
Introduced	16.0.R1
Platforms	All

signal-fail *boolean*

Synopsis	Report Ethernet signal lost alarm
Context	configure port string ethernet report-alarm signal-fail boolean
Tree	signal-fail
Introduced	16.0.R1
Platforms	All

rs-fec-mode *keyword*

Synopsis	RS-FEC mode on the Ethernet port
Context	configure port string ethernet rs-fec-mode keyword

Tree	rs-fec-mode
Description	This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet port. See "Forward Error Correction" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Interface Configuration Guide</i> for more information about FEC settings.
Options	cl91-514-528, cl74, cl108
Introduced	16.0.R1
Platforms	All

single-fiber boolean

Synopsis	Enable packet gathering from a single fiber port
Context	configure port string ethernet single-fiber boolean
Tree	single-fiber
Description	When configured to true , this command enables packet gathering and redirection of IP packets from a single fiber (Rx) port of the Ethernet or SONET/SDH interface and redistributes packets to other interfaces through static routes or policy-based forwarding. Traffic is no longer transmitted out of the port. When configured to false , packet gathering is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

speed number

Synopsis	Ethernet port speed
Context	configure port string ethernet speed number
Tree	speed
Description	This command configures the port speed for ports that support multiple speeds. This applies to the following: <ul style="list-style-type: none">• Fast Ethernet when autonegotiation is not enabled• 10/100/1000 Mb/s Ethernet when autonegotiation is not enabled• 10/1G ports supporting 10G SFP+ or 1G SFP• 40/100G ports supporting QSFP28s on non connector-based MDAs If autonegotiation is enabled for the port, this command setting is ignored. Speed cannot be configured for ports that are part of a LAG.
Range	10 100 1000 10000 25000 40000 50000 100000

Units	megabps
Introduced	16.0.R1
Platforms	All

ssm

Synopsis	Enter the ssm context
Context	configure port string ethernet ssm
Tree	ssm
Description	Commands in this context configure the Ethernet Synchronization Messaging Channel (ESMC) for the Ethernet port. The ESMC carries the Synchronization Status Message (SSM) code representing the quality level of the source of the frequency of the central clock of the node.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the ESMC for the Ethernet port
Context	configure port string ethernet ssm admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

code-type keyword

Synopsis	Encoding of synchronization status messages
Context	configure port string ethernet ssm code-type keyword
Tree	code-type
Default	sdh
Options	sonet, sdh
Introduced	16.0.R1
Platforms	All

esmc-tunnel *boolean*

Synopsis	Tunnel ESMC frames in Epipe or VPLS services
Context	configure <i>port string ethernet ssm</i> esmc-tunnel <i>boolean</i>
Tree	esmc-tunnel
Description	<p>When configured to true, ESMC frames that are received into the Ethernet port can be tunneled in an Epipe or VPLS service. This is not recommended because it breaks the concepts inherent in Synchronous Ethernet, however it is required for compliance to MEF 6.1.1 EPL Option 2.</p> <p>When configured to false, ESMC frames are extracted upon reception by the port and are not tunneled through the service.</p>
Default	false
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-dus *boolean*

Synopsis	Force QL value transmitted be set to QL-DNU or QL-DUS
Context	configure <i>port string ethernet ssm</i> tx-dus <i>boolean</i>
Tree	tx-dus
Introduced	16.0.R1
Platforms	All

symbol-monitor

Synopsis	Enter the symbol-monitor context
Context	configure <i>port string ethernet</i> symbol-monitor
Tree	symbol-monitor
Description	<p>Commands in this context configure Ethernet symbol monitoring. Support for symbol monitoring is hardware dependent. An error message indicating that the port setting cannot be modified is presented when attempting to enable the feature or configure the individual commands on unsupported hardware.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of symbol monitoring on the port
Context	configure port <i>string</i> ethernet symbol-monitor admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-degrade

Synopsis	Enter the signal-degrade context
Context	configure port <i>string</i> ethernet symbol-monitor signal-degrade
Tree	signal-degrade
Description	Commands in this context specify the error rate at which to declare the SD condition on an Ethernet interface. The value represents $M \cdot 10E-N$, which is the ratio of errored frames over the total frames received over the sliding window interval. The symbol errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	SD multiplier used to scale the symbol error ratio
Context	configure port <i>string</i> ethernet symbol-monitor signal-degrade multiplier <i>number</i>
Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	SD threshold for symbol errors
Context	configure port <i>string</i> ethernet symbol-monitor signal-degrade threshold <i>number</i>
Tree	threshold

Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-failure

Synopsis	Enter the signal-failure context
Context	configure port <i>string</i> ethernet symbol-monitor signal-failure
Tree	signal-failure
Description	Commands in this context specify the error rate at which to declare the SF condition on an Ethernet interface. The value represents $M \cdot 10E-N$, which is the ratio of errored frames over the total frames received over the sliding window interval. The symbol errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier number

Synopsis	SF multiplier used to scale the symbol error ratio
Context	configure port <i>string</i> ethernet symbol-monitor signal-failure multiplier <i>number</i>
Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold number

Synopsis	SF threshold for symbol errors
Context	configure port <i>string</i> ethernet symbol-monitor signal-failure threshold <i>number</i>
Tree	threshold
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window-size *number*

Synopsis	Sliding window size over which errors are measured
Context	configure port <i>string</i> ethernet symbol-monitor window-size <i>number</i>
Tree	window-size
Description	This command specifies the sliding window size over which the symbols are sampled to detect SF or SD conditions.
Range	5 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

util-stats-interval *number*

Synopsis	Interval to calculate utilization statistics
Context	configure port <i>string</i> ethernet util-stats-interval <i>number</i>
Tree	util-stats-interval
Range	30 to 600
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	All

xgig *keyword*

Synopsis	Ethernet port mode
Context	configure port <i>string</i> ethernet xgig <i>keyword</i>
Tree	xgig
Description	This command configures a 10 Gb/s interface to be in LAN or WAN mode. When configuring the port to be in WAN mode, certain SONET/SDH commands can be changed to reflect the SONET/SDH requirements for the port. When configuring the port to be in LAN mode, all SONET/SDH commands are pre-determined and not configurable.
Options	lan, wan
Introduced	16.0.R1
Platforms	All

gnss

Synopsis	Enter the gnss context
Context	configure port string gnss
Tree	gnss
Description	Commands in this context configure GNSS port attributes.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

antenna-cable-delay *number*

Synopsis	Signal delay resulting from GNSS antenna cable length
Context	configure port string gnss antenna-cable-delay number
Tree	antenna-cable-delay
Description	This command configures the expected signal delay resulting from the length of the GNSS antenna cable.
Range	0 to 32767
Default	0
Units	nanoseconds
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

constellation

Synopsis	Enter the constellation context
Context	configure port string gnss constellation
Tree	constellation
Description	Commands in this context configure the GNSS systems that are used by the GNSS receiver.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

galileo boolean

Synopsis	Enable GNSS receiver to use GALILEO constellation type
Context	configure port string gnss constellation galileo boolean
Tree	galileo
Description	When configured to true , this command enables the use of the European Galileo GNSS system.
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

glonass boolean

Synopsis	Enable GNSS receiver to use GLONASS constellation type
Context	configure port string gnss constellation glonass boolean
Tree	glonass
Description	When configured to true , this command enables the use of the Russian GLONASS GNSS system. When configured to false , this command disables the use of the Russian GLONASS GNSS system.
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

gps boolean

Synopsis	Enable GNSS receiver to use GPS constellation type
Context	configure port string gnss constellation gps boolean
Tree	gps
Description	When configured to true , this command enables the use of the American GPS GNSS system. When configured to false , this command disables the use of the American GPS GNSS system.
Default	true
Introduced	22.10.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D,
7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

elevation-mask-angle *number*

Synopsis Minimum elevation mask angle

Context **configure** port *string* gns elevation-mask-angle *number*

Tree [elevation-mask-angle](#)

Description This command configures the elevation mask angle, which provides a method of filtering satellites used by the system.

Satellites with low elevation may provide degraded accuracy because of the long signal path through the atmosphere. Signals from satellites below the configured minimum satellite elevation are not used.

Nokia does not recommend configuring an elevation mask angle below 10.

Range 0 to 89

Default 10

Units degrees angle

Introduced 22.10.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D,
7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

hybrid-buffer-allocation

Synopsis Enter the **hybrid-buffer-allocation** context

Context **configure** port *string* hybrid-buffer-allocation

Tree [hybrid-buffer-allocation](#)

Introduced 16.0.R1

Platforms All

egress-weight

Synopsis Enter the **egress-weight** context

Context **configure** port *string* hybrid-buffer-allocation egress-weight

Tree [egress-weight](#)

Introduced 16.0.R1

Platforms All

access number

Synopsis	Access weight for the hybrid port
Context	configure port string hybrid-buffer-allocation egress-weight access number
Tree	access
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

network number

Synopsis	Access weight for the hybrid port
Context	configure port string hybrid-buffer-allocation egress-weight network number
Tree	network
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

ingress-weight

Synopsis	Enter the ingress-weight context
Context	configure port string hybrid-buffer-allocation ingress-weight
Tree	ingress-weight
Introduced	16.0.R1
Platforms	All

access number

Synopsis	Access weight for the hybrid port
Context	configure port string hybrid-buffer-allocation ingress-weight access number
Tree	access
Range	0 to 100
Default	50

Introduced	16.0.R1
Platforms	All

network number

Synopsis	Access weight for the hybrid port
Context	configure port <i>string</i> hybrid-buffer-allocation ingress-weight network <i>number</i>
Tree	network
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

modify-buffer-allocation

Synopsis	Enter the modify-buffer-allocation context
Context	configure port <i>string</i> modify-buffer-allocation
Tree	modify-buffer-allocation
Description	Commands in this context to configure ingress and egress percentage of rate commands. These commands only apply to physical ports (for example, it does not work on APS or similar logical ports). The percentage of rate commands are used to define a percentage value that affects the amount of buffers used by ingress and egress port managed buffer space.
Introduced	16.0.R1
Platforms	All

percentage-of-rate

Synopsis	Enter the percentage-of-rate context
Context	configure port <i>string</i> modify-buffer-allocation percentage-of-rate
Tree	percentage-of-rate
Description	Commands in this context increase or decrease the active bandwidth associated with the egress or ingress port that affects the amount of egress or ingress buffer space managed by the port. Changing a ports active bandwidth using the commands in this context are an effective means of artificially lowering the buffers managed by one egress or ingress port and giving them to the other egress or ingress ports on the same MDA.
Introduced	16.0.R1

Platforms All

egress number

Synopsis Egress rate percentage
Context **configure** [port string](#) [modify-buffer-allocation](#) [percentage-of-rate](#) *egress number*
Tree [egress](#)
Range 1 to 1000
Introduced 16.0.R1
Platforms All

ingress number

Synopsis Ingress rate percentage
Context **configure** [port string](#) [modify-buffer-allocation](#) [percentage-of-rate](#) *ingress number*
Tree [ingress](#)
Range 1 to 1000
Default 100
Introduced 16.0.R1
Platforms All

monitor-agg-egress-queue-stats boolean

Synopsis Monitor aggregate queue statistics
Context **configure** [port string](#) [monitor-agg-egress-queue-stats](#) *boolean*
Tree [monitor-agg-egress-queue-stats](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

monitor-oper-group reference

Synopsis Operational group to monitor
Context **configure** [port string](#) [monitor-oper-group](#) *reference*
Tree [monitor-oper-group](#)

Description	This command configures the operational group to monitor the operational group state. The state of the operational group affects the state of this port. When the operational group is inactive, the state of the port goes down and powers off the port to signal to the CE that the connected port is not available.
Reference	configure service oper-group <i>string</i>
Introduced	22.7.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure port string network
Tree	network
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure port string network egress
Tree	egress
Introduced	16.0.R1
Platforms	All

pool [name] string

Synopsis	Enter the pool list instance
Context	configure port string network egress pool string
Tree	pool
Introduced	16.0.R1
Platforms	All

[name] string

Synopsis	Pool name
Context	configure port string network egress pool string

Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

amber-alarm-threshold *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	configure port <i>string</i> network egress pool <i>string</i> amber-alarm-threshold <i>number</i>
Tree	amber-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

red-alarm-threshold *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	configure port <i>string</i> network egress pool <i>string</i> red-alarm-threshold <i>number</i>
Tree	red-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the resv-cbs context
Context	configure port <i>string</i> network egress pool <i>string</i> resv-cbs
Tree	resv-cbs
Introduced	16.0.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the amber-alarm-action context
Context	configure port <i>string</i> network egress pool <i>string</i> resv-cbs amber-alarm-action
Tree	amber-alarm-action
Introduced	16.0.R1
Platforms	All

max number

Synopsis	Maximum percentage for reserved CBS of the pool
Context	configure port <i>string</i> network egress pool <i>string</i> resv-cbs amber-alarm-action max number
Tree	max
Description	<p>This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.</p> <p>To enable adaptive CBS sizing the max, step, and cbs commands must be configured. The cbs command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

step number

Synopsis	Step-size percentage for reserved CBS of the pool
Context	configure port <i>string</i> network egress pool <i>string</i> resv-cbs amber-alarm-action step number
Tree	step
Description	<p>This command specifies the step-size percentage for the reserved CBS of the pool.</p> <p>To enable adaptive CBS sizing the max, step, and cbs commands must be configured. The cbs command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent

Introduced 16.0.R1
Platforms All

cbs (*number* | *keyword*)

Synopsis Percentage of the pool buffer space reserved for CBS
Context **configure** *port string network egress pool string resv-cbs cbs* (*number* | *keyword*)
Tree [cbs](#)
Range 0 to 100
Default auto
Units percent
Options auto
Introduced 16.0.R1
Platforms All

slope-policy *reference*

Synopsis Policy for the RED slope and TAF values
Context **configure** *port string network egress pool string slope-policy reference*
Tree [slope-policy](#)
Reference **configure** *qos slope-policy string*
Introduced 16.0.R1
Platforms All

oper-group *reference*

Synopsis Operational group ID
Context **configure** *port string oper-group reference*
Tree [oper-group](#)
Reference **configure** *service oper-group string*
Introduced 22.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

otu

Synopsis	Enable the otu context
Context	configure port string otu
Tree	otu
Introduced	16.0.R1
Platforms	All

async-mapping *boolean*

Synopsis	Allow asynchronous mapping of the payload inside the OTU
Context	configure port string otu async-mapping boolean
Tree	async-mapping
Introduced	16.0.R1
Platforms	All

fec *keyword*

Synopsis	Forwarding Error Correction (FEC) encapsulation on the port
Context	configure port string otu fec keyword
Tree	fec
Options	none, g709, enhanced
Introduced	16.0.R1
Platforms	All

fine-granularity-ber

Synopsis	Enter the fine-granularity-ber context
Context	configure port string otu fine-granularity-ber
Tree	fine-granularity-ber
Introduced	16.0.R1
Platforms	All

signal-degrade

Synopsis	Enter the signal-degrade context
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Context	configure port string otu fine-granularity-ber signal-degrade
Tree	signal-degrade
Introduced	16.0.R1
Platforms	All

clear

Synopsis	Enter the clear context
Context	configure port string otu fine-granularity-ber signal-degrade clear
Tree	clear
Introduced	16.0.R1
Platforms	All

multiplier number

Synopsis	Multiplier of the SD clear threshold
Context	configure port string otu fine-granularity-ber signal-degrade clear multiplier number
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

threshold number

Synopsis	SD clear threshold
Context	configure port string otu fine-granularity-ber signal-degrade clear threshold number
Tree	threshold
Range	3 to 10
Default	8
Introduced	16.0.R1
Platforms	All

raise

Synopsis	Enter the raise context
Context	configure port string otu fine-granularity-ber signal-degrade raise
Tree	raise
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Multiplier of the SD raise threshold
Context	configure port string otu fine-granularity-ber signal-degrade raise multiplier <i>number</i>
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	SD raise threshold
Context	configure port string otu fine-granularity-ber signal-degrade raise threshold <i>number</i>
Tree	threshold
Range	3 to 9
Default	7
Introduced	16.0.R1
Platforms	All

signal-failure

Synopsis	Enter the signal-failure context
Context	configure port string otu fine-granularity-ber signal-failure
Tree	signal-failure
Introduced	16.0.R1
Platforms	All

clear

Synopsis	Enter the clear context
Context	configure port <i>string</i> otu <i>fine-granularity-ber</i> signal-failure clear
Tree	clear
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Threshold for the Multiplier of SD clear
Context	configure port <i>string</i> otu <i>fine-granularity-ber</i> signal-failure clear multiplier <i>number</i>
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold for the Multiplier of SD clear
Context	configure port <i>string</i> otu <i>fine-granularity-ber</i> signal-failure clear threshold <i>number</i>
Tree	threshold
Range	3 to 9
Default	6
Introduced	16.0.R1
Platforms	All

raise

Synopsis	Enter the raise context
Context	configure port <i>string</i> otu <i>fine-granularity-ber</i> signal-failure raise
Tree	raise
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	SF raise threshold
Context	configure port string otu fine-granularity-ber signal-failure raise multiplier <i>number</i>
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	SF raise threshold
Context	configure port string otu fine-granularity-ber signal-failure raise threshold <i>number</i>
Tree	threshold
Range	3 to 8
Default	5
Introduced	16.0.R1
Platforms	All

otu2-lan-data-rate *keyword*

Synopsis	Data rate for 10GE LAN OTU2 on the port
Context	configure port string otu otu2-lan-data-rate <i>keyword</i>
Tree	otu2-lan-data-rate
Units	gigabps
Options	11.049, 11.096
Introduced	16.0.R1
Platforms	All

path-monitoring

Synopsis	Enter the path-monitoring context
Context	configure port string otu path-monitoring
Tree	path-monitoring

Introduced 16.0.R4
Platforms All

trail-trace-identifier

Synopsis Enter the **trail-trace-identifier** context
Context **configure** port *string* otu path-monitoring trail-trace-identifier
Tree trail-trace-identifier
Introduced 16.0.R4
Platforms All

expected

Synopsis Enter the **expected** context
Context **configure** port *string* otu path-monitoring trail-trace-identifier expected
Tree expected
Introduced 16.0.R4
Platforms All

auto-generated

Synopsis Use the system generated TTI
Context **configure** port *string* otu path-monitoring trail-trace-identifier expected auto-generated
Tree auto-generated
Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced 16.0.R4
Platforms All

bytes *string*

Synopsis TTI as a sequence of bytes
Context **configure** port *string* otu path-monitoring trail-trace-identifier expected bytes *string*
Tree bytes
String Length 0 to 192
Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.

Introduced 16.0.R4
Platforms All

string *string*

Synopsis TTI as a sequence of printable ASCII
Context **configure** [port](#) [string](#) [otu](#) [path-monitoring](#) [trail-trace-identifier](#) [expected](#) [string](#) *string*
Tree [string](#)
String Length 0 to 64
Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced 16.0.R4
Platforms All

mismatch-reaction *keyword*

Synopsis Reaction to a mismatched TTI
Context **configure** [port](#) [string](#) [otu](#) [path-monitoring](#) [trail-trace-identifier](#) [mismatch-reaction](#) *keyword*
Tree [mismatch-reaction](#)
Options [squelch-rx](#)
Introduced 16.0.R4
Platforms All

transmit

Synopsis Enter the **transmit** context
Context **configure** [port](#) [string](#) [otu](#) [path-monitoring](#) [trail-trace-identifier](#) [transmit](#)
Tree [transmit](#)
Introduced 16.0.R4
Platforms All

auto-generated

Synopsis Use the system generated TTI
Context **configure** [port](#) [string](#) [otu](#) [path-monitoring](#) [trail-trace-identifier](#) [transmit](#) [auto-generated](#)

Tree	auto-generated
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

bytes *string*

Synopsis	TTI as a sequence of bytes
Context	configure port string otu path-monitoring trail-trace-identifier transmit bytes <i>string</i>
Tree	bytes
String Length	0 to 192
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	configure port string otu path-monitoring trail-trace-identifier transmit string <i>string</i>
Tree	string
String Length	0 to 64
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

payload-structure-identifier

Synopsis	Enter the payload-structure-identifier context
Context	configure port string otu payload-structure-identifier
Tree	payload-structure-identifier
Introduced	16.0.R4
Platforms	All

payload

Synopsis	Enter the payload context
Context	configure port <i>string</i> otu payload-structure-identifier payload
Tree	payload
Introduced	16.0.R4
Platforms	All

expected keyword

Synopsis	Configure the port's PSI payload expected parameters.
Context	configure port <i>string</i> otu payload-structure-identifier payload expected keyword
Tree	expected
Default	auto
Options	auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82, reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test
Introduced	16.0.R4
Platforms	All

mismatch-reaction keyword

Synopsis	Reaction to a mismatched payload
Context	configure port <i>string</i> otu payload-structure-identifier payload mismatch-reaction keyword
Tree	mismatch-reaction
Options	squelch-rx
Introduced	16.0.R4
Platforms	All

transmit keyword

Synopsis	Transmit payload type
Context	configure port <i>string</i> otu payload-structure-identifier payload transmit keyword
Tree	transmit

Default	auto
Options	auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82, reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test
Introduced	16.0.R4
Platforms	All

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port <i>string</i> otu report-alarm
Tree	report-alarm
Introduced	16.0.R1
Platforms	All

fec-fail *boolean*

Synopsis	Report FEC mode mismatch alarm
Context	configure port <i>string</i> otu report-alarm fec-fail <i>boolean</i>
Tree	fec-fail
Default	false
Introduced	16.0.R1
Platforms	All

fec-sd *boolean*

Synopsis	Report Signal Degrade alarm
Context	configure port <i>string</i> otu report-alarm fec-sd <i>boolean</i>
Tree	fec-sd
Default	false
Introduced	16.0.R1
Platforms	All

fec-sf *boolean*

Synopsis	Report Signal Fail alarm
Context	configure port string otu report-alarm fec-sf <i>boolean</i>
Tree	fec-sf
Default	true
Introduced	16.0.R1
Platforms	All

fec-uncorr *boolean*

Synopsis	Report one or more Uncorrectable FEC errors alarm
Context	configure port string otu report-alarm fec-uncorr <i>boolean</i>
Tree	fec-uncorr
Default	false
Introduced	16.0.R1
Platforms	All

loc *boolean*

Synopsis	Report alarm for a loss of clock that causes the port to shut down
Context	configure port string otu report-alarm loc <i>boolean</i>
Tree	loc
Default	true
Introduced	16.0.R1
Platforms	All

lof *boolean*

Synopsis	Report alarm for the loss of OTU framing
Context	configure port string otu report-alarm lof <i>boolean</i>
Tree	lof
Default	true
Introduced	16.0.R1
Platforms	All

lom *boolean*

Synopsis	Report alarm for the loss of multi-frame
Context	configure <i>port string otu report-alarm lom boolean</i>
Tree	lom
Default	true
Introduced	16.0.R1
Platforms	All

los *boolean*

Synopsis	Report alarm for the loss of signal transitions on data
Context	configure <i>port string otu report-alarm los boolean</i>
Tree	los
Default	true
Introduced	16.0.R1
Platforms	All

odu-ais *boolean*

Synopsis	Report ODU Alarm Indication Signal alarm
Context	configure <i>port string otu report-alarm odu-ais boolean</i>
Tree	odu-ais
Default	false
Introduced	16.0.R1
Platforms	All

odu-bdi *boolean*

Synopsis	Report PM Backward Defect Indication alarm
Context	configure <i>port string otu report-alarm odu-bdi boolean</i>
Tree	odu-bdi
Default	false
Introduced	16.0.R1
Platforms	All

odu-lck *boolean*

Synopsis	Report ODU Locked alarm
Context	configure <i>port string otu report-alarm odu-lck boolean</i>
Tree	odu-lck
Default	false
Introduced	16.0.R1
Platforms	All

odu-oci *boolean*

Synopsis	Report ODU Open Connection Indication alarm
Context	configure <i>port string otu report-alarm odu-oci boolean</i>
Tree	odu-oci
Default	false
Introduced	16.0.R1
Platforms	All

odu-tim *boolean*

Synopsis	Report PM Trace ID Mismatch alarm
Context	configure <i>port string otu report-alarm odu-tim boolean</i>
Tree	odu-tim
Default	false
Introduced	16.0.R1
Platforms	All

opu-plm *boolean*

Synopsis	Report PSI Payload Type Mismatch alarm
Context	configure <i>port string otu report-alarm opu-plm boolean</i>
Tree	opu-plm
Default	false
Introduced	16.0.R1
Platforms	All

otu-ais *boolean*

Synopsis	Report OTU Alarm Indication Signal alarm
Context	configure port string otu report-alarm otu-ais <i>boolean</i>
Tree	otu-ais
Default	false
Introduced	16.0.R1
Platforms	All

otu-bdi *boolean*

Synopsis	Report SM Backward Defect Indication alarm
Context	configure port string otu report-alarm otu-bdi <i>boolean</i>
Tree	otu-bdi
Default	true
Introduced	16.0.R1
Platforms	All

otu-ber-sd *boolean*

Synopsis	Report SM Signal Degrade alarm
Context	configure port string otu report-alarm otu-ber-sd <i>boolean</i>
Tree	otu-ber-sd
Default	false
Introduced	16.0.R1
Platforms	All

otu-ber-sf *boolean*

Synopsis	Report SM Signal Fail alarm
Context	configure port string otu report-alarm otu-ber-sf <i>boolean</i>
Tree	otu-ber-sf
Default	true
Introduced	16.0.R1
Platforms	All

otu-biae *boolean*

Synopsis	Report SM Backward Incoming Alignment Error alarm
Context	configure <i>port string otu report-alarm otu-biae boolean</i>
Tree	otu-biae
Default	false
Introduced	16.0.R1
Platforms	All

otu-iae *boolean*

Synopsis	Report SM Incoming Alignment Error alarm
Context	configure <i>port string otu report-alarm otu-iae boolean</i>
Tree	otu-iae
Default	false
Introduced	16.0.R1
Platforms	All

otu-tim *boolean*

Synopsis	Report SM Trace ID Mismatch alarm
Context	configure <i>port string otu report-alarm otu-tim boolean</i>
Tree	otu-tim
Default	false
Introduced	16.0.R1
Platforms	All

sd-threshold *number*

Synopsis	Error rate at which to declare the signal fail condition for the signal degrade (SD)
Context	configure <i>port string otu sd-threshold number</i>
Tree	sd-threshold
Range	5 to 9
Default	7
Introduced	16.0.R1

Platforms All

section-monitoring

Synopsis Enter the **section-monitoring** context
Context **configure** port *string* otu **section-monitoring**
Tree [section-monitoring](#)
Introduced 16.0.R4
Platforms All

trail-trace-identifier

Synopsis Enter the **trail-trace-identifier** context
Context **configure** port *string* otu **section-monitoring** **trail-trace-identifier**
Tree [trail-trace-identifier](#)
Introduced 16.0.R4
Platforms All

expected

Synopsis Enter the **expected** context
Context **configure** port *string* otu **section-monitoring** **trail-trace-identifier** **expected**
Tree [expected](#)
Introduced 16.0.R4
Platforms All

auto-generated

Synopsis Use the system generated TTI
Context **configure** port *string* otu **section-monitoring** **trail-trace-identifier** **expected** **auto-generated**
Tree [auto-generated](#)
Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced 16.0.R4
Platforms All

bytes *string*

Synopsis	TTI as a sequence of bytes
Context	configure port string otu section-monitoring trail-trace-identifier expected bytes string
Tree	bytes
String Length	0 to 192
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	configure port string otu section-monitoring trail-trace-identifier expected string string
Tree	string
String Length	0 to 64
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

mismatch-reaction *keyword*

Synopsis	Reaction to a mismatched TTI
Context	configure port string otu section-monitoring trail-trace-identifier mismatch-reaction keyword
Tree	mismatch-reaction
Options	squelch-rx
Introduced	16.0.R4
Platforms	All

transmit

Synopsis	Enter the transmit context
Context	configure port string otu section-monitoring trail-trace-identifier transmit
Tree	transmit

Introduced 16.0.R4
Platforms All

auto-generated

Synopsis Use the system generated TTI
Context **configure** port *string* otu section-monitoring trail-trace-identifier transmit auto-generated
Tree auto-generated
Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced 16.0.R4
Platforms All

bytes *string*

Synopsis TTI as a sequence of bytes
Context **configure** port *string* otu section-monitoring trail-trace-identifier transmit bytes *string*
Tree bytes
String Length 0 to 192
Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced 16.0.R4
Platforms All

string *string*

Synopsis TTI as a sequence of printable ASCII
Context **configure** port *string* otu section-monitoring trail-trace-identifier transmit string *string*
Tree string
String Length 0 to 64
Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced 16.0.R4
Platforms All

sf-sd-method *keyword*

Synopsis Method used to determine the signal fail and signal degrade alarms

Context	configure port string otu sf-sd-method keyword
Tree	sf-sd-method
Default	fec
Options	fec, bip8
Introduced	16.0.R1
Platforms	All

sf-threshold *number*

Synopsis	Error rate at which to declare the signal fail condition for the signal fail (SF)
Context	configure port string otu sf-threshold number
Tree	sf-threshold
Range	3 to 6
Default	5
Introduced	16.0.R1
Platforms	All

sonet-sdh

Synopsis	Enter the sonet-sdh context
Context	configure port string sonet-sdh
Tree	sonet-sdh
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clock-source *keyword*

Synopsis	Clock used for transmitted data
Context	configure port string sonet-sdh clock-source keyword
Tree	clock-source
Options	loop-timed, node-timed
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

framing *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET or SDH framing
Context	configure port string sonet-sdh framing <i>keyword</i>
Tree	framing
Default	sonet
Options	sonet, sdh
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

group [group-index] *string*

Synopsis	Enter the group list instance
Context	configure port string sonet-sdh group <i>string</i>
Tree	group
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[group-index] *string*

Synopsis	Components making up the specified SONET/SDH path
Context	configure port string sonet-sdh group <i>string</i>
Tree	group
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

payload *keyword*

Synopsis	SONET/SDH group payload
Context	configure port string sonet-sdh group string payload <i>keyword</i>
Tree	payload
Default	tu3

Options	vt15, vt2, tu3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hold-time

Synopsis	Enter the hold-time context
Context	configure port <i>string</i> sonet-sdh hold-time
Tree	hold-time
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

down number

Synopsis	Hold timer for link down event dampening
Context	configure port <i>string</i> sonet-sdh hold-time down number
Tree	down
Range	0 to 100
Units	deciseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

up number

Synopsis	Hold timer for link up event dampening
Context	configure port <i>string</i> sonet-sdh hold-time up number
Tree	up
Range	0 to 100
Default	5
Units	deciseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loopback *keyword*

Synopsis	Loopback to activate on SONET port
Context	configure port <i>string</i> sonet-sdh loopback <i>keyword</i>
Tree	loopback
Options	line, internal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

path [*path-index*] *string*

Synopsis	Enter the path list instance
Context	configure port <i>string</i> sonet-sdh path <i>string</i>
Tree	path
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[*path-index*] *string*

Synopsis	SONET/SDH path index
Context	configure port <i>string</i> sonet-sdh path <i>string</i>
Tree	path
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the SONET/SDH path
Context	configure port <i>string</i> sonet-sdh path <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc number

Synopsis	Cyclic redundancy check
Context	configure port string sonet-sdh path string crc number
Tree	crc
Range	16 32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis	Text description
Context	configure port string sonet-sdh path string description string
Tree	description
String Length	1 to 160
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

egress

Synopsis	Enter the egress context
Context	configure port string sonet-sdh path string egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port string sonet-sdh path string egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enable the overrides context
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level [*priority-level*] *number*

Synopsis	Enter the level list instance
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[*priority-level*] *number*

Synopsis	Port priority levels override
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *decimal-number*

Synopsis CIR for the priority level

Context **configure** [port string](#) [sonet-sdh path string](#) [egress port-scheduler-policy overrides level number](#) [percent-rate](#) [cir decimal-number](#)

Tree [cir](#)

Range 0 to 100

Default 100

Units percent

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *decimal-number*

Synopsis PIR for the priority level

Context **configure** [port string](#) [sonet-sdh path string](#) [egress port-scheduler-policy overrides level number](#) [percent-rate](#) [pir decimal-number](#)

Tree [pir](#)

Range 0.01 to 100

Default 100

Units percent

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis Enter the **rate** context

Context **configure** [port string](#) [sonet-sdh path string](#) [egress port-scheduler-policy overrides level number](#) [rate](#)

Tree [rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 3200000000
Default	max
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rate

Synopsis	Enter the max-rate context
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate *decimal-number*

Synopsis	PIR
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Default	100
Units	percent
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate (*number* | *keyword*)

Synopsis	PIR
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides max-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Port egress scheduler policy name
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure an encap method.
Context	configure port string sonet-sdh path string encap-type keyword
Tree	encap-type
Options	bcp-null, bcp-dot1q, ipcp, ppp-auto, wan-mirror, cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm
Context	configure port string sonet-sdh path string load-balancing-algorithm keyword
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address for the SONET/SDH path
Context	configure port string sonet-sdh path string mac-address string
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation port mode for the SONET/SDH path
Context	configure port string sonet-sdh path string mode keyword
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mtu number

Synopsis	Maximum payload MTU size
Context	configure port string sonet-sdh path string mtu number
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

network

Synopsis	Enter the network context
Context	configure port string sonet-sdh path string network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accounting-policy reference

Synopsis	Accounting policy
Context	configure port string sonet-sdh path string network accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port string sonet-sdh path string network collect-stats boolean
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue-policy *reference*

Synopsis	Queue policy on the SONET/SDH network path
Context	configure port string sonet-sdh path string network queue-policy reference
Tree	queue-policy
Reference	configure qos network-queue string
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

payload *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET/SDH path payload
Context	configure port string sonet-sdh path string payload keyword
Tree	payload
Options	sts3, tug3, vt15, vt2, ds3, e3, ds1, e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ppp

Synopsis	Enter the ppp context
Context	configure port string sonet-sdh path string ppp
Tree	ppp
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

keepalive

Synopsis Enter the **keepalive** context
Context **configure** port string sonet-sdh path string ppp keepalive
Tree [keepalive](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop-count number

Synopsis Consecutive missed keepalives before port is taken down
Context **configure** port string sonet-sdh path string ppp keepalive drop-count number
Tree [drop-count](#)
Range 1 to 255
Default 3
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval (number | keyword)

Synopsis Interval at which keepalive messages are issued
Context **configure** port string sonet-sdh path string ppp keepalive interval (number | keyword)
Tree [interval](#)
Range 1 to 60
Default 10
Units seconds
Options none
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

report-alarm

Synopsis Enter the **report-alarm** context

Context **configure port string sonet-sdh path string report-alarm**
Tree **report-alarm**
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pais *boolean*

Synopsis Report path alarm indication signal errors
Context **configure port string sonet-sdh path string report-alarm pais boolean**
Tree **pais**
Default false
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

plcd *boolean*

Synopsis Report path loss of code group delineation errors
Context **configure port string sonet-sdh path string report-alarm plcd boolean**
Tree **plcd**
Default false
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

plop *boolean*

Synopsis Report path loss of pointer errors as a trap
Context **configure port string sonet-sdh path string report-alarm plop boolean**
Tree **plop**
Default true
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pplm *boolean*

Synopsis Report a path payload mismatch trap

Context **configure** port string sonet-sdh path string report-alarm pplm boolean
Tree pplm
Default true
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prdi boolean

Synopsis Report path remote defect indication errors
Context **configure** port string sonet-sdh path string report-alarm prdi boolean
Tree prdi
Default false
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prei boolean

Synopsis Report a path error condition as a result of b3 error
Context **configure** port string sonet-sdh path string report-alarm prei boolean
Tree prei
Default false
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

puneq boolean

Synopsis Report path unequipped errors
Context **configure** port string sonet-sdh path string report-alarm puneq boolean
Tree puneq
Default true
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

scramble *boolean*

Synopsis	Enable SONET/SDH payload scrambling
Context	configure port string sonet-sdh path string scramble boolean
Tree	scramble
Description	When configured to true , the SONET/SDH frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking. When configured to false , the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-label *string*

Synopsis	C2 byte value that communicates the payload type
Context	configure port string sonet-sdh path string signal-label string
Tree	signal-label
String Length	1 to 4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

trace-string (*keyword* | *string*)

Synopsis	J1 path-trace string that identifies the circuit
Context	configure port string sonet-sdh path string trace-string (<i>keyword</i> <i>string</i>)
Tree	trace-string
String Length	0 to 62
Options	zeros
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port string sonet-sdh report-alarm
Tree	report-alarm

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lais *boolean*

Synopsis Report Line Indication Signal Errors alarm
Context **configure** port string sonet-sdh report-alarm **lais** *boolean*
Tree [lais](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lb2er-sd *boolean*

Synopsis Report alarm for line signal degradation BER (bit interleaved parity) errors
Context **configure** port string sonet-sdh report-alarm **lb2er-sd** *boolean*
Tree [lb2er-sd](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lb2er-sf *boolean*

Synopsis Report alarm line signal failure BER errors
Context **configure** port string sonet-sdh report-alarm **lb2er-sf** *boolean*
Tree [lb2er-sf](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loc *boolean*

Synopsis Report alarm for a loss of clock that causes the port to shut down
Context **configure** port string sonet-sdh report-alarm **loc** *boolean*
Tree [loc](#)

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lrdi boolean

Synopsis	Report Line Remote Defect Indication Errors alarm
Context	configure port string sonet-sdh report-alarm lrdi boolean
Tree	lrdi
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lrei boolean

Synopsis	Report alarm for a line error condition
Context	configure port string sonet-sdh report-alarm lrei boolean
Tree	lrei
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

slof boolean

Synopsis	Report alarm for section loss of frame errors
Context	configure port string sonet-sdh report-alarm slof boolean
Tree	slof
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

slos boolean

Synopsis	Report alarm for section loss of signal error on the transmit side
Context	configure port string sonet-sdh report-alarm slos boolean

Tree	slos
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ss1f *boolean*

Synopsis	Report alarm for section synchronization failure
Context	configure port <i>string</i> sonet-sdh report-alarm ss1f <i>boolean</i>
Tree	ss1f
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sd-threshold *number*

Synopsis	Threshold for line signal failure BER
Context	configure port <i>string</i> sonet-sdh sd-threshold <i>number</i>
Tree	sd-threshold
Range	3 to 9
Default	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

section-trace

Synopsis	Enter the section-trace context
Context	configure port <i>string</i> sonet-sdh section-trace
Tree	section-trace
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

byte *string*

Synopsis	Section trace bytes in the SONET section header
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Context	configure port string sonet-sdh section-trace byte string
Tree	byte
String Length	1 to 4
Default	1
Notes	The following elements are part of a choice: byte , increment-z0 , or string .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

increment-z0

Synopsis	Configure incrementing STM ID instead of a static value
Context	configure port string sonet-sdh section-trace increment-z0
Tree	increment-z0
Notes	The following elements are part of a choice: byte , increment-z0 , or string .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

string string

Synopsis	Text string that identifies the section
Context	configure port string sonet-sdh section-trace string string
Tree	string
String Length	0 to 16
Notes	The following elements are part of a choice: byte , increment-z0 , or string .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sf-threshold number

Synopsis	Threshold for line signal failure BER
Context	configure port string sonet-sdh sf-threshold number
Tree	sf-threshold
Range	3 to 6
Default	3
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

single-fiber *boolean*

Synopsis Allow packet gathering and redirection of IP packets from a single fiber (RX) port
Context **configure** port string sonet-sdh single-fiber boolean
Tree [single-fiber](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

speed *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis SONET/SDH port speed
Context **configure** port string sonet-sdh speed keyword
Tree [speed](#)
Options oc3, oc12, oc48, oc192, oc768, oc1
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

suppress-low-order-alarms *boolean*

Synopsis Suppress low order alarms
Context **configure** port string sonet-sdh suppress-low-order-alarms boolean
Tree [suppress-low-order-alarms](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-dus *boolean*

Synopsis Force the QL value to be set to QL-DUS/QL-DNU

Context	configure port string sonet-sdh tx-dus boolean
Tree	tx-dus
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tdm

Synopsis	Enter the tdm context
Context	configure port string tdm
Tree	tdm
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

buildout keyword

Synopsis	Line buildout for physical DS1/DS3 ports
Context	configure port string tdm buildout keyword
Tree	buildout
Default	short
Options	short, long
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ds1 [ds1-index] string

Synopsis	Enter the ds1 list instance
Context	configure port string tdm ds1 string
Tree	ds1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[ds1-index] string

Synopsis	DS-1 channel ID
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Context	configure port string tdm ds1 string
Tree	ds1
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state keyword

Synopsis	Administrative state of the DS1 channel
Context	configure port string tdm ds1 string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-threshold

Synopsis	Enter the ber-threshold context
Context	configure port string tdm ds1 string ber-threshold
Tree	ber-threshold
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-degrade number

Synopsis	BER signal degradation threshold
Context	configure port string tdm ds1 string ber-threshold signal-degrade number
Tree	signal-degrade
Range	1 5 10 50 100
Default	5
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-failure *number*

Synopsis	BER signal failure threshold
Context	configure port <i>string</i> tdm ds1 <i>string</i> ber-threshold signal-failure <i>number</i>
Tree	signal-failure
Range	1 5 10 50 100
Default	50
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

channel-group [*ds0-index*] *number*

Synopsis	Enter the channel-group list instance
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i>
Tree	channel-group
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[*ds0-index*] *number*

Synopsis	Channel group ID
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i>
Tree	channel-group
Range	1 to 24
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the DS1 channel group
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

crc number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Precision of the CRC
Context **configure port string tdm ds1 string channel-group number crc number**
Tree **crc**
Range 16 | 32
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description string

Synopsis Text description
Context **configure port string tdm ds1 string channel-group number description string**
Tree **description**
String Length 1 to 160
Default DS0GRP
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis Enter the **egress** context
Context **configure port string tdm ds1 string channel-group number egress**
Tree **egress**
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis Enter the **port-scheduler-policy** context

Context	configure port string tdm ds1 string channel-group number egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis	Enable the overrides context
Context	configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [priority-level] number

Synopsis	Enter the level list instance
Context	configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[priority-level] number

Synopsis	Port priority levels override
Context	configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir decimal-number

Synopsis	CIR for the priority level
Context	configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number percent-rate cir decimal-number
Tree	cir
Range	0 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir decimal-number

Synopsis	PIR for the priority level
Context	configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis	Enter the rate context
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Context	configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 3200000000
Default	max
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	configure port string tdm ds1 string channel-group number egress port-scheduler-policy overrides level number rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis	Enter the max-rate context
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Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate *decimal-number*

Synopsis	PIR
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Default	100
Units	percent
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate (*number* | *keyword*)

Synopsis	PIR
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis	Port egress scheduler policy name
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Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy <i>policy-name</i> <i>reference</i>
Tree	policy-name
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> encap-type <i>keyword</i>
Tree	encap-type
Options	bcp-null, bcp-dot1q, ipcp, ppp-auto, wan-mirror, cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-cycle-flag *keyword*

Synopsis	Value transmitted during idle cycles
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-cycle-flag <i>keyword</i>
Tree	idle-cycle-flag
Options	flags, ones
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-payload-fill

Synopsis	Enter the idle-payload-fill context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill
Tree	idle-payload-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

all-ones

Synopsis	Define the 8 bit value to be transmitted as 11111111
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill pattern <i>number</i>
Tree	pattern
Range	0 to 255
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-signal-fill

Synopsis	Enter the idle-signal-fill context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-signal-fill
Tree	idle-signal-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

all-ones

Synopsis	Define the 8-bit value to be transmitted as 11111111
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-signal-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis User-defined pattern to be transmitted

Context **configure** port *string* tdm ds1 *string* channel-group *number* idle-signal-fill **pattern** *number*

Tree **pattern**

Range 0 to 15

Notes The following elements are part of a choice: **all-ones** or **pattern**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis Load balancing algorithm to be used on the port

Context **configure** port *string* tdm ds1 *string* channel-group *number* load-balancing-algorithm *keyword*

Tree **load-balancing-algorithm**

Options default, include-l4, exclude-l4

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis MAC address for the port

Context **configure** port *string* tdm ds1 *string* channel-group *number* mac-address *string*

Tree **mac-address**

Default 00:00:00:00:00:00

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode for the TDM channel group
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group number mode <i>keyword</i>
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu *number*

Synopsis	Maximum payload MTU size for the port
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group number mtu <i>number</i>
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

network

Synopsis	Enter the network context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group number network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group number network accounting-policy <i>reference</i>
Tree	accounting-policy

Reference	configure log accounting-policy <i>number</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> network collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy *reference*

Synopsis	Queue policy on the TDM DS0 network channel group
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> network queue-policy <i>reference</i>
Tree	queue-policy
Reference	configure qos network-queue <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ppp

Synopsis	Enter the ppp context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> ppp
Tree	ppp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sf-link-down *boolean*

Synopsis	Set link out-of-service on BER-SF alarm
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Context	configure port string tdm ds1 string channel-group number ppp ber-sf-link-down boolean
Tree	ber-sf-link-down
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

compress

Synopsis	Enter the compress context
Context	configure port string tdm ds1 string channel-group number ppp compress
Tree	compress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

acfc boolean

Synopsis	Enable Address Control Field Compression (ACFC)
Context	configure port string tdm ds1 string channel-group number ppp compress acfc boolean
Tree	acfc
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pfc boolean

Synopsis	Enable Protocol Field Compression (PFC)
Context	configure port string tdm ds1 string channel-group number ppp compress pfc boolean
Tree	pfc
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

keepalive

Synopsis	Enter the keepalive context
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Context	configure port string tdm ds1 string channel-group number ppp keepalive
Tree	keepalive
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

drop-count number

Synopsis	Consecutive missed keepalives before port is taken down
Context	configure port string tdm ds1 string channel-group number ppp keepalive drop-count number
Tree	drop-count
Range	1 to 255
Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

interval (number | keyword)

Synopsis	Interval at which keepalive messages are issued
Context	configure port string tdm ds1 string channel-group number ppp keepalive interval (number keyword)
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Options	none
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

speed number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Speed of the DS0 channels in the channel group
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Context	configure port string tdm ds1 string channel-group number speed number
Tree	speed
Range	56 64
Default	64
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

timeslot number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Timeslot for the channel group
Context	configure port string tdm ds1 string channel-group number timeslot number
Tree	timeslot
Range	1 to 24
Max.	24
Instances	
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source keyword

Synopsis	Clock for data transmission
Context	configure port string tdm ds1 string clock-source keyword
Tree	clock-source
Options	loop-timed, node-timed, adaptive, differential
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

framing keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the DS1 channel
Context	configure port string tdm ds1 string framing keyword
Tree	framing
Default	extended-super-frame
Options	extended-super-frame, super-frame, ds1-unframed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback keyword

Synopsis	Loopback mode for the port
Context	configure port string tdm ds1 string loopback keyword
Tree	loopback
Options	line, internal, fdl-ansi, fdl-bellcore, payload-ansi, inband-ansi, inband-bellcore
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

remote-loop-respond boolean

Synopsis	Respond to requests for remote loopbacks
Context	configure port string tdm ds1 string remote-loop-respond boolean
Tree	remote-loop-respond
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port string tdm ds1 string report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ais *boolean*

Synopsis	Report alarm indication signal errors
Context	configure port string tdm ds1 string report-alarm ais <i>boolean</i>
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sd *boolean*

Synopsis	Report the BER that specifies signal degradation
Context	configure port string tdm ds1 string report-alarm ber-sd <i>boolean</i>
Tree	ber-sd
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sf *boolean*

Synopsis	Report the BER that species signal failure
Context	configure port string tdm ds1 string report-alarm ber-sf <i>boolean</i>
Tree	ber-sf
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped *boolean*

Synopsis	Report looped packet errors
Context	configure port string tdm ds1 string report-alarm looped <i>boolean</i>
Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los *boolean*

Synopsis	Report loss of signal errors
Context	configure port string tdm ds1 string report-alarm los boolean
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

oof *boolean*

Synopsis	Report out-of-frame errors
Context	configure port string tdm ds1 string report-alarm oof boolean
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rai *boolean*

Synopsis	Report resource availability indicator events
Context	configure port string tdm ds1 string report-alarm rai boolean
Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal mode on the channel
Context	configure port string tdm ds1 string signal-mode keyword
Tree	signal-mode

Options	channel-associated-signaling
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ds3 [[ds3-index](#)] *string*

Synopsis	Enter the ds3 list instance
Context	configure port <i>string</i> tdm ds3 <i>string</i>
Tree	ds3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[ds3-index] *string*

Synopsis	TDM DS3 index
Context	configure port <i>string</i> tdm ds3 <i>string</i>
Tree	ds3
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the DS3 port
Context	configure port <i>string</i> tdm ds3 <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

channelized *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Channelization of the DS3
Context	configure port string tdm ds3 string channelized keyword
Tree	channelized
Options	ds1, e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source *keyword*

Synopsis	Clock for data transmission
Context	configure port string tdm ds3 string clock-source keyword
Tree	clock-source
Default	node-timed
Options	loop-timed, node-timed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

crc *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precision of the cyclic redundancy check (CRC)
Context	configure port string tdm ds3 string crc number
Tree	crc
Range	16 32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	configure port string tdm ds3 string description string
Tree	description
String Length	1 to 160
Default	DS3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis	Enter the egress context
Context	configure port string tdm ds3 string egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port string tdm ds3 string egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis	Enable the overrides context
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [*priority-level*] *number*

Synopsis	Enter the level list instance
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[priority-level] *number*

Synopsis	Port priority levels override
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir *decimal-number*

Synopsis	CIR for the priority level
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number percent-rate cir decimal-number
Tree	cir
Range	0 to 100
Default	100

Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir *decimal-number*

Synopsis	PIR for the priority level
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis	Enter the rate context
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 3200000000
Default	max
Units	kilobps
Options	sum, max

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir (*number* | *keyword*)

Synopsis PIR for the priority level
Context **configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides level *number*
rate pir (*number* | *keyword*)
Tree **pir**
Range 1 to 3200000000
Default max
Units kilobps
Options max
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis Enter the **max-rate** context
Context **configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides max-rate
Tree **max-rate**
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate *decimal-number*

Synopsis PIR
Context **configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides max-rate
percent-rate *decimal-number*
Tree **percent-rate**
Range 0.01 to 100
Default 100
Units percent
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate (*number* | *keyword*)

Synopsis PIR

Context **configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides max-rate rate (*number* | *keyword*)

Tree rate

Range 1 to 3200000000

Default max

Units kilobps

Options max

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis Port egress scheduler policy name

Context **configure** port *string* tdm ds3 *string* egress port-scheduler-policy policy-name *reference*

Tree policy-name

Reference **configure** qos port-scheduler-policy *string*

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Encapsulation method

Context **configure** port *string* tdm ds3 *string* encap-type *keyword*

Tree encap-type

Options bcp-null, bcp-dot1q, ipcp, ppp-auto, wan-mirror, cem

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

feac-loop-respond *boolean*

Synopsis Enable DS-3 interface to respond to remote loop signals
Context **configure** port string tdm ds3 string feac-loop-respond boolean
Tree feac-loop-respond
Default false
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

framing *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Framing for the DS3 channel
Context **configure** port string tdm ds3 string framing keyword
Tree framing
Default c-bit
Options c-bit, m23, ds3-unframed
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-cycle-flag *keyword*

Synopsis Value transmitted during idle cycles
Context **configure** port string tdm ds3 string idle-cycle-flag keyword
Tree idle-cycle-flag
Options flags, ones
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm to be used on the port
Context	configure port <i>string</i> tdm ds3 <i>string</i> load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback *keyword*

Synopsis	Loopback mode on the channel
Context	configure port <i>string</i> tdm ds3 <i>string</i> loopback <i>keyword</i>
Tree	loopback
Options	line, internal, remote
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis	MAC address for the port
Context	configure port <i>string</i> tdm ds3 <i>string</i> mac-address <i>string</i>
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

maintenance-data-link

Synopsis	Enter the maintenance-data-link context
Context	configure port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link
Tree	maintenance-data-link
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

equipment-id-code *string*

Synopsis	Equipment ID Code (EIC) of the MDL
Context	configure port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link equipment-id-code <i>string</i>
Tree	equipment-id-code
String Length	0 to 10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

facility-id-code *string*

Synopsis	Facility ID Code sent in the MDL Path message
Context	configure port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link facility-id-code <i>string</i>
Tree	facility-id-code
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

frame-id-code *string*

Synopsis	Frame ID Code (FIC) of the MDL
Context	configure port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link frame-id-code <i>string</i>
Tree	frame-id-code
String Length	0 to 10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

generator-string *string*

Synopsis	Generator number string sent in MDL test signal message
Context	configure port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link generator-string <i>string</i>
Tree	generator-string
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

location-id-code *string*

Synopsis	Location ID Code (LIC) of the MDL
Context	configure port string tdm ds3 string maintenance-data-link location-id-code string
Tree	location-id-code
String Length	0 to 11
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-string *string*

Synopsis	Port number string sent in the MDL idle signal message
Context	configure port string tdm ds3 string maintenance-data-link port-string string
Tree	port-string
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

transmit-message-type

Synopsis	Enter the transmit-message-type context
Context	configure port string tdm ds3 string maintenance-data-link transmit-message-type
Tree	transmit-message-type
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-signal *boolean*

Synopsis	Enable transmission of MDL idle signal messages
Context	configure port string tdm ds3 string maintenance-data-link transmit-message-type idle-signal boolean
Tree	idle-signal
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

path *boolean*

Synopsis	Enable transmission of MDL path messages
Context	configure port string tdm ds3 string maintenance-data-link transmit-message-type path <i>boolean</i>
Tree	path
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

test-signal *boolean*

Synopsis	Enable transmission of MDL test signal messages
Context	configure port string tdm ds3 string maintenance-data-link transmit-message-type test-signal <i>boolean</i>
Tree	test-signal
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

unit-id-code *string*

Synopsis	Unit ID Code (UIC) of the MDL
Context	configure port string tdm ds3 string maintenance-data-link unit-id-code <i>string</i>
Tree	unit-id-code
String Length	0 to 6
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	configure port string tdm ds3 string mode <i>keyword</i>

Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu number

Synopsis	Maximum payload MTU size for the port
Context	configure port string tdm ds3 string mtu number
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

network

Synopsis	Enter the network context
Context	configure port string tdm ds3 string network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

accounting-policy reference

Synopsis	Accounting policy
Context	configure port string tdm ds3 string network accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats boolean

Synopsis	Collect accounting and statistical data
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Context	configure port <i>string</i> tdm ds3 <i>string</i> network collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy *reference*

Synopsis	Queue policy on the TDM DS3 network channel
Context	configure port <i>string</i> tdm ds3 <i>string</i> network queue-policy <i>reference</i>
Tree	queue-policy
Reference	configure qos network-queue <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ppp

Synopsis	Enter the ppp context
Context	configure port <i>string</i> tdm ds3 <i>string</i> ppp
Tree	ppp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

keepalive

Synopsis	Enter the keepalive context
Context	configure port <i>string</i> tdm ds3 <i>string</i> ppp keepalive
Tree	keepalive
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

drop-count *number*

Synopsis	Consecutive missed keepalives before port is taken down
Context	configure port <i>string</i> tdm ds3 <i>string</i> ppp keepalive drop-count <i>number</i>

Tree	drop-count
Range	1 to 255
Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

interval (*number* | *keyword*)

Synopsis	Interval at which keepalive messages are issued
Context	configure port string tdm ds3 string ppp keepalive interval (<i>number</i> <i>keyword</i>)
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Options	none
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port string tdm ds3 string report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ais *boolean*

Synopsis	Report alarm indication signal errors
Context	configure port string tdm ds3 string report-alarm ais <i>boolean</i>
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped *boolean*

Synopsis	Report looped packet errors
Context	configure port string tdm ds3 string report-alarm looped boolean
Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los *boolean*

Synopsis	Report loss of signal errors
Context	configure port string tdm ds3 string report-alarm los boolean
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

oof *boolean*

Synopsis	Report out-of-frame errors
Context	configure port string tdm ds3 string report-alarm oof boolean
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rai *boolean*

Synopsis	Report resource availability indicator events
Context	configure port string tdm ds3 string report-alarm rai boolean
Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

scramble *boolean*

Synopsis	Enable TDM DS3 payload scrambling
Context	configure <i>port string tdm ds3 string scramble boolean</i>
Tree	<i>scramble</i>
Description	When configured to true , the TDM DS3 frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking. When configured to false , the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

subrate

Synopsis	Enter the subrate context
Context	configure <i>port string tdm ds3 string subrate</i>
Tree	<i>subrate</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

csu-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Channel Service Unit (CSU) compatibility mode
Context	configure <i>port string tdm ds3 string subrate csu-mode keyword</i>
Tree	<i>csu-mode</i>
Options	digital-link, larscom
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate-step *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Subrate for the associated DS3
Context	configure port <i>string</i> tdm ds3 <i>string</i> subrate rate-step <i>number</i>
Tree	rate-step
Range	0 to 147
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

e1 [**e1-index**] *string*

Synopsis	Enter the e1 list instance
Context	configure port <i>string</i> tdm e1 <i>string</i>
Tree	e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[e1-index] *string*

Synopsis	E-1 channel
Context	configure port <i>string</i> tdm e1 <i>string</i>
Tree	e1
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the E1 channel
Context	configure port <i>string</i> tdm e1 <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-threshold

Synopsis Enter the **ber-threshold** context
Context **configure** port string tdm e1 string ber-threshold
Tree ber-threshold
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-degrade *number*

Synopsis BER signal degradation threshold
Context **configure** port string tdm e1 string ber-threshold signal-degrade *number*
Tree signal-degrade
Range 1 | 5 | 10 | 50 | 100
Default 5
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-failure *number*

Synopsis BER signal failure threshold
Context **configure** port string tdm e1 string ber-threshold signal-failure *number*
Tree signal-failure
Range 1 | 5 | 10 | 50 | 100
Default 50
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

channel-group [*ds0-index*] *number*

Synopsis Enter the **channel-group** list instance
Context **configure** port string tdm e1 string channel-group *number*

Tree	channel-group
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[ds0-index] *number*

Synopsis	DS0 channel group in a channelized DS1 or E1 circuit
Context	configure port string tdm e1 string channel-group number
Tree	channel-group
Range	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the E1 channel group
Context	configure port string tdm e1 string channel-group number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

crc *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precision of the Cyclic Redundancy Check (CRC)
Context	configure port string tdm e1 string channel-group number crc number
Tree	crc
Range	16 32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	configure port string tdm e1 string channel-group number description string
Tree	description
String Length	1 to 160
Default	DS0GRP
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis	Enter the egress context
Context	configure port string tdm e1 string channel-group number egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port string tdm e1 string channel-group number egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis	Enable the overrides context
Context	configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [*priority-level*] *number*

Synopsis	Enter the level list instance
Context	configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides level number
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[priority-level] *number*

Synopsis	Port priority levels override
Context	configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides level number
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides level number percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir *decimal-number*

Synopsis	CIR for the priority level
Context	configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides level number percent-rate cir decimal-number
Tree	cir
Range	0 to 100

Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir *decimal-number*

Synopsis	PIR for the priority level
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis	Enter the rate context
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 3200000000
Default	max
Units	kilobps

Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis	Enter the max-rate context
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate *decimal-number*

Synopsis	PIR
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Default	100
Units	percent
Notes	The following elements are part of a choice: percent-rate or rate .

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate (*number* | *keyword*)

Synopsis PIR
Context **configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides max-rate rate (*number* | *keyword*)
Tree rate
Range 1 to 3200000000
Default max
Units kilobps
Options max
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis Port egress scheduler policy name
Context **configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy policy-name *reference*
Tree policy-name
Reference **configure** qos port-scheduler-policy *string*
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Encapsulation method used on a port, path, or channel
Context **configure** port *string* tdm e1 *string* channel-group *number* encap-type *keyword*
Tree encap-type

Options bcp-null, bcp-dot1q, ipcp, ppp-auto, wan-mirror, cem
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-cycle-flag *keyword*

Synopsis Value transmitted by channel group during idle cycle
Context **configure** port *string* tdm e1 *string* channel-group *number* idle-cycle-flag *keyword*
Tree [idle-cycle-flag](#)
Options flags, ones
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-payload-fill

Synopsis Enter the **idle-payload-fill** context
Context **configure** port *string* tdm e1 *string* channel-group *number* idle-payload-fill
Tree [idle-payload-fill](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

all-ones

Synopsis Define the 8 bit value to be transmitted as 11111111
Context **configure** port *string* tdm e1 *string* channel-group *number* idle-payload-fill all-ones
Tree [all-ones](#)
Notes The following elements are part of a choice: **all-ones** or **pattern**.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis User-defined pattern to be transmitted
Context **configure** port *string* tdm e1 *string* channel-group *number* idle-payload-fill *pattern*
number

Tree	pattern
Range	0 to 255
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-signal-fill

Synopsis	Enter the idle-signal-fill context
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-signal-fill
Tree	idle-signal-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

all-ones

Synopsis	Define the 8-bit value to be transmitted as 11111111
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-signal-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-signal-fill pattern <i>number</i>
Tree	pattern
Range	0 to 15
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm to be used on this port
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis	MAC address for the port
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> mac-address <i>string</i>
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> mode <i>keyword</i>
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu *number*

Synopsis	Maximum payload MTU
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> mtu <i>number</i>
Tree	mtu

Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

network

Synopsis	Enter the network context
Context	configure port string tdm e1 string channel-group number network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

accounting-policy reference

Synopsis	Accounting policy
Context	configure port string tdm e1 string channel-group number network accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats boolean

Synopsis	Collect accounting and statistical data
Context	configure port string tdm e1 string channel-group number network collect-stats boolean
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy reference

Synopsis	Network queue policy on TDM E0 network channel group
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Context	configure port string tdm e1 string channel-group number network queue-policy reference
Tree	queue-policy
Reference	configure qos network-queue string
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ppp

Synopsis	Enter the ppp context
Context	configure port string tdm e1 string channel-group number ppp
Tree	ppp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sf-link-down boolean

Synopsis	Set link out-of-service on BER-SF alarm
Context	configure port string tdm e1 string channel-group number ppp ber-sf-link-down boolean
Tree	ber-sf-link-down
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

compress

Synopsis	Enter the compress context
Context	configure port string tdm e1 string channel-group number ppp compress
Tree	compress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

acfc boolean

Synopsis	Enable Address Control Field Compression (ACFC)
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Context	configure port string tdm e1 string channel-group number ppp compress acfc boolean
Tree	acfc
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pfc boolean

Synopsis	Enable Protocol Field Compression (PFC)
Context	configure port string tdm e1 string channel-group number ppp compress pfc boolean
Tree	pfc
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

keepalive

Synopsis	Enter the keepalive context
Context	configure port string tdm e1 string channel-group number ppp keepalive
Tree	keepalive
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

drop-count number

Synopsis	Consecutive missed keepalives before port is taken down
Context	configure port string tdm e1 string channel-group number ppp keepalive drop-count number
Tree	drop-count
Range	1 to 255
Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

interval (*number* | *keyword*)

Synopsis	Interval at which keepalive messages are issued
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> ppp keepalive interval (<i>number</i> <i>keyword</i>)
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Options	none
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

speed *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Speed of the E0 channels in this channel group
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> speed <i>number</i>
Tree	speed
Range	56 64
Default	64
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

timeslot *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure timeslot for this channel group.
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> timeslot <i>number</i>
Tree	timeslot
Range	1 to 32

Max. Instances	32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source *keyword*

Synopsis	Clock for data transmission
Context	configure port <i>string</i> tdm e1 <i>string</i> clock-source <i>keyword</i>
Tree	clock-source
Options	loop-timed, node-timed, adaptive, differential
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

framing *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing on the E1 channel
Context	configure port <i>string</i> tdm e1 <i>string</i> framing <i>keyword</i>
Tree	framing
Default	g704
Options	no-crc-g704, g704, e1-unframed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback *keyword*

Synopsis	Loopback mode
Context	configure port <i>string</i> tdm e1 <i>string</i> loopback <i>keyword</i>
Tree	loopback
Options	line, internal
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

national-bits

Synopsis	Enter the national-bits context
Context	configure port string tdm e1 string national-bits
Tree	national-bits
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa4 boolean

Synopsis	Enable bit Sa4
Context	configure port string tdm e1 string national-bits sa4 boolean
Tree	sa4
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa5 boolean

Synopsis	Enable bit Sa5
Context	configure port string tdm e1 string national-bits sa5 boolean
Tree	sa5
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa6 boolean

Synopsis	Enable bit Sa6
Context	configure port string tdm e1 string national-bits sa6 boolean
Tree	sa6
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa7 boolean

Synopsis	Enable bit Sa7
Context	configure port string tdm e1 string national-bits sa7 boolean
Tree	sa7
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa8 boolean

Synopsis	Enable bit Sa8
Context	configure port string tdm e1 string national-bits sa8 boolean
Tree	sa8
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port string tdm e1 string report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ais boolean

Synopsis	Report alarm indication signal errors
Context	configure port string tdm e1 string report-alarm ais boolean
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sd *boolean*

Synopsis	Enable/disable ber-sd alarm.
Context	configure <i>port string tdm e1 string report-alarm ber-sd boolean</i>
Tree	<i>ber-sd</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sf *boolean*

Synopsis	Enable/disable ber-sf alarm.
Context	configure <i>port string tdm e1 string report-alarm ber-sf boolean</i>
Tree	<i>ber-sf</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped *boolean*

Synopsis	Report looped packet errors
Context	configure <i>port string tdm e1 string report-alarm looped boolean</i>
Tree	<i>looped</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los *boolean*

Synopsis	Report loss of signal errors
Context	configure <i>port string tdm e1 string report-alarm los boolean</i>
Tree	<i>los</i>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

oof *boolean*

Synopsis	Report out-of-frame errors
Context	configure port <i>string</i> tdm e1 <i>string</i> report-alarm oof <i>boolean</i>
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rai *boolean*

Synopsis	Report resource availability indicator events
Context	configure port <i>string</i> tdm e1 <i>string</i> report-alarm rai <i>boolean</i>
Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal mode on the channel
Context	configure port <i>string</i> tdm e1 <i>string</i> signal-mode <i>keyword</i>
Tree	signal-mode
Options	channel-associated-signaling
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

e3 [[e3-index](#)] *string*

Synopsis	Enter the e3 list instance
Context	configure port <i>string</i> tdm e3 <i>string</i>
Tree	e3

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[e3-index] *string*

Synopsis Components making up the SONET/SDH Path
Context **configure** *port string tdm e3 string*
Tree **e3**
Notes This element is part of a list key.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis Administrative state of the E3 channel
Context **configure** *port string tdm e3 string admin-state keyword*
Tree **admin-state**
Default disable
Options enable, disable
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source *keyword*

Synopsis Clock for data transmission
Context **configure** *port string tdm e3 string clock-source keyword*
Tree **clock-source**
Default node-timed
Options loop-timed, node-timed
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

crc number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precision of the CRC
Context	configure port string tdm e3 string crc number
Tree	crc
Range	16 32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description string

Synopsis	Text description
Context	configure port string tdm e3 string description string
Tree	description
String Length	1 to 160
Default	E3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis	Enter the egress context
Context	configure port string tdm e3 string egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port string tdm e3 string egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis Enable the **overrides** context

Context **configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides

Tree [overrides](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [[priority-level](#)] *number*

Synopsis Enter the **level** list instance

Context **configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number*

Tree [level](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[\[priority-level\]](#) *number*

Synopsis Port priority levels override

Context **configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number*

Tree [level](#)

Range 1 to 8

Notes This element is part of a list key.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number* [percent-rate](#)

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir *decimal-number*

Synopsis CIR for the priority level
Context **configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number*
percent-rate cir *decimal-number*
Tree cir
Range 0 to 100
Default 100
Units percent
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir *decimal-number*

Synopsis PIR for the priority level
Context **configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number*
percent-rate pir *decimal-number*
Tree pir
Range 0.01 to 100
Default 100
Units percent
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis Enter the **rate** context
Context **configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number*
rate
Tree rate
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	configure <i>port string tdm e3 string egress port-scheduler-policy overrides level number rate cir</i> (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 3200000000
Default	max
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	configure <i>port string tdm e3 string egress port-scheduler-policy overrides level number rate pir</i> (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis	Enter the max-rate context
Context	configure <i>port string tdm e3 string egress port-scheduler-policy overrides max-rate</i>
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate *decimal-number*

Synopsis	PIR
Context	configure port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Default	100
Units	percent
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate (*number* | *keyword*)

Synopsis	PIR
Context	configure port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy overrides max-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis	Port egress scheduler policy name
Context	configure port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

encap-type keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method used on a port, path, or channel
Context	configure port string tdm e3 string encap-type keyword
Tree	encap-type
Options	bcp-null, bcp-dot1q, ipcp, ppp-auto, wan-mirror, cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

framing keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the E3 channel
Context	configure port string tdm e3 string framing keyword
Tree	framing
Default	g751
Options	g751, g832, e3-unframed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-cycle-flag keyword

Synopsis	Value transmitted by channel group during idle cycle
Context	configure port string tdm e3 string idle-cycle-flag keyword
Tree	idle-cycle-flag
Options	flags, ones
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm to be used on this port
Context	configure port <i>string</i> tdm e3 <i>string</i> load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback *keyword*

Synopsis	Loopback mode
Context	configure port <i>string</i> tdm e3 <i>string</i> loopback <i>keyword</i>
Tree	loopback
Options	line, internal
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis	MAC address for the port
Context	configure port <i>string</i> tdm e3 <i>string</i> mac-address <i>string</i>
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	configure port <i>string</i> tdm e3 <i>string</i> mode <i>keyword</i>
Tree	mode
Options	access, network

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu number

Synopsis Maximum payload MTU size
Context **configure** port string tdm e3 string mtu number
Tree mtu
Range 512 to 9208
Units bytes
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

network

Synopsis Enter the **network** context
Context **configure** port string tdm e3 string network
Tree network
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

accounting-policy reference

Synopsis Accounting policy
Context **configure** port string tdm e3 string network accounting-policy reference
Tree accounting-policy
Reference **configure** log accounting-policy number
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats boolean

Synopsis Collect accounting and statistical data
Context **configure** port string tdm e3 string network collect-stats boolean
Tree collect-stats

Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy *reference*

Synopsis	Queue policy on the TDM E3 network channel
Context	configure port string tdm e3 string network queue-policy reference
Tree	queue-policy
Reference	configure qos network-queue string
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ppp

Synopsis	Enter the ppp context
Context	configure port string tdm e3 string ppp
Tree	ppp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

keepalive

Synopsis	Enter the keepalive context
Context	configure port string tdm e3 string ppp keepalive
Tree	keepalive
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

drop-count *number*

Synopsis	Consecutive missed keepalives before port is taken down
Context	configure port string tdm e3 string ppp keepalive drop-count number
Tree	drop-count
Range	1 to 255

Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

interval (*number* | *keyword*)

Synopsis	Interval at which keepalive messages are issued
Context	configure port string tdm e3 string ppp keepalive interval (<i>number</i> <i>keyword</i>)
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Options	none
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port string tdm e3 string report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ais *boolean*

Synopsis	Report alarm indication signal errors
Context	configure port string tdm e3 string report-alarm ais <i>boolean</i>
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped *boolean*

Synopsis	Report looped packet errors
Context	configure port string tdm e3 string report-alarm looped <i>boolean</i>
Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los *boolean*

Synopsis	Report loss of signal errors
Context	configure port string tdm e3 string report-alarm los <i>boolean</i>
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

oof *boolean*

Synopsis	Report out-of-frame errors
Context	configure port string tdm e3 string report-alarm oof <i>boolean</i>
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rai *boolean*

Synopsis	Report resource availability indicator events
Context	configure port string tdm e3 string report-alarm rai <i>boolean</i>
Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

scramble *boolean*

Synopsis	Enable TDM E3 payload scrambling
Context	configure <i>port string tdm e3 string scramble boolean</i>
Tree	<i>scramble</i>
Description	When configured to true , the TDM E3 frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking. When configured to false , the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

hold-time

Synopsis	Enter the hold-time context
Context	configure <i>port string tdm hold-time</i>
Tree	<i>hold-time</i>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

down *number*

Synopsis	Hold timer for link down event dampening
Context	configure <i>port string tdm hold-time down number</i>
Tree	<i>down</i>
Range	0 to 100
Default	5
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

up *number*

Synopsis	Hold timer for link up event dampening
Context	configure <i>port string tdm hold-time up number</i>
Tree	<i>up</i>
Range	1 to 100

Introduced 19.5.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

transceiver

Synopsis Enter the **transceiver** context
Context **configure** port string **transceiver**
Tree **transceiver**
Introduced 16.0.R4
Platforms All

digital-coherent-optics *boolean*

Synopsis Enable digital coherent optics module for transceiver
Context **configure** port string **transceiver** **digital-coherent-optics** *boolean*
Tree **digital-coherent-optics**
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

3.33 port-policy commands

```
configure
- port-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress-port-scheduler-policy reference
```


3.33.1 port-policy command descriptions

port-policy [[name](#)] *string*

Synopsis	Enter the port-policy list instance
Context	configure port-policy <i>string</i>
Tree	port-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Port policy name
Context	configure port-policy <i>string</i>
Tree	port-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure port-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress-port-scheduler-policy *reference*

Synopsis	Policy for egress port scheduler
Context	configure port-policy <i>string</i> egress-port-scheduler-policy <i>reference</i>

Tree	egress-port-scheduler-policy
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.34 port-xc commands

```
configure
- port-xc
  - apply-groups reference
  - apply-groups-exclude reference
  - pxc number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - port-id reference
```

3.34.1 port-xc command descriptions

port-xc

Synopsis	Enter the port-xc context
Context	configure port-xc
Tree	port-xc
Description	Commands in this context configure port cross-connect (PXC) functionality.
Introduced	16.0.R1
Platforms	All

pxc [[pxc-id](#)] *number*

Synopsis	Enter the pxc list instance
Context	configure port-xc pxc number
Tree	pxc
Description	Commands in this context configure port cross-connect (PXC) information.
Introduced	16.0.R1
Platforms	All

[pxc-id] *number*

Synopsis	PXC ID
Context	configure port-xc pxc number
Tree	pxc
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the PXC
Context	configure port-xc pxc number admin-state keyword

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure port-xc pxc number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

port-id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PXC port ID
Context	configure port-xc pxc number port-id reference
Tree	port-id
Reference	configure port string
Introduced	16.0.R1
Platforms	All

3.35 pw-port commands

```
configure
- pw-port number
- apply-groups reference
- apply-groups-exclude reference
- description string
- dot1q-etype string
- encap-type keyword
- epipe reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- down-on-peer-tldp-pw-status-faults boolean
- egress
- shaper
  - intermediate-destination-id string
  - virtual-port string
- fpe-id reference
- monitor-oper-group reference
- oper-up-on-mh-standby boolean
- oper-group reference
- qinq-etype string
- sdp reference
- admin-state keyword
- adv-service-mtu number
- apply-groups reference
- apply-groups-exclude reference
- control-word boolean
- egress
- shaper
  - intermediate-destination-id string
  - pw-sap-secondary-shaper string
  - virtual-port string
- vc-label number
- entropy-label boolean
- ingress
- vc-label number
- monitor-oper-group reference
- vc-id number
- vc-type keyword
- vlan-vc-tag number
```

3.35.1 pw-port command descriptions

pw-port [*pw-port-id*] *number*

Synopsis	Enter the pw-port list instance
Context	configure <i>pw-port number</i>
Tree	<i>pw-port</i>
Introduced	16.0.R4
Platforms	All

[pw-port-id] *number*

Synopsis	Pseudowire port ID
Context	configure <i>pw-port number</i>
Tree	<i>pw-port</i>
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure <i>pw-port number description string</i>
Tree	<i>description</i>
String Length	1 to 255
Default	PW Port
Introduced	16.0.R4
Platforms	All

dot1q-etype *string*

Synopsis	Dot1q Ethertype on the PW port
Context	configure <i>pw-port number dot1q-etype string</i>
Tree	<i>dot1q-etype</i>

Default	33024
Introduced	16.0.R4
Platforms	All

encap-type *keyword*

Synopsis	Encap type of the pseudo-wire port
Context	configure <i>pw-port number encap-type keyword</i>
Tree	encap-type
Default	dot1q
Options	dot1q, qinq
Introduced	16.0.R4
Platforms	All

epipe [[service-name](#)] *reference*

Synopsis	Enter the epipe list instance
Context	configure <i>pw-port number epipe reference</i>
Tree	epipe
Max. Instances	1
Notes	The following elements are part of a choice: epipe or sdp .
Introduced	16.0.R4
Platforms	All

[service-name] *reference*

Synopsis	Administrative service name
Context	configure <i>pw-port number epipe reference</i>
Tree	epipe
Reference	configure <i>service epipe string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the pseudowire port
Context	configure pw-port <i>number</i> epipe <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

down-on-peer-tldp-pw-status-faults *boolean*

Synopsis	Force PW port to go down for certain PW status bits
Context	configure pw-port <i>number</i> epipe <i>reference</i> down-on-peer-tldp-pw-status-faults <i>boolean</i>
Tree	down-on-peer-tldp-pw-status-faults
Description	<p>When configured to true, the router causes the PW port configured on an Epipe to go locally operationally down if any of the following status bits are received on a mate spoke SDP across an FPE:</p> <ul style="list-style-type: none"> • 0x00000001 - Pseudowire Not Forwarding • 0x00000002 - Local Attachment Circuit (ingress) Receive Fault • 0x00000004 - Local Attachment Circuit (egress) Transmit Fault • 0x00000008 - Local PSN-facing PW (ingress) Receive Fault • 0x00000010 - Local PSN-facing PW (egress) Transmit Fault <p>When configured to false, the mate PW status fault bits are not taken into account in the operational state of the PW port.</p>
Default	false
Introduced	22.2.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure pw-port <i>number</i> epipe <i>reference</i> egress
Tree	egress
Introduced	16.0.R4
Platforms	All

shaper

Synopsis	Enter the shaper context
Context	configure pw-port number epipe reference egress shaper
Tree	shaper
Introduced	16.0.R4
Platforms	All

intermediate-destination-id *string*

Synopsis	Intermediate destination ID for ESM PW SAPs
Context	configure pw-port number epipe reference egress shaper intermediate-destination-id string
Tree	intermediate-destination-id
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

virtual-port *string*

Synopsis	Virtual port name of the egress shaper
Context	configure pw-port number epipe reference egress shaper virtual-port string
Tree	virtual-port
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

fpe-id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding Path Extension ID
Context	configure pw-port number epipe reference fpe-id reference
Tree	fpe-id

Reference	configure fwd-path-ext fpe number
Introduced	16.0.R4
Platforms	All

monitor-oper-group reference

Synopsis	Name of the operational group to monitor
Context	configure pw-port number epipe reference monitor-oper-group reference
Tree	monitor-oper-group
Reference	configure service oper-group string
Introduced	16.0.R4
Platforms	All

oper-up-on-mh-standby boolean

Synopsis	Sets PW port to operationally up on MH standby
Context	configure pw-port number epipe reference oper-up-on-mh-standby boolean
Tree	oper-up-on-mh-standby
Description	<p>When configured to true, this command allows the PW port to remain operationally up on the non-DF PE and all the PW SAPs contained in the PW port.</p> <p>The PW port status shows operationally up status with a flag MH Standby.</p> <p>When configured to false, this command causes the PW port to remain operationally down on the non-DF PE and all the PW SAPs contained in the PW port.</p>
Default	false
Introduced	22.2.R1
Platforms	All

oper-group reference

Synopsis	Operational group ID
Context	configure pw-port number oper-group reference
Tree	oper-group
Reference	configure service oper-group string
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qinq-etype *string*

Synopsis	QinQ Ethertype encapsulation on the PW port
Context	configure <i>pw-port number qinq-etype string</i>
Tree	qinq-etype
Default	33024
Introduced	16.0.R4
Platforms	All

sdp [[sdp-id](#)] *reference*

Synopsis	Enter the sdp list instance
Context	configure <i>pw-port number sdp reference</i>
Tree	sdp
Max. Instances	1
Notes	The following elements are part of a choice: epipe or sdp .
Introduced	16.0.R4
Platforms	All

[sdp-id] *reference*

Synopsis	SDP ID
Context	configure <i>pw-port number sdp reference</i>
Tree	sdp
Reference	configure <i>service sdp number</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the pseudowire port
Context	configure <i>pw-port number sdp reference admin-state keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

adv-service-mtu *number*

Synopsis	Service MTU size to be used
Context	configure pw-port number sdp reference adv-service-mtu number
Tree	adv-service-mtu
Range	0 to 9782
Units	bytes
Introduced	21.7.R1
Platforms	All

control-word *boolean*

Synopsis	Allow control word bit setting in the label message
Context	configure pw-port number sdp reference control-word boolean
Tree	control-word
Default	false
Introduced	19.10.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure pw-port number sdp reference egress
Tree	egress
Introduced	16.0.R4
Platforms	All

shaper

Synopsis	Enter the shaper context
----------	---------------------------------

Context	configure pw-port number sdp reference egress shaper
Tree	shaper
Introduced	16.0.R4
Platforms	All

intermediate-destination-id *string*

Synopsis	Intermediate destination ID applicable to ESM PW SAPs
Context	configure pw-port number sdp reference egress shaper intermediate-destination-id string
Tree	intermediate-destination-id
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

pw-sap-secondary-shaper *string*

Synopsis	Secondary shaper applicable to PW SAPs
Context	configure pw-port number sdp reference egress shaper pw-sap-secondary-shaper string
Tree	pw-sap-secondary-shaper
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

virtual-port *string*

Synopsis	Virtual port applicable to all PW SAPs
Context	configure pw-port number sdp reference egress shaper virtual-port string
Tree	virtual-port
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress VC label representing the PW port
Context	configure pw-port <i>number</i> sdp <i>reference</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R4
Platforms	All

entropy-label *boolean*

Synopsis	Enable entropy level insertion on the PW port
Context	configure pw-port <i>number</i> sdp <i>reference</i> entropy-label <i>boolean</i>
Tree	entropy-label
Description	<p>When configured to true, the entropy label and ELI are inserted in packets for which at least one LSP in the stack for the far-end of the tunnel used by the service has advertised entropy label capability.</p> <ul style="list-style-type: none"> For RSVP or SR-TE tunnels, the entropy-label command must be set to true under the configure router mpls or configure router mpls lsp context. For SR-ISIS, SR-OSPF, or SR-TE tunnels, the override-tunnel-elic command must be set to true under the configure router isis entropy-label or configure router ospf entropy-label context. For LDP tunnels, the entropy-label-capability command must be set to true under the configure router ldp context. <p>When configured to false, entropy label insertion on the PW port is not allowed.</p> <p>The entropy label is only applicable to PW ports bound to a static port; it is not applicable to ports using an FPE.</p>
Default	false
Introduced	21.5.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure pw-port <i>number</i> sdp <i>reference</i> ingress

Tree	ingress
Introduced	16.0.R4
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress VC label representing the PW-port
Context	configure pw-port <i>number</i> sdp <i>reference</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R4
Platforms	All

monitor-oper-group *reference*

Synopsis	Name of the operational group to monitor
Context	configure pw-port <i>number</i> sdp <i>reference</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R4
Platforms	All

vc-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual Circuit ID signaled to the peer
Context	configure pw-port <i>number</i> sdp <i>reference</i> vc-id <i>number</i>
Tree	vc-id
Range	1 to 4294967295

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

vc-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding mode for the PW-port
Context	configure <i>pw-port number sdp reference vc-type keyword</i>
Tree	vc-type
Default	ether
Options	ether, vlan
Introduced	16.0.R4
Platforms	All

vlan-vc-tag *number*

Synopsis	VLAN VC tag
Context	configure <i>pw-port number sdp reference vlan-vc-tag number</i>
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	16.0.R4
Platforms	All

3.36 python commands

```

configure
- python
- apply-groups reference
- apply-groups-exclude reference
- python-policy string
- apply-groups reference
- apply-groups-exclude reference
- cache
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- entry-size number
- max-entries number
- max-entry-lifetime number
- mcs-peer
- apply-groups reference
- apply-groups-exclude reference
- ip-address reference
- sync-tag string
- minimum-lifetimes
- high-availability number
- multi-chassis-redundancy number
- persistence number
- persistence boolean
- description string
- dhcp keyword direction keyword
- apply-groups reference
- apply-groups-exclude reference
- script reference
- dhcp6 keyword direction keyword
- apply-groups reference
- apply-groups-exclude reference
- script reference
- diameter keyword direction keyword
- apply-groups reference
- apply-groups-exclude reference
- script reference
- gtpv1-c keyword direction keyword
- apply-groups reference
- apply-groups-exclude reference
- script reference
- gtpv2-c keyword direction keyword
- apply-groups reference
- apply-groups-exclude reference
- script reference
- nat-group reference
- pfcf keyword direction keyword
- apply-groups reference
- apply-groups-exclude reference
- script reference
- pppoe keyword direction keyword
- apply-groups reference
- apply-groups-exclude reference
- script reference
- radius keyword direction keyword
- apply-groups reference
- apply-groups-exclude reference
- script reference
- syslog

```

configure python python-policy syslog apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **script** *reference*
- **vsd**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **script** *reference*
- **wlan-gw-group** *reference*
- **python-script** *string*
 - **action-on-fail** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **protection**
 - **hmac-sha256** *string*
 - **run-as-user** *string*
 - **urls** *string*
 - **version** *keyword*

3.36.1 python command descriptions

python

Synopsis	Enter the python context
Context	configure python
Tree	python
Introduced	16.0.R1
Platforms	All

python-policy [[name](#)] *string*

Synopsis	Enter the python-policy list instance
Context	configure python python-policy <i>string</i>
Tree	python-policy
Max. Instances	64
Introduced	16.0.R1
Platforms	All

[\[name\]](#) *string*

Synopsis	Python policy name
Context	configure python python-policy <i>string</i>
Tree	python-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

cache

Synopsis	Enable the cache context
Context	configure python python-policy <i>string</i> cache
Tree	cache

Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the Python cache
Context **configure** [python](#) [python-policy](#) *string* [cache](#) **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

entry-size *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum data structure size for Python cache entry
Context **configure** [python](#) [python-policy](#) *string* [cache](#) **entry-size** *number*
Tree [entry-size](#)
Range 32 to 2048
Default 256
Units bytes
Introduced 16.0.R1
Platforms All

max-entries *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of Python cache entries to be stored
Context **configure** [python](#) [python-policy](#) *string* [cache](#) **max-entries** *number*
Tree [max-entries](#)

Range	1 to 1000000
Default	128000
Introduced	16.0.R1
Platforms	All

max-entry-lifetime *number*

Synopsis	Maximum lifetime allowed for each entry of the Python cache of this Python policy
Context	configure python python-policy <i>string</i> cache max-entry-lifetime <i>number</i>
Tree	max-entry-lifetime
Range	1 to 604800
Default	86400
Units	seconds
Introduced	16.0.R1
Platforms	All

mcs-peer

Synopsis	Enable the mcs-peer context
Context	configure python python-policy <i>string</i> cache mcs-peer
Tree	mcs-peer
Introduced	16.0.R1
Platforms	All

ip-address *reference*

Synopsis	IP address of the MCS peer
Context	configure python python-policy <i>string</i> cache mcs-peer ip-address <i>reference</i>
Tree	ip-address
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sync-tag *string*

Synopsis	Python policy cache that is uniquely identified within the scope of MCS peer
Context	configure python python-policy <i>string</i> cache mcs-peer sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

minimum-lifetimes

Synopsis	Enter the minimum-lifetimes context
Context	configure python python-policy <i>string</i> cache minimum-lifetimes
Tree	minimum-lifetimes
Introduced	16.0.R1
Platforms	All

high-availability *number*

Synopsis	Minimum lifetime of a cache entry to be synced with CPM
Context	configure python python-policy <i>string</i> cache minimum-lifetimes high-availability <i>number</i>
Tree	high-availability
Range	1 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

multi-chassis-redundancy *number*

Synopsis	Minimum lifetime for synchronization with the MCS peer
Context	configure python python-policy <i>string</i> cache minimum-lifetimes multi-chassis-redundancy <i>number</i>
Tree	multi-chassis-redundancy
Range	1 to 600

Units	seconds
Introduced	16.0.R1
Platforms	All

persistence *number*

Synopsis	Minimum lifetime for cache entry to be made persistent
Context	configure python python-policy <i>string</i> cache minimum-lifetimes persistence <i>number</i>
Tree	persistence
Range	1 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

persistence *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow persistence for cached entries
Context	configure python python-policy <i>string</i> cache persistence <i>boolean</i>
Tree	persistence
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure python python-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dhcp [message-type] keyword direction keyword

Synopsis	Enter the dhcp list instance
Context	configure python python-policy string dhcp keyword direction keyword
Tree	dhcp
Introduced	16.0.R1
Platforms	All

[message-type] keyword

Synopsis	DHCP message type
Context	configure python python-policy string dhcp keyword direction keyword
Tree	dhcp
Options	discover, offer, request, decline, ack, nak, release, inform, force-renew, lease-query, lease-unassigned, lease-unknown, lease-active
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction keyword

Synopsis	Event that is either incoming or outgoing
Context	configure python python-policy string dhcp keyword direction keyword
Tree	dhcp
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script reference

Synopsis	Python script to handle the message
Context	configure python python-policy string dhcp keyword direction keyword script reference
Tree	script
Reference	configure python python-script string

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

dhcp6 [*message-type*] *keyword* *direction* *keyword*

Synopsis	Enter the dhcp6 list instance
Context	configure <i>python</i> <i>python-policy</i> <i>string</i> dhcp6 <i>keyword</i> <i>direction</i> <i>keyword</i>
Tree	dhcp6
Introduced	16.0.R1
Platforms	All

[*message-type*] *keyword*

Synopsis	DHCPv6 message type
Context	configure <i>python</i> <i>python-policy</i> <i>string</i> dhcp6 <i>keyword</i> <i>direction</i> <i>keyword</i>
Tree	dhcp6
Options	solicit, advertise, request, confirm, renew, rebind, reply, release, decline, reconfigure, info-request, relay-forward, relay-reply
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	configure <i>python</i> <i>python-policy</i> <i>string</i> dhcp6 <i>keyword</i> <i>direction</i> <i>keyword</i>
Tree	dhcp6
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	configure python python-policy <i>string</i> dhcp6 <i>keyword</i> direction <i>keyword</i> script <i>reference</i>
Tree	script
Reference	configure python python-script <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

diameter [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the diameter list instance
Context	configure python python-policy <i>string</i> diameter <i>keyword</i> direction <i>keyword</i>
Tree	diameter
Introduced	16.0.R1
Platforms	All

[message-type] *keyword*

Synopsis	Diameter message type
Context	configure python python-policy <i>string</i> diameter <i>keyword</i> direction <i>keyword</i>
Tree	diameter
Options	ccr, cca, rar, raa, cer, cea, dwr, dwa, dpr, dpa, asr, asa, aar, aaa
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	configure python python-policy <i>string</i> diameter <i>keyword</i> direction <i>keyword</i>
Tree	diameter
Options	ingress, egress
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

script *reference*

Synopsis Python script to handle the message
Context **configure** [python](#) [python-policy](#) *string* [diameter](#) *keyword* [direction](#) *keyword* [script](#) *reference*
Tree [script](#)
Reference **configure** [python](#) [python-script](#) *string*
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

gtpv1-c [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis Enter the **gtpv1-c** list instance
Context **configure** [python](#) [python-policy](#) *string* [gtpv1-c](#) *keyword* [direction](#) *keyword*
Tree [gtpv1-c](#)
Introduced 16.0.R1
Platforms All

[message-type] *keyword*

Synopsis GTPv1-C message type
Context **configure** [python](#) [python-policy](#) *string* [gtpv1-c](#) *keyword* [direction](#) *keyword*
Tree [gtpv1-c](#)
Options echo-request, echo-response, version-not-supported, create-pdp-context-request, create-pdp-context-response, delete-pdp-context-request, delete-pdp-context-response, error-indication, end-marker
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	configure python python-policy <i>string</i> gtpv1-c <i>keyword</i> direction <i>keyword</i>
Tree	gtpv1-c
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	configure python python-policy <i>string</i> gtpv1-c <i>keyword</i> direction <i>keyword</i> script <i>reference</i>
Tree	script
Reference	configure python python-script <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

gtpv2-c [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the gtpv2-c list instance
Context	configure python python-policy <i>string</i> gtpv2-c <i>keyword</i> direction <i>keyword</i>
Tree	gtpv2-c
Introduced	16.0.R1
Platforms	All

[[message-type](#)] *keyword*

Synopsis	GTPv2-C message type
Context	configure python python-policy <i>string</i> gtpv2-c <i>keyword</i> direction <i>keyword</i>
Tree	gtpv2-c
Options	echo-request, echo-response, version-not-supported, create-session-request, create-session-response, modify-bearer-request, modify-bearer-response, delete-session-request, delete-session-response, delete-bearer-request,

delete-bearer-response, release-access-bearers-request,
release-access-bearers-response, downlink-data-notification,
downlink-data-notification-ack, change-notification-request,
change-notification-response, stop-paging-indication

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	configure python python-policy <i>string</i> gtpv2-c <i>keyword</i> direction <i>keyword</i>
Tree	gtpv2-c
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	configure python python-policy <i>string</i> gtpv2-c <i>keyword</i> direction <i>keyword</i> script <i>reference</i>
Tree	script
Reference	configure python python-script <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

nat-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT ISA group for this Python policy
Context	configure python python-policy <i>string</i> nat-group <i>reference</i>

Tree	nat-group
Reference	configure isa nat-group <i>number</i>
Notes	The following elements are part of a choice: nat-group or wlan-gw-group .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

pfcp [[message-type](#)] *keyword direction keyword*

Synopsis	Enter the pfcp list instance
Context	configure python python-policy <i>string pfcp keyword direction keyword</i>
Tree	pfcp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[message-type] *keyword*

Synopsis	Message type applied to the script
Context	configure python python-policy <i>string pfcp keyword direction keyword</i>
Tree	pfcp
Options	heartbeat-request, heartbeat-response, association-setup-request, association-setup-response, association-update-request, association-update-response, association-release-request, association-release-response, node-report-request, node-report-response, session-estab-request, session-estab-response, session-mod-request, session-mod-response, session-del-request, session-del-response, session-report-request, session-report-response
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	configure python python-policy <i>string pfcp keyword direction keyword</i>
Tree	pfcp
Options	ingress, egress
Notes	This element is part of a list key.

Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

script *reference*

Synopsis Python script to handle the message
Context **configure** [python](#) [python-policy](#) *string* [pfcf](#) *keyword* [direction](#) *keyword* [script](#) *reference*
Tree [script](#)
Reference **configure** [python](#) [python-script](#) *string*
Notes This element is mandatory.
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis Enter the **pppoe** list instance
Context **configure** [python](#) [python-policy](#) *string* [pppoe](#) *keyword* [direction](#) *keyword*
Tree [pppoe](#)
Introduced 16.0.R1
Platforms All

[message-type] *keyword*

Synopsis PPPoE message type
Context **configure** [python](#) [python-policy](#) *string* [pppoe](#) *keyword* [direction](#) *keyword*
Tree [pppoe](#)
Options session-lcp, session-pap, session-chap, session-ipcp, session-ip6cp, pado, padi, padr, pads, padt
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

direction *keyword*

Synopsis Event that is either incoming or outgoing

Context	configure python python-policy <i>string</i> pppoe <i>keyword</i> direction <i>keyword</i>
Tree	pppoe
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	configure python python-policy <i>string</i> pppoe <i>keyword</i> direction <i>keyword</i> script <i>reference</i>
Tree	script
Reference	configure python python-script <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

radius [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the radius list instance
Context	configure python python-policy <i>string</i> radius <i>keyword</i> direction <i>keyword</i>
Tree	radius
Introduced	16.0.R1
Platforms	All

[[message-type](#)] *keyword*

Synopsis	RADIUS message type
Context	configure python python-policy <i>string</i> radius <i>keyword</i> direction <i>keyword</i>
Tree	radius
Options	access-request, access-accept, access-reject, accounting-request, accounting-response, access-challenge, disconnect-request, change-of-authorization-request
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

direction *keyword*

Synopsis Event that is either incoming or outgoing
Context **configure** [python](#) [python-policy](#) *string* [radius](#) *keyword* **direction** *keyword*
Tree [radius](#)
Options ingress, egress
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

script *reference*

Synopsis Python script to handle the message
Context **configure** [python](#) [python-policy](#) *string* [radius](#) *keyword* **direction** *keyword* **script** *reference*
Tree [script](#)
Reference **configure** [python](#) [python-script](#) *string*
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

syslog

Synopsis Enable the **syslog** context
Context **configure** [python](#) [python-policy](#) *string* **syslog**
Tree [syslog](#)
Introduced 16.0.R1
Platforms All

script *reference*

Synopsis Python script name for outgoing syslog messages
Context **configure** [python](#) [python-policy](#) *string* **syslog** **script** *reference*
Tree [script](#)

Reference	configure python python-script <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vsd

Synopsis	Enable the vsd context
Context	configure python python-policy <i>string</i> vsd
Tree	vsd
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script name for the received XMPP Service-Config response messages
Context	configure python python-policy <i>string</i> vsd script <i>reference</i>
Tree	script
Reference	configure python python-script <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

wlan-gw-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN ISA group for this Python policy
Context	configure python python-policy <i>string</i> wlan-gw-group <i>reference</i>
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Notes	The following elements are part of a choice: nat-group or wlan-gw-group .
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s

python-script *[name]* *string*

Synopsis Enter the **python-script** list instance
Context **configure** *python* *python-script* *string*
Tree *python-script*
Max. Instances 256
Introduced 16.0.R1
Platforms All

[name] *string*

Synopsis Python script policy name
Context **configure** *python* *python-script* *string*
Tree *python-script*
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

action-on-fail *keyword*

Synopsis Action taken when Python fails to modify the given message
Context **configure** *python* *python-script* *string* *action-on-fail* *keyword*
Tree *action-on-fail*
Default drop
Options passthrough, drop
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the Python script

Context	configure python python-script <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure python python-script <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

protection

Synopsis	Enter the protection context
Context	configure python python-script <i>string</i> protection
Tree	protection
Introduced	16.0.R1
Platforms	All

hmac-sha256 *string*

Synopsis	Python script to consist of the hash value as obtained by the hmac-sha256 hashing algorithm
Context	configure python python-script <i>string</i> protection hmac-sha256 <i>string</i>
Tree	hmac-sha256
String Length	1 to 199
Introduced	16.0.R1
Platforms	All

run-as-user *string*

Synopsis	User authenticated for scripts
Context	configure python python-script <i>string</i> run-as-user <i>string</i>
Tree	run-as-user
Description	This command configures a user that is different from the current user of the session. Script authentication, authorization, accounting, and any activity within the script, is run as the specified user. If this command is not configured, the current user of the session is used.
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

urls *string*

Synopsis	Script location in URL format
Context	configure python python-script <i>string</i> urls <i>string</i>
Tree	urls
String Length	1 to 180
Max. Instances	3
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

version *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Python version the script is written for
Context	configure python python-script <i>string</i> version <i>keyword</i>
Tree	version
Default	python2
Options	python2, python3
Introduced	21.2.R1

Platforms All

3.37 qos commands

```

configure
- qos
  - adv-config-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - child-control
    - bandwidth-distribution
      - above-offered-allowance
        - delta-consumed-agg-rate
          - percent decimal-number
        - delta-consumed-higher-tier-rate
          - percent decimal-number
        - unconsumed-agg-rate
          - percent decimal-number
        - unconsumed-higher-tier-rate
          - percent decimal-number
      - above-offered-cap
        - percent decimal-number
        - rate (number | keyword)
      - enqueue-on-pir-zero boolean
      - granularity
        - percent decimal-number
        - rate number
      - internal-scheduler-weight-mode keyword
      - limit-pir-zero-drain boolean
      - lub-init-min-pir boolean
    - offered-measurement
      - add
        - active-min-only boolean
        - min-only boolean
        - percent decimal-number
        - rate number
        - fast-start boolean
        - fast-stop boolean
        - granularity
          - percent decimal-number
          - rate number
        - hold-time
          - active-min-only boolean
          - high-rate number
        - max-decrement
          - percent decimal-number
          - rate number
        - sample-interval number
        - time-average-factor
          - dec-only boolean
          - weighting-factor number
      - description string
  - apply-groups reference
  - apply-groups-exclude reference
  - atm-td-profile number
    - apply-groups reference
    - apply-groups-exclude reference
    - clp-tagging boolean
    - description string
    - descriptor-type keyword
    - policing boolean
    - service-category keyword
    - shaping boolean

```


configure qos atm-td-profile traffic

- **traffic**
 - **cdvt** *number*
 - **mbs** *number*
 - **mir** *number*
 - **pir** *number*
 - **sir** *number*
 - **weight** *number*
- **fp-resource-policy** *string*
- **aggregate-shapers**
 - **auto-creation** *boolean*
 - **hw-agg-shapers**
 - **saps** *boolean*
 - **subscribers** *boolean*
 - **queue-sets**
 - **default-size**
 - **queue-groups** (*number* | *keyword*)
 - **saps** (*number* | *keyword*)
 - **subscribers** (*number* | *keyword*)
 - **size** *number*
 - **allocation-weight** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **reserved-non-shaper-queues** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **ports**
 - **hqos-mode** *keyword*
- **queues**
 - **ingress-percent-of-total** *decimal-number*
- **hs-attachment-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **low-burst-max-class** *number*
 - **queue** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sched-class** *number*
 - **unattached**
 - **wrr-group** *number*
- **wrr-group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sched-class** *number*
 - **unattached**
- **hs-pool-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **mid-tier**
 - **mid-pool** *number*
 - **allocation-percent** *decimal-number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent-root-pool**
 - **none**
 - **pool-id** *reference*
 - **port-bw-oversubscription-factor** *number*
 - **slope-policy** *reference*
- **root-tier**
 - **root-pool** *number*
 - **allocation-weight** *number*
 - **apply-groups** *reference*

configure qos hs-pool-policy root-tier root-pool apply-groups-exclude

- **apply-groups-exclude** *reference*
- **slope-policy** *reference*
- **system-reserve** *decimal-number*
- **hs-port-pool-policy** *string*
- **alt-port-class-pools**
 - **class-pool** *number*
 - **allocation**
 - **explicit-percent** *decimal-number*
 - **port-bw-weight** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent-mid-pool**
 - **none**
 - **pool-id** *number*
 - **slope-policy** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **std-port-class-pools**
 - **class-pool** *number*
 - **allocation**
 - **explicit-percent** *decimal-number*
 - **port-bw-weight** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent-mid-pool**
 - **none**
 - **pool-id** *number*
 - **slope-policy** *reference*
- **hs-scheduler-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **group** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **rate** (*number* | *keyword*)
- **max-rate** (*number* | *keyword*)
- **scheduling-class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **group**
 - **group-id** *number*
 - **weight** *number*
 - **rate** (*number* | *keyword*)
- **hw-agg-shaper-scheduler-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **congestion-threshold** *number*
- **description** *string*
- **group** *string*
- **max-percent-rate** *decimal-number*
- **max-rate** (*number* | *keyword*)
- **monitor-threshold** *number*
- **sched-class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **group** *reference*
- **weight** *number*
- **match-list**
 - **ip-prefix-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*

configure qos match-list ip-prefix-list prefix

- **prefix** *string*
- **ipv6-prefix-list** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **prefix** *string*
- **port-list** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **port** *number*
- **range** *number end number*
- **mc-fr-profile-egress** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **max-queue-size** *number*
- **mir** *number*
- **weight** *number*
- **description** *string*
- **mc-fr-profile-ingress** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **reassemble-timeout** *number*
- **description** *string*
- **md-auto-id**
- **qos-policy-id-range**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **end** *number*
- **start** *number*
- **mlppp-profile-egress** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **max-queue-size** *number*
- **mir** *number*
- **weight** *number*
- **description** *string*
- **fc** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mlppp-class** *number*
- **mlppp-profile-ingress** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **class** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **reassemble-timeout** *number*
- **description** *string*
- **network** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **egress**
- **dscp** *keyword*

configure qos network egress dscp apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fc** *keyword*
- **profile** *keyword*
- **fc** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **de-mark**
 - **force** *number*
 - **dot1p-in-profile** *number*
 - **dot1p-out-profile** *number*
 - **dscp-in-profile** *keyword*
 - **dscp-out-profile** *keyword*
 - **lsp-exp-in-profile** *number*
 - **lsp-exp-out-profile** *number*
 - **port-redirect-group**
 - **policer** *number*
 - **queue** *number*
- **ip-criteria**
 - **entry** *number*
 - **action**
 - **fc** *keyword*
 - **port-redirect-group**
 - **policer** *number*
 - **queue** *number*
 - **profile** *keyword*
 - **type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **fragment** *keyword*
 - **icmp-type** *number*
 - **protocol** (*number* | *keyword*)
 - **src-ip**
 - **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)
 - **mask** *string*
 - **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **ipv6-criteria**
 - **entry** *number*
 - **action**
 - **fc** *keyword*
 - **port-redirect-group**
 - **policer** *number*
 - **queue** *number*

configure qos network egress ipv6-criteria entry action profile

- **profile** *keyword*
- **type** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **fragment** *keyword*
 - **icmp-type** *number*
 - **next-header** (*number* | *keyword*)
 - **src-ip**
 - **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)
 - **mask** *string*
 - **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **prec** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fc** *keyword*
- **profile** *keyword*
- **remark-trusted**
 - **force-egress-marking** *boolean*
- **ingress**
 - **default-action**
 - **fc** *keyword*
 - **profile** *keyword*
 - **dotlp** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
 - **dscp** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
 - **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fp-redirect-group**
 - **broadcast-policer** *number*
 - **multicast-policer** *number*
 - **policer** *number*
 - **unknown-policer** *number*
- **ip-criteria**
 - **entry** *number*
 - **action**

configure qos network ingress ip-criteria entry action fc

- **fc** keyword
- **profile** keyword
- **type** keyword
- **apply-groups** reference
- **apply-groups-exclude** reference
- **description** string
- **match**
 - **dscp** keyword
 - **dst-ip**
 - **address** (ipv4-address | ipv4-prefix-with-host-bits)
 - **ip-prefix-list** reference
 - **mask** string
 - **dst-port**
 - **eq** number
 - **gt** number
 - **lt** number
 - **port-list** reference
 - **range**
 - **end** number
 - **start** number
 - **fragment** keyword
 - **protocol** (number | keyword)
 - **src-ip**
 - **address** (ipv4-address | ipv4-prefix-with-host-bits)
 - **ip-prefix-list** reference
 - **mask** string
 - **src-port**
 - **eq** number
 - **gt** number
 - **lt** number
 - **port-list** reference
 - **range**
 - **end** number
 - **start** number
- **ipv6-criteria**
 - **entry** number
 - **action**
 - **fc** keyword
 - **profile** keyword
 - **type** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** string
 - **match**
 - **dscp** keyword
 - **dst-ip**
 - **address** (ipv6-address | ipv6-prefix-with-host-bits)
 - **ipv6-prefix-list** reference
 - **mask** string
 - **dst-port**
 - **eq** number
 - **gt** number
 - **lt** number
 - **port-list** reference
 - **range**
 - **end** number
 - **start** number
 - **fragment** keyword
 - **next-header** (number | keyword)
 - **src-ip**
 - **address** (ipv6-address | ipv6-prefix-with-host-bits)
 - **ipv6-prefix-list** reference
 - **mask** string
 - **src-port**

configure qos network ingress ipv6-criteria entry match src-port eq

```

        - eq number
        - gt number
        - lt number
        - port-list reference
        - range
          - end number
          - start number
    - ler-use-dscp boolean
    - lsp-exp number
      - apply-groups reference
      - apply-groups-exclude reference
      - fc keyword
      - profile keyword
    - policy-id number
    - scope keyword
  - network-queue string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - fc keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - multicast-queue reference
      - queue reference
    - hs-attachment-policy reference
    - hs-wrr-group number
      - adaptation-rule
        - pir keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - hs-class-weight number
      - rate number
    - queue number
      - adaptation-rule
        - cir keyword
        - fir keyword
        - pir keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - avg-frame-overhead decimal-number
      - cbs decimal-number
      - drop-tail
        - low
          - percent-reduction-from-mbs (number | keyword)
    - hs-alt-port-class-pool boolean
    - hs-class-weight number
    - hs-mbs decimal-number
    - hs-wred-queue
      - policy reference
    - hs-wrr-weight number
    - mbs decimal-number
    - multipoint boolean
    - port-parent
      - cir-level number
      - cir-weight number
      - level number
      - weight number
    - queue-type keyword
    - rate
      - cir number
      - fir number
      - pir number
  - policer-control-policy string
    - apply-groups reference

```

configure qos policer-control-policy apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- root
  - max-percent-rate decimal-number
  - max-rate (number | keyword)
  - priority-mbs-thresholds
    - min-thresh-separation (number | keyword)
    - priority number
      - apply-groups reference
      - apply-groups-exclude reference
      - fixed-mbs boolean
      - mbs-contribution (number | keyword)
    - profile-preferred boolean
  - tier number
    - apply-groups reference
    - apply-groups-exclude reference
    - arbiter string
      - apply-groups reference
      - apply-groups-exclude reference
      - arbiter-parent
        - arbiter-name string
        - level number
        - weight number
      - description string
      - percent-rate decimal-number
      - rate (number | keyword)
      - reference-rate keyword
  - port-scheduler-policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - dist-lag-rate-shared boolean
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - monitor-threshold number
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
  - hqos-algorithm keyword
  - level number
    - apply-groups reference
    - apply-groups-exclude reference
    - group reference
    - monitor-threshold number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - weight number
  - max-percent-rate decimal-number
  - max-rate (number | keyword)
  - monitor-threshold number
  - orphan-overrides
    - cir-level number
    - cir-weight number
    - level number
    - weight number
- post-policer-mapping string

```


configure qos post-policer-mapping apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **fc** *keyword* **profile** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **maps-to**
 - **fc** *keyword*
 - **profile** *keyword*
- **queue-group-redirect-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **match** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **instance** *number*
- **type** *keyword*
- **queue-group-templates**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **egress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **queue-group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **queue**
 - **none**
 - **queue-id** *reference*
- **hs-attachment-policy** *reference*
- **hs-wrr-group** *number*
 - **adaptation-rule**
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hs-class-weight** *number*
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
- **policer** *number*
 - **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
 - **adv-config-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **arbiter-parent**
 - **arbiter-name** *string*
 - **level** *number*
 - **weight** *number*
 - **cbs** (*number* | *keyword*)
 - **description** *string*
 - **exceed-pir** *boolean*
 - **high-prio-only** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **packet-byte-offset** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **reference-rate** *keyword*
 - **profile-capped** *boolean*

configure qos queue-group-templates egress queue-group policer rate

```

- rate
  - cir (number | keyword)
  - pir (number | keyword)
- stat-mode keyword
- queue number
  - adaptation-rule
    - cir keyword
    - pir keyword
  - adv-config-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - burst-limit (number | keyword)
  - cbs (number | keyword)
  - drop-tail
    - exceed
      - percent-reduction-from-mbs (number | keyword)
    - high
      - percent-reduction-from-mbs (number | keyword)
    - highplus
      - percent-reduction-from-mbs (number | keyword)
    - low
      - percent-reduction-from-mbs (number | keyword)
  - dynamic-mbs boolean
  - hs-alt-port-class-pool boolean
  - hs-class-weight number
  - hs-wred-queue
    - policy reference
  - hs-wrr-weight number
  - mbs (number | keyword)
  - packet-byte-offset number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
    - reference-rate keyword
  - port-parent
    - cir-level number
    - cir-weight number
    - level number
    - weight number
  - queue-delay number
  - queue-type keyword
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - scheduler-parent
    - cir-level number
    - cir-weight number
    - level number
    - scheduler-name string
    - weight number
  - wred-queue
    - mode keyword
    - policy reference
    - usage keyword
- queues-hqos-manageable boolean
- ingress
  - apply-groups reference
  - apply-groups-exclude reference
  - queue-group string
    - apply-groups reference
    - apply-groups-exclude reference
  - description string
  - policer number
    - adaptation-rule

```

configure qos queue-group-templates ingress queue-group policer adaptation-rule cir

```

    - cir keyword
    - pir keyword
    - adv-config-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - arbiter-parent
      - arbiter-name string
      - level number
      - weight number
    - cbs (number | keyword)
    - description string
    - high-prio-only (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - profile-capped boolean
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue number
    - adaptation-rule
      - cir keyword
      - fir keyword
      - pir keyword
      - adv-config-policy reference
      - apply-groups reference
      - apply-groups-exclude reference
      - burst-limit (number | keyword)
      - cbs (number | keyword)
      - cir-non-profiling boolean
      - drop-tail
        - low
          - percent-reduction-from-mbs (number | keyword)
      - mbs (number | keyword)
      - multipoint boolean
      - packet-byte-offset number
      - percent-rate
        - cir decimal-number
        - fir decimal-number
        - pir decimal-number
        - police
          - reference-rate keyword
      - queue-mode keyword
      - queue-type keyword
      - rate
        - cir (number | keyword)
        - fir (number | keyword)
        - pir (number | keyword)
        - police
          - scheduler-parent
            - cir-level number
            - cir-weight number
            - level number
            - scheduler-name string
            - weight number
    - sap-egress string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - dot1p number
      - apply-groups reference

```

configure qos sap-egress dot1p apply-groups-exclude

- **apply-groups-exclude** *reference*
- **fc** *keyword*
- **profile** *keyword*
- **dscp** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
- **ethernet-ctag** *boolean*
- **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **de-mark**
 - **force** *number*
 - **de-mark-inner**
 - **force** *number*
 - **de-mark-outer**
 - **force** *number*
- **dot1p**
 - **exceed-profile** *number*
 - **in-profile** *number*
 - **out-profile** *number*
- **dot1p-inner**
 - **in-profile** *number*
 - **out-profile** *number*
- **dot1p-outer**
 - **exceed-profile** *number*
 - **in-profile** *number*
 - **out-profile** *number*
- **dscp**
 - **exceed-profile** *keyword*
 - **in-profile** *keyword*
 - **out-profile** *keyword*
- **policer** *reference*
- **port-redirect-group-queue**
 - **queue** *number*
- **prec**
 - **exceed-profile** *number*
 - **in-profile** *number*
 - **out-profile** *number*
- **queue** *reference*
- **queue-group-queue**
 - **instance** *number*
 - **queue** *reference*
 - **queue-group-name** *reference*
- **hs-attachment-policy** *reference*
- **hs-wrr-group** *number*
 - **adaptation-rule**
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hs-class-weight** *number*
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
- **ip-criteria**
 - **entry** *number*
 - **action**
 - **fc** *keyword*
 - **policer** *reference*
 - **port-redirect-group-queue** *boolean*
 - **profile** *keyword*
 - **queue** *number*
 - **type** *keyword*
 - **use-fc-mapped-queue** *boolean*

configure qos sap-egress ip-criteria entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv4-address | ipv4-prefix-with-host-bits*)
 - **ip-prefix-list** *reference*
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
 - **fragment** *keyword*
 - **protocol** (*number | keyword*)
 - **src-ip**
 - **address** (*ipv4-address | ipv4-prefix-with-host-bits*)
 - **ip-prefix-list** *reference*
 - **mask** *string*
 - **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
- **ipv6-criteria**
 - **entry** *number*
 - **action**
 - **fc** *keyword*
 - **policer** *reference*
 - **port-redirect-group-queue** *boolean*
 - **profile** *keyword*
 - **queue** *number*
 - **type** *keyword*
 - **use-fc-mapped-queue** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv6-address | ipv6-prefix-with-host-bits*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
 - **next-header** (*number | keyword*)
 - **src-ip**
 - **address** (*ipv6-address | ipv6-prefix-with-host-bits*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
 - **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*

configure qos sap-egress ipv6-criteria entry match src-port range

```

    - range
      - end number
      - start number
- parent-location keyword
- policer number
  - adaptation-rule
    - cir keyword
    - pir keyword
  - adv-config-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - arbiter-parent
    - arbiter-name string
    - level number
    - weight number
  - cbs (number | keyword)
  - description string
  - dscp-prec-remarking boolean
  - exceed-pir boolean
  - high-prio-only (number | keyword)
  - mbs (number | keyword)
  - packet-byte-offset number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
    - reference-rate keyword
  - port-parent
    - cir-level number
    - cir-weight number
    - level number
    - weight number
  - profile-capped boolean
  - profile-out-preserve boolean
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - scheduler-parent
    - cir-level number
    - cir-weight number
    - level number
    - scheduler-name string
    - weight number
    - stat-mode keyword
- policers-hqos-manageable boolean
- policy-id number
- post-policer-mapping reference
- prec number
  - apply-groups reference
  - apply-groups-exclude reference
  - fc keyword
  - profile keyword
- queue number
  - adaptation-rule
    - cir keyword
    - pir keyword
  - adv-config-policy reference
  - agg-shaper-weight number
  - apply-groups reference
  - apply-groups-exclude reference
  - avg-frame-overhead decimal-number
  - burst-limit (number | keyword)
  - cbs (number | keyword)
  - drop-tail
    - exceed

```

configure qos sap-egress queue drop-tail exceed percent-reduction-from-mbs

```

- percent-reduction-from-mbs (number | keyword)
- high
- percent-reduction-from-mbs (number | keyword)
- highplus
- percent-reduction-from-mbs (number | keyword)
- low
- percent-reduction-from-mbs (number | keyword)
- fir-burst-limit (number | keyword)
- hs-alt-port-class-pool boolean
- hs-class-weight number
- hs-wred-queue
- policy reference
- hs-wrr-weight number
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
- cir decimal-number
- pir decimal-number
- reference-rate keyword
- port-parent
- cir-level number
- cir-weight number
- level number
- weight number
- queue-type keyword
- rate
- cir (number | keyword)
- pir (number | keyword)
- sched-class (number | keyword)
- scheduler-parent
- cir-level number
- cir-weight number
- level number
- scheduler-name string
- weight number
- wred-queue
- mode keyword
- policy reference
- usage keyword
- sched-class-elevation
- sched-class number
- apply-groups reference
- apply-groups-exclude reference
- weight number
- scope keyword
- subscriber-mgmt
- dynamic-policer
- arbiter-parent
- arbiter-name string
- level number
- weight number
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- policer-id-range
- end number
- start number
- stat-mode keyword
- pcc-rule-entry
- range
- end number
- start number
- sap-ingress string
- apply-groups reference

```

configure qos sap-ingress apply-groups-exclude

```

- apply-groups-exclude reference
- default-fc string
- default-priority keyword
- description string
- dot1p number
  - apply-groups reference
  - apply-groups-exclude reference
  - fc string
  - priority keyword
- dscp keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - fc string
  - priority keyword
- fc string
  - apply-groups reference
  - apply-groups-exclude reference
  - broadcast-policer number
  - broadcast-queue reference
  - broadcast-queue-group-queue
    - queue reference
    - queue-group-name reference
  - de-1-out-profile boolean
  - egress-fc keyword
  - fp-redirect-group-broadcast-policer
  - fp-redirect-group-multicast-policer
  - fp-redirect-group-policer
  - fp-redirect-group-unknown-policer
  - in-remark
    - dscp keyword
    - prec number
  - multicast-policer number
  - multicast-queue reference
  - multicast-queue-group-queue
    - queue reference
    - queue-group-name reference
  - out-remark
    - dscp keyword
    - prec number
  - policer number
  - profile keyword
  - queue reference
  - queue-group-queue
    - queue reference
    - queue-group-name reference
  - unknown-policer number
  - unknown-queue reference
  - unknown-queue-group-queue
    - queue reference
    - queue-group-name reference
- ip-criteria
  - entry number
    - action
      - fc string
      - policer reference
      - priority keyword
      - type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip
        - address (ipv4-address | ipv4-prefix-with-host-bits)

```


configure qos sap-ingress ip-criteria entry match dst-ip ip-prefix-list

```

    - ip-prefix-list reference
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - fragment keyword
  - protocol (number | keyword)
  - src-ip
    - address (ipv4-address | ipv4-prefix-with-host-bits)
    - ip-prefix-list reference
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - vxlan-vni
    - eq number
    - range
      - end number
      - start number
  - tag number
  - type keyword
- ipv6-criteria
  - entry number
    - action
      - fc string
      - policer reference
      - priority keyword
      - type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - match
    - dscp keyword
    - dst-ip
      - address (ipv6-address | ipv6-prefix-with-host-bits)
      - ipv6-prefix-list reference
      - mask string
    - dst-port
      - eq number
      - gt number
      - lt number
      - range
        - end number
        - start number
    - fragment keyword
    - next-header (number | keyword)
    - src-ip
      - address (ipv6-address | ipv6-prefix-with-host-bits)
      - ipv6-prefix-list reference
      - mask string
    - src-port
      - eq number
      - gt number
      - lt number
      - range
        - end number

```

configure qos sap-ingress ipv6-criteria entry match src-port range start

```

    - start number
  - vxlan-vni
    - eq number
    - range
      - end number
      - start number
  - tag number
  - type keyword
- lsp-exp number
- apply-groups reference
- apply-groups-exclude reference
- fc string
- priority keyword
- mac-criteria
  - entry number
    - action
      - fc string
      - policer reference
      - priority keyword
      - type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - atm-vci number
      - dot1p
        - mask number
        - priority number
      - dst-mac
        - address string
        - mask string
      - etype string
      - frame-type keyword
      - inner-tag
        - mask number
        - vlan number
      - llc-dsap
        - dsap number
        - mask number
      - llc-ssap
        - mask number
        - ssap number
      - outer-tag
        - mask number
        - vlan number
      - snap-oui keyword
      - snap-pid number
      - src-mac
        - address string
        - mask string
    - type keyword
- policer number
- adaptation-rule
  - cir keyword
  - pir keyword
- adv-config-policy reference
- apply-groups reference
- apply-groups-exclude reference
- arbiter-parent
  - arbiter-name string
  - level number
  - weight number
- cbs (number | keyword)
- description string

```

configure qos sap-ingress policer high-prio-only

```

- high-prio-only (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
  - reference-rate keyword
- profile-capped boolean
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- scheduler-parent
  - cir-level number
  - cir-weight number
  - level number
  - scheduler-name string
  - weight number
- stat-mode keyword
- policers-hqos-manageable boolean
- policy-id number
- prec number
  - apply-groups reference
  - apply-groups-exclude reference
  - fc string
  - priority keyword
- queue number
  - adaptation-rule
    - cir keyword
    - fir keyword
    - pir keyword
  - adv-config-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - burst-limit (number | keyword)
  - cbs (number | keyword)
  - cir-non-profiling boolean
  - drop-tail
    - low
      - percent-reduction-from-mbs (number | keyword)
  - mbs (number | keyword)
  - multipoint boolean
  - packet-byte-offset number
  - percent-rate
    - cir decimal-number
    - fir decimal-number
    - pir decimal-number
    - police
      - reference-rate keyword
  - queue-mode keyword
  - queue-type keyword
  - rate
    - cir (number | keyword)
    - fir (number | keyword)
    - pir (number | keyword)
    - police
  - scheduler-parent
    - cir-level number
    - cir-weight number
    - level number
    - scheduler-name string
    - weight number
- scope keyword
- subscriber-mgmt
- dynamic-policer

```

configure qos sap-ingress subscriber-mgmt dynamic-policer arbiter-parent

- **arbiter-parent**
 - **arbiter-name** *string*
 - **level** *number*
 - **weight** *number*
- **cbs** (*number | keyword*)
- **mbs** (*number | keyword*)
- **packet-byte-offset** *number*
- **policer-id-range**
 - **end** *number*
 - **start** *number*
- **stat-mode** *keyword*
- **pcc-rule-entry**
 - **range**
 - **end** *number*
 - **start** *number*
- **scheduler-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **frame-based-accounting** *boolean*
 - **tier** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent-location** *keyword*
 - **scheduler** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **limit-unused-bandwidth** *boolean*
 - **percent-rate**
 - **cir** (*keyword | decimal-number*)
 - **pir** *decimal-number*
 - **reference-rate** *keyword*
 - **port-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **weight** *number*
 - **rate**
 - **cir** (*number | keyword*)
 - **pir** (*number | keyword*)
 - **scheduler-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **scheduler-name** *string*
 - **weight** *number*
- **shared-queue** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast-queue** *number*
 - **multicast-queue** *number*
 - **queue** *number*
 - **unknown-queue** *number*
- **queue** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** *number*
 - **drop-tail**
 - **low**

configure qos shared-queue queue drop-tail low percent-reduction-from-mbs

- **percent-reduction-from-mbs** (*number* | *keyword*)
- **mbs** *number*
- **multipoint** *boolean*
- **queue-type** *keyword*
- **rate**
 - **cir** *number*
 - **fir** *number*
 - **pir** *number*
- **slope-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **exceed-slope**
 - **admin-state** *keyword*
 - **max-avg** *number*
 - **max-prob** *number*
 - **start-avg** *number*
 - **high-slope**
 - **admin-state** *keyword*
 - **max-avg** *number*
 - **max-prob** *number*
 - **start-avg** *number*
 - **highplus-slope**
 - **admin-state** *keyword*
 - **max-avg** *number*
 - **max-prob** *number*
 - **start-avg** *number*
 - **low-slope**
 - **admin-state** *keyword*
 - **max-avg** *number*
 - **max-prob** *number*
 - **start-avg** *number*
- **time-average-factor** *number*

3.37.1 qos command descriptions

qos

Synopsis	Enter the qos context
Context	configure qos
Tree	qos
Introduced	16.0.R1
Platforms	All

adv-config-policy [[adv-config-policy-name](#)] *string*

Synopsis	Enter the adv-config-policy list instance
Context	configure qos adv-config-policy <i>string</i>
Tree	adv-config-policy
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[[adv-config-policy-name](#)] *string*

Synopsis	Advanced QoS policy name
Context	configure qos adv-config-policy <i>string</i>
Tree	adv-config-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

child-control

Synopsis	Enter the child-control context
Context	configure qos adv-config-policy <i>string</i> child-control
Tree	child-control

Introduced 16.0.R1
Platforms All

bandwidth-distribution

Synopsis Enter the **bandwidth-distribution** context
Context **configure qos adv-config-policy** *string* **child-control bandwidth-distribution**
Tree **bandwidth-distribution**
Introduced 16.0.R1
Platforms All

above-offered-allowance

Synopsis Enter the **above-offered-allowance** context
Context **configure qos adv-config-policy** *string* **child-control bandwidth-distribution above-offered-allowance**
Tree **above-offered-allowance**
Description Commands in this context control the child's above offered allowance bandwidth. The configuration is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm (specified via the **configure qos port-scheduler-policy hqos-algorithm** command).
Introduced 19.10.R2
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delta-consumed-agg-rate

Synopsis Enter the **delta-consumed-agg-rate** context
Context **configure qos adv-config-policy** *string* **child-control bandwidth-distribution above-offered-allowance delta-consumed-agg-rate**
Tree **delta-consumed-agg-rate**
Introduced 19.10.R2
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent *decimal-number*

Synopsis Percentage of the delta consumed aggregate rate

Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-allowance delta-consumed-agg-rate percent <i>decimal-number</i>
Tree	percent
Description	This command configures the percentage of the delta (from the beginning to the end of the current H-QoS below CIR or above CIR pass) of the aggregate rate consumed by other members that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. This command is only applicable when the port scheduler is configured to use the above-offered-allowance-control algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	20.00
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delta-consumed-higher-tier-rate

Synopsis	Enter the delta-consumed-higher-tier-rate context
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-allowance delta-consumed-higher-tier-rate
Tree	delta-consumed-higher-tier-rate
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent *decimal-number*

Synopsis	Percentage of the delta consumed higher-tier rate
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-allowance delta-consumed-higher-tier-rate percent <i>decimal-number</i>
Tree	percent
Description	This command configures the percentage of the delta (from the beginning to the end of the current H-QoS below CIR or above CIR pass) of the higher-tier rate consumed by its other members that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. Higher tier refers to the Vport aggregate rate and port scheduler level, group, and maximum rates. This command is only applicable when the port scheduler is configured to use the above-offered-allowance-control algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	5.00
Introduced	19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

unconsumed-agg-rate

Synopsis Enter the **unconsumed-agg-rate** context

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-agg-rate

Tree [unconsumed-agg-rate](#)

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent *decimal-number*

Synopsis Percentage of the unconsumed aggregate rate

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-agg-rate percent *decimal-number*

Tree [percent](#)

Description This command configures the percentage of the unconsumed aggregate rate that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass.
This command is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm; otherwise it is ignored.

Range 0.00 to 100.00

Default 100.00

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

unconsumed-higher-tier-rate

Synopsis Enter the **unconsumed-higher-tier-rate** context

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-higher-tier-rate

Tree [unconsumed-higher-tier-rate](#)

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent *decimal-number*

Synopsis	Percentage of the unconsumed higher-tier rate
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-allowance unconsumed-higher-tier-rate percent <i>decimal-number</i>
Tree	percent
Description	This command configures the percentage of the unconsumed higher tier rate that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. Higher tier refers to the Vport aggregate rate and port scheduler level, group, and maximum rates. This command is only applicable when the port scheduler is configured to use the above-offered-allowance-control algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	100.00
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

above-offered-cap

Synopsis	Enter the above-offered-cap context
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap
Tree	above-offered-cap
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Percentage of the child's administrative PIR used as the fair share increase limit
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap percent <i>decimal-number</i>
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

rate (*number* | *keyword*)

Synopsis	Explicit number to assign as limit to the child's fair share increase
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	0 to 100000000
Options	max
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

enqueue-on-pir-zero *boolean*

Synopsis	Enqueue the packets when bandwidth-distribution granularity rate is set to zero
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution enqueue-on-pir-zero <i>boolean</i>
Tree	enqueue-on-pir-zero
Default	false
Introduced	16.0.R1
Platforms	All

granularity

Synopsis	Enter the granularity context
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution granularity
Tree	granularity
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Rounding percentage value for administrative PIR
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution granularity percent <i>decimal-number</i>
Tree	percent
Range	0.00 to 100.00

Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

rate number

Synopsis	Rounding rate step value
Context	configure qos adv-config-policy string child-control bandwidth-distribution granularity rate number
Tree	rate
Range	0 to 100000000
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

internal-scheduler-weight-mode keyword

Synopsis	Weight mode applied to this advanced QoS policy
Context	configure qos adv-config-policy string child-control bandwidth-distribution internal-scheduler-weight-mode keyword
Tree	internal-scheduler-weight-mode
Options	auto, force-equal, offered-load, capped-offered-load
Introduced	16.0.R1
Platforms	All

limit-pir-zero-drain boolean

Synopsis	Throttle the queue draining based on bandwidth-distribution granularity rate
Context	configure qos adv-config-policy string child-control bandwidth-distribution limit-pir-zero-drain boolean
Tree	limit-pir-zero-drain
Default	false
Introduced	16.0.R1
Platforms	All

lub-init-min-pir *boolean*

Synopsis	Apply minimal PIR for new queues when LUB is enabled
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution lub-init-min-pir <i>boolean</i>
Tree	lub-init-min-pir
Default	false
Introduced	16.0.R1
Platforms	All

offered-measurement

Synopsis	Enter the offered-measurement context
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement
Tree	offered-measurement
Introduced	16.0.R1
Platforms	All

add

Synopsis	Enter the add context
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement add
Tree	add
Introduced	16.0.R1
Platforms	All

active-min-only *boolean*

Synopsis	Use increase in rate or percentage as minimum offered rate only for active queues or policers
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement add active-min-only <i>boolean</i>
Tree	active-min-only
Default	false
Introduced	16.0.R1
Platforms	All

min-only *boolean*

Synopsis	Use specified increase value as a minimum offered rate even for inactive queues or policers
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement add min-only <i>boolean</i>
Tree	min-only
Default	false
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Percentage of child's administrative PIR to add to child's offered rate
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement add percent <i>decimal-number</i>
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Rate value to add to child's offered rate
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement add rate <i>number</i>
Tree	rate
Range	0 to 100000000
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

fast-start *boolean*

Synopsis	Allow fast detection of initial bandwidth on a child policer or queue associated with policy
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Context	configure qos adv-config-policy string child-control offered-measurement fast-start boolean
Tree	fast-start
Default	false
Introduced	16.0.R1
Platforms	All

fast-stop boolean

Synopsis	Allow fast detection of lack of offered rate on a child policer or queue associated with the policy
Context	configure qos adv-config-policy string child-control offered-measurement fast-stop boolean
Tree	fast-stop
Default	false
Introduced	16.0.R1
Platforms	All

granularity

Synopsis	Enter the granularity context
Context	configure qos adv-config-policy string child-control offered-measurement granularity
Tree	granularity
Introduced	16.0.R1
Platforms	All

percent decimal-number

Synopsis	Percentage of child's administrative PIR used as threshold sensitivity to offered rate change
Context	configure qos adv-config-policy string child-control offered-measurement granularity percent decimal-number
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1

Platforms All

rate number

Synopsis Value to use as child's offered rate change sensitivity value

Context **configure qos adv-config-policy string child-control offered-measurement granularity rate number**

Tree [rate](#)

Range 0 to 100000000

Notes The following elements are part of a choice: **percent** or **rate**.

Introduced 16.0.R1

Platforms All

hold-time

Synopsis Enter the **hold-time** context

Context **configure qos adv-config-policy string child-control offered-measurement hold-time**

Tree [hold-time](#)

Introduced 16.0.R1

Platforms All

active-min-only boolean

Synopsis Use specified increase value as minimum offered rate only for active queues or policers

Context **configure qos adv-config-policy string child-control offered-measurement hold-time active-min-only boolean**

Tree [active-min-only](#)

Default false

Introduced 16.0.R1

Platforms All

high-rate number

Synopsis Time during which current offered rate is maintained for a child policer or queue

Context **configure qos adv-config-policy string child-control offered-measurement hold-time high-rate number**

Tree	high-rate
Range	0 to 60
Default	0
Introduced	16.0.R1
Platforms	All

max-decrement

Synopsis	Enter the max-decrement context
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement max-decrement
Tree	max-decrement
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Value of the child's administrative PIR to use as the decrement limit to offered rate change
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement max-decrement percent <i>decimal-number</i>
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Value to use as the decrement limit to offered rate change
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement max-decrement rate <i>number</i>
Tree	rate
Range	0 to 100000000
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1

Platforms All

sample-interval *number*

Synopsis Interval for sampling the child's offered rate

Context **configure qos adv-config-policy** *string* **child-control offered-measurement sample-interval** *number*

Tree **sample-interval**

Range 1 to 8

Default 1

Introduced 16.0.R1

Platforms All

time-average-factor

Synopsis Enter the **time-average-factor** context

Context **configure qos adv-config-policy** *string* **child-control offered-measurement time-average-factor**

Tree **time-average-factor**

Introduced 16.0.R1

Platforms All

dec-only *boolean*

Synopsis Apply time average factor adjustment when the offered rate decreases compared to previous

Context **configure qos adv-config-policy** *string* **child-control offered-measurement time-average-factor dec-only** *boolean*

Tree **dec-only**

Default false

Introduced 16.0.R1

Platforms All

weighting-factor *number*

Synopsis New offered rate with a sample of the previous offered rate

Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement time-average-factor weighting-factor <i>number</i>
Tree	weighting-factor
Range	0 to 64
Default	0
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos adv-config-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

atm-td-profile [[atm-td-profile-id](#)] *number*

Synopsis	Enter the atm-td-profile list instance
Context	configure qos atm-td-profile <i>number</i>
Tree	atm-td-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

[atm-td-profile-id] *number*

Synopsis	ATM traffic descriptor ID
Context	configure qos atm-td-profile <i>number</i>
Tree	atm-td-profile
Range	1 to 1000
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

clp-tagging *boolean*

Synopsis	Control the setting of CLP bit in the ATM cell header
Context	configure qos atm-td-profile <i>number</i> clp-tagging <i>boolean</i>
Tree	clp-tagging
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

description *string*

Synopsis	Text description
Context	configure qos atm-td-profile <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

descriptor-type *keyword*

Synopsis	ATM traffic descriptor type
Context	configure qos atm-td-profile <i>number</i> descriptor-type <i>keyword</i>
Tree	descriptor-type
Options	p01, p01-and-s01, p01-and-s0, p01-and-s0-tag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

policing *boolean*

Synopsis	Allow ingress traffic policing
Context	configure qos atm-td-profile <i>number</i> policing <i>boolean</i>
Tree	policing
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

service-category *keyword*

Synopsis	ATM service category
Context	configure qos atm-td-profile <i>number</i> service-category <i>keyword</i>
Tree	service-category
Default	ubr
Options	cbr, rt-vbr, nrt-vbr, ubr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

shaping *boolean*

Synopsis	Enable egress shaping
Context	configure qos atm-td-profile <i>number</i> shaping <i>boolean</i>
Tree	shaping
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

traffic

Synopsis	Enter the traffic context
Context	configure qos atm-td-profile <i>number</i> traffic
Tree	traffic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

cdvt *number*

Synopsis	Cell Delay Variation Tolerance
Context	configure qos atm-td-profile <i>number</i> traffic cdvt <i>number</i>
Tree	cdvt
Max. Range	0 to 4294967295
Default	250
Units	microseconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

mbs number

Synopsis Maximum burst size in cell
Context **configure qos atm-td-profile number traffic mbs number**
Tree **mbs**
Max. Range 0 to 4294967295
Units bytes
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

mir number

Synopsis Minimum information rate
Context **configure qos atm-td-profile number traffic mir number**
Tree **mir**
Max. Range 0 to 4294967295
Default 0
Units kilobps
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

pir number

Synopsis Peak information rate
Context **configure qos atm-td-profile number traffic pir number**
Tree **pir**
Max. Range 0 to 4294967295
Units kilobps
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

sir number

Synopsis	Sustained information rate
Context	configure qos atm-td-profile number traffic sir number
Tree	sir
Max. Range	0 to 4294967295
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

weight number

Synopsis	Relative weight for the ATM traffic descriptor based on ATM VP shaper scheduling
Context	configure qos atm-td-profile number weight number
Tree	weight
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

fp-resource-policy [fp-resource-policy-name] string

Synopsis	Enter the fp-resource-policy list instance
Context	configure qos fp-resource-policy string
Tree	fp-resource-policy
Max. Instances	15
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[fp-resource-policy-name] string

Synopsis	FP resource policy name
Context	configure qos fp-resource-policy string
Tree	fp-resource-policy
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

aggregate-shapers

Synopsis	Enter the aggregate-shapers context
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers
Tree	aggregate-shapers
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

auto-creation *boolean*



WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enables auto-creation of hardware aggregate shapers
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers auto-creation <i>boolean</i>
Tree	auto-creation
Description	When configured to true , enables the auto-creation of hardware aggregate shapers on the specified FP. After enabling, the corresponding FP is rebooted.
Default	false
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

hw-agg-shapers

Synopsis	Enter the hw-agg-shapers context
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers hw-agg-shapers
Tree	hw-agg-shapers
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

saps *boolean*



WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enable hardware aggregate shapers for SAPs
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers hw-agg-shapers saps <i>boolean</i>
Tree	saps
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

subscribers *boolean*



WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enables hardware aggregate shapers for subscribers
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers hw-agg-shapers subscribers <i>boolean</i>
Tree	subscribers
Default	false
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

queue-sets

Synopsis	Enter the queue-sets context
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets
Tree	queue-sets
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

default-size

Synopsis	Enter the default-size context
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets default-size
Tree	default-size
Description	Commands in this context configure the default queue-set size for individual object types.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

queue-groups (*number* | *keyword*)

Synopsis	Default size of queue-groups
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets default-size queue-groups (<i>number</i> <i>keyword</i>)
Tree	queue-groups
Range	2 to 8
Default	8
Options	non-shaper-queues
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

saps (*number* | *keyword*)

Synopsis	Default queue-set size for SAPs
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets default-size saps (<i>number</i> <i>keyword</i>)
Tree	saps
Description	This command configures the default queue-set size for SAPs. When the non-shaper-queues keyword is configured, SAPs do not use hardware aggregate shapers on FPs where the specified FP resource policy is applied.
Range	2 to 8
Default	8
Options	non-shaper-queues
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

subscribers (*number* | *keyword*)

Synopsis	Default queue-set size for subscribers
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets default-size subscribers (<i>number</i> <i>keyword</i>)
Tree	subscribers
Description	This command configures the default queue-set size for subscribers. When the non-shaper-queues keyword is configured, SAPs do not use hardware aggregate shapers on FPs where the specified FP resource policy is applied.
Range	2 to 8
Default	8
Options	non-shaper-queues
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

size [*qset-size*] *number*

Synopsis	Enter the size list instance
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i>
Tree	size
Description	Commands in this context configure parameters for the specified queue-set size.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

[*qset-size*] *number*

Synopsis	Size of the queue-sets
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i>
Tree	size
Range	2 to 8
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

allocation-weight *number*

Synopsis	Allocation weight of the queue-set size
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i> allocation-weight <i>number</i>
Tree	allocation-weight
Description	This command configures the allocation weight for the specified queue-set size. The available queue-sets are distributed based on the allocation weight among different queue-set sizes.
Range	0 to 100
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

reserved-non-shaper-queues *number*

Synopsis	Number of queues reserved for non-shaper queues
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers reserved-non-shaper-queues <i>number</i>
Tree	reserved-non-shaper-queues
Description	This command configures the number of egress queues that will not be used by hardware aggregate shapers.
Range	2048 to 262144
Default	8192
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

description *string*

Synopsis	Text description
Context	configure qos fp-resource-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ports

Synopsis	Enter the ports context
Context	configure qos fp-resource-policy string ports
Tree	ports
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

hqos-mode keyword



WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Default HQOS mode of the port
Context	configure qos fp-resource-policy string ports hqos-mode keyword
Tree	hqos-mode
Default	port-scheduler
Options	port-scheduler, hw-agg-shaping
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

queues

Synopsis	Enter the queues context
Context	configure qos fp-resource-policy string queues
Tree	queues
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-percent-of-total decimal-number



WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Percentage of total ingress queues allocated
Context	configure qos fp-resource-policy <i>string</i> queues ingress-percent-of-total <i>decimal-number</i>
Tree	ingress-percent-of-total
Description	<p>This command configures the percentage of the total number of queues on the FP on which the policy is applied that are allocated to ingress, with the remainder allocated to egress. The ingress and egress buffer pool sizes are not affected by the queue allocation.</p> <p>The allocation is performed in sets of 8192 queues, with a minimum of 8192 queues at ingress and 8192 queues at egress. If the percentage configured results in the queue allocation not being a multiple of 8192, the number of queues at ingress is rounded down to the next 8192 boundary, and consequently the number of queues at egress is rounded up to the next 8192 boundary, both while respecting the minimum at ingress and egress.</p> <p>If the FP resource policy is applied to any FP and the updated allocation is not achievable with the current ingress or egress queue consumption on any of the related FPs, the command fails.</p> <p>The configuration of this command (which includes removing the configuration) causes the router to immediately reset the associated cards, XIOMs and MDAs on all FPs on which the FP resource policy is applied, except on the 7750 SR-1, where the configuration must be saved and the router rebooted, immediately after committing the configuration transaction.</p>
Range	4.00 to 97.00
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

hs-attachment-policy [*name*] *string*

Synopsis	Enter the hs-attachment-policy list instance
Context	configure qos hs-attachment-policy <i>string</i>
Tree	hs-attachment-policy
Max. Instances	31
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[name] *string*

Synopsis	HS attachment policy name
Context	configure qos hs-attachment-policy <i>string</i>
Tree	hs-attachment-policy

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	configure qos hs-attachment-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

low-burst-max-class *number*

Synopsis	Low priority burst threshold
Context	configure qos hs-attachment-policy <i>string</i> low-burst-max-class <i>number</i>
Tree	low-burst-max-class
Range	1 to 6
Default	6
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

queue [[queue-id](#)] *number*

Synopsis	Enter the queue list instance
Context	configure qos hs-attachment-policy <i>string</i> queue <i>number</i>
Tree	queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[queue-id] *number*

Synopsis	Queue identifier for the HS attachment policy
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Context	configure qos hs-attachment-policy <i>string queue number</i>
Tree	queue
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

sched-class *number*

Synopsis	Scheduling class associated with the queue
Context	configure qos hs-attachment-policy <i>string queue number sched-class number</i>
Tree	sched-class
Range	1 to 6
Notes	The following elements are part of a choice: sched-class , unattached , or wrr-group .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

unattached

Synopsis	Do not attach queue to scheduling class or WRR group
Context	configure qos hs-attachment-policy <i>string queue number unattached</i>
Tree	unattached
Notes	The following elements are part of a choice: sched-class , unattached , or wrr-group .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

wrr-group *number*

Synopsis	WRR group attached to the queue
Context	configure qos hs-attachment-policy <i>string queue number wrr-group number</i>
Tree	wrr-group
Range	1 to 2
Notes	The following elements are part of a choice: sched-class , unattached , or wrr-group .
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

wrr-group [[wrr-group-id](#)] *number*

Synopsis Enter the **wrr-group** list instance
Context **configure qos hs-attachment-policy** *string wrr-group number*
Tree [wrr-group](#)
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

[wrr-group-id] *number*

Synopsis WRR group ID for the HS attachment policy
Context **configure qos hs-attachment-policy** *string wrr-group number*
Tree [wrr-group](#)
Range 1 to 2
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

sched-class *number*

Synopsis Scheduling class associated with the WRR group
Context **configure qos hs-attachment-policy** *string wrr-group number sched-class number*
Tree [sched-class](#)
Range 1 to 6
Notes The following elements are part of a choice: **sched-class** or **unattached**.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

unattached

Synopsis Do not attach group ID to scheduling class or WRR group
Context **configure qos hs-attachment-policy** *string wrr-group number unattached*
Tree [unattached](#)

Notes	The following elements are part of a choice: sched-class or unattached .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-pool-policy [*name*] *string*

Synopsis	Enter the hs-pool-policy list instance
Context	configure qos hs-pool-policy <i>string</i>
Tree	hs-pool-policy
Max. Instances	63
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[*name*] *string*

Synopsis	HS pool policy name
Context	configure qos hs-pool-policy <i>string</i>
Tree	hs-pool-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	configure qos hs-pool-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mid-tier

Synopsis	Enter the mid-tier context
Context	configure qos hs-pool-policy <i>string</i> mid-tier
Tree	mid-tier
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mid-pool [**mid-pool-id**] *number*

Synopsis	Enter the mid-pool list instance
Context	configure qos hs-pool-policy <i>string</i> mid-tier mid-pool <i>number</i>
Tree	mid-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**mid-pool-id**] *number*

Synopsis	Mid-pool identifier for the HS pool policy
Context	configure qos hs-pool-policy <i>string</i> mid-tier mid-pool <i>number</i>
Tree	mid-pool
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

allocation-percent *decimal-number*

Synopsis	Root pool size to derive the mid-pool size
Context	configure qos hs-pool-policy <i>string</i> mid-tier mid-pool <i>number</i> allocation-percent <i>decimal-number</i>
Tree	allocation-percent
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

parent-root-pool

Synopsis	Enter the parent-root-pool context
Context	configure qos hs-pool-policy <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> parent-root-pool
Tree	parent-root-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

none

Synopsis	Assign no buffers to the mid-tier pool
Context	configure qos hs-pool-policy <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> parent-root-pool none
Tree	none
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pool-id reference

Synopsis	Parent root pool to which the mid-pool is associated
Context	configure qos hs-pool-policy <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> parent-root-pool pool-id reference
Tree	pool-id
Reference	configure qos hs-pool-policy <i>string</i> <i>root-tier</i> <i>root-pool</i> <i>number</i>
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

port-bw-oversubscription-factor *number*

Synopsis	Over subscription factor for port-class pool sizes
Context	configure qos hs-pool-policy <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> port-bw-oversubscription-factor <i>number</i>
Tree	port-bw-oversubscription-factor
Description	This command modifies the size of the mid-pool when calculating the port-class pool sizes based on port bandwidth ratios. The over subscription factor for a mid-pool can

be modified at any time, causing the corresponding port-class pool dynamic sizes to be recalculated. A similar behavior can be obtained by increasing the mid-pool's allocation-percent of its parent root-pool. However, the major difference in using this command is that it provides larger port-class pools without allowing the mid-pool to use a higher number of buffers in the root pool.

Range	1 to 10
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	configure qos hs-pool-policy <i>string</i> mid-tier mid-pool <i>number</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

root-tier

Synopsis	Enter the root-tier context
Context	configure qos hs-pool-policy <i>string</i> root-tier
Tree	root-tier
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

root-pool [**root-pool-id**] *number*

Synopsis	Enter the root-pool list instance
Context	configure qos hs-pool-policy <i>string</i> root-tier root-pool <i>number</i>
Tree	root-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[root-pool-id] *number*

Synopsis	Root pool identifier for the HS pool policy
Context	configure qos hs-pool-policy <i>string</i> root-tier root-pool <i>number</i>
Tree	root-pool
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

allocation-weight *number*

Synopsis	Root pool allocation weight used to calculate pool size
Context	configure qos hs-pool-policy <i>string</i> root-tier root-pool <i>number</i> allocation-weight <i>number</i>
Tree	allocation-weight
Description	<p>This command specifies the weight that is applied to the root pool and is divided by the sum of all root pool weights to derive the pool's buffer allocation factor. The amount of buffers remaining after the system-reserve percentage is applied is multiplied by the buffer allocation factor to derive the pool size.</p> <p>A root pool with an allocation weight set to "0" is considered inactive and is not allocated buffers.</p> <p>When a root pool's allocation weight is modified, all root pools, mid-tier pools, and port class pool sizes are reevaluated and modified when necessary.</p>
Range	0 to 100
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	configure qos hs-pool-policy <i>string</i> root-tier root-pool <i>number</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

system-reserve *decimal-number*

Synopsis	Percentage of HS buffers reserved for internal system use
Context	configure qos hs-pool-policy <i>string</i> system-reserve <i>decimal-number</i>
Tree	system-reserve
Range	1.00 to 30.00
Default	5.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-port-pool-policy [*name*] *string*

Synopsis	Enter the hs-port-pool-policy list instance
Context	configure qos hs-port-pool-policy <i>string</i>
Tree	hs-port-pool-policy
Max. Instances	2047
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[*name*] *string*

Synopsis	HS port pool policy name
Context	configure qos hs-port-pool-policy <i>string</i>
Tree	hs-port-pool-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

alt-port-class-pools

Synopsis	Enter the alt-port-class-pools context
Context	configure qos hs-port-pool-policy <i>string</i> alt-port-class-pools
Tree	alt-port-class-pools
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

class-pool [[alt-class-pool-id](#)] *number*

Synopsis Enter the **class-pool** list instance
Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number](#)
Tree [class-pool](#)
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

[alt-class-pool-id] *number*

Synopsis Class pool ID
Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number](#)
Tree [class-pool](#)
Range 1 to 6
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

allocation

Synopsis Enter the **allocation** context
Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number](#)
[allocation](#)
Tree [allocation](#)
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

explicit-percent *decimal-number*

Synopsis Percentage of parent pool to be allocated
Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number](#)
[allocation explicit-percent decimal-number](#)
Tree [explicit-percent](#)
Range 0.01 to 100.00

Notes	The following elements are part of a choice: explicit-percent or port-bw-weight .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

port-bw-weight *number*

Synopsis	Port bandwidth weight to be allocated
Context	configure qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> allocation port-bw-weight <i>number</i>
Tree	port-bw-weight
Range	1 to 100
Default	1
Notes	The following elements are part of a choice: explicit-percent or port-bw-weight .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

parent-mid-pool

Synopsis	Enter the parent-mid-pool context
Context	configure qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> parent-mid-pool
Tree	parent-mid-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

none

Synopsis	Deactivate the port-class pool; pool size is zero
Context	configure qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> parent-mid-pool none
Tree	none
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pool-id *number*

Synopsis	Mid-pool ID associated with the port-class pool
Context	configure qos hs-port-pool-policy <i>string alt-port-class-pools class-pool number parent-mid-pool pool-id number</i>
Tree	pool-id
Range	1 to 16
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	configure qos hs-port-pool-policy <i>string alt-port-class-pools class-pool number slope-policy reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	configure qos hs-port-pool-policy <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

std-port-class-pools

Synopsis	Enter the std-port-class-pools context
Context	configure qos hs-port-pool-policy <i>string std-port-class-pools</i>
Tree	std-port-class-pools
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

class-pool [**std-class-pool-id**] *number*

Synopsis Enter the **class-pool** list instance
Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number**
Tree **class-pool**
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

[std-class-pool-id] *number*

Synopsis Standard port class identifier for the HS port pool policy
Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number**
Tree **class-pool**
Range 1 to 6
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

allocation

Synopsis Enter the **allocation** context
Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number allocation**
Tree **allocation**
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

explicit-percent *decimal-number*

Synopsis Percentage of parent pool to be allocated
Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number allocation explicit-percent decimal-number**
Tree **explicit-percent**
Range 0.01 to 100.00

Notes	The following elements are part of a choice: explicit-percent or port-bw-weight .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

port-bw-weight *number*

Synopsis	Port bandwidth weight to be allocated
Context	configure qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> allocation port-bw-weight <i>number</i>
Tree	port-bw-weight
Range	1 to 100
Default	1
Notes	The following elements are part of a choice: explicit-percent or port-bw-weight .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

parent-mid-pool

Synopsis	Enter the parent-mid-pool context
Context	configure qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> parent-mid-pool
Tree	parent-mid-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

none

Synopsis	Deactivate the port-class pool; pool size is zero
Context	configure qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> parent-mid-pool none
Tree	none
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pool-id *number*

Synopsis	Mid-pool ID associated with the port-class pool
Context	configure qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> parent-mid-pool pool-id <i>number</i>
Tree	pool-id
Range	1 to 16
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	configure qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-scheduler-policy [*name*] *string*

Synopsis	Enter the hs-scheduler-policy list instance
Context	configure qos hs-scheduler-policy <i>string</i>
Tree	hs-scheduler-policy
Max. Instances	127
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[*name*] *string*

Synopsis	HS scheduler policy name
Context	configure qos hs-scheduler-policy <i>string</i>
Tree	hs-scheduler-policy
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	configure qos hs-scheduler-policy <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

group [[group-id](#)] *number*

Synopsis	Enter the group list instance
Context	configure qos hs-scheduler-policy <i>string group number</i>
Tree	group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[group-id] *number*

Synopsis	Group ID for the HS scheduler policy
Context	configure qos hs-scheduler-policy <i>string group number</i>
Tree	group
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Group maximum rate
Context	configure qos hs-scheduler-policy <i>string group number rate (number keyword)</i>

Tree	rate
Range	1 to 100000
Default	max
Units	megabps
Options	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit for the policy
Context	configure qos hs-scheduler-policy <i>string</i> max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 100000
Default	max
Options	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

scheduling-class [[class-id](#)] *number*

Synopsis	Enter the scheduling-class list instance
Context	configure qos hs-scheduler-policy <i>string</i> scheduling-class <i>number</i>
Tree	scheduling-class
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[class-id] *number*

Synopsis	Class identifier for the HS scheduler policy scheduling class
Context	configure qos hs-scheduler-policy <i>string</i> scheduling-class <i>number</i>
Tree	scheduling-class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

group

Synopsis Enable the **group** context

Context **configure** qos hs-scheduler-policy *string* scheduling-class *number* group

Tree [group](#)

Notes The following elements are part of a choice: **group** or **rate**.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

group-id *number*

Synopsis Associated group associated with this scheduling class

Context **configure** qos hs-scheduler-policy *string* scheduling-class *number* group group-id *number*

Tree [group-id](#)

Range 1

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

weight *number*

Synopsis Weight associated with this scheduling class

Context **configure** qos hs-scheduler-policy *string* scheduling-class *number* group weight *number*

Tree [weight](#)

Range 1 to 127

Default 1

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit

Context	configure qos hs-scheduler-policy <i>string scheduling-class number rate (number keyword)</i>
Tree	rate
Range	1 to 100000
Default	max
Units	kilobps
Options	max
Notes	The following elements are part of a choice: group or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hw-agg-shaper-scheduler-policy [[name](#)] *string*

Synopsis	Enter the hw-agg-shaper-scheduler-policy list instance
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i>
Tree	hw-agg-shaper-scheduler-policy
Description	Commands in this context configure the attributes of a hardware aggregate shaper scheduler policy.
Max. Instances	127
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

[name] *string*

Synopsis	Name of the hardware aggregate shaper scheduler policy
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i>
Tree	hw-agg-shaper-scheduler-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

congestion-threshold *number*

Synopsis	Congestion threshold of the scheduler
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Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i> congestion-threshold <i>number</i>
Tree	congestion-threshold
Description	This command configures the congestion threshold for the hardware aggregate shaper scheduler policy, which, if exceeded, triggers the hardware aggregate scheduler algorithm. The value is expressed as a percentage of the scheduler rate.
Range	0 to 100
Default	90
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

description *string*

Synopsis	Description of the hardware aggregate shaper scheduler policy
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

group [*group-name*] *string*

Synopsis	Add a list entry for group
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i> group <i>string</i>
Tree	group
Max. Instances	6
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

[group-name] *string*

Synopsis	Name of the HW aggregate shaper scheduler policy group
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i> group <i>string</i>
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 21.7.R1
Platforms 7750 SR-1, 7750 SR-s

max-percent-rate *decimal-number*

Synopsis Maximum frame-based bandwidth percentage
Context **configure qos hw-agg-shaper-scheduler-policy** *string* **max-percent-rate** *decimal-number*
Tree **max-percent-rate**
Description This command configures the rate of the hardware aggregate shaper scheduler expressed as a percentage of the port rate.
Range 0.01 to 100.00
Notes The following elements are part of a choice: **max-percent-rate** or **max-rate**.
Introduced 21.7.R1
Platforms 7750 SR-1, 7750 SR-s

max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit
Context **configure qos hw-agg-shaper-scheduler-policy** *string* **max-rate** (*number* | *keyword*)
Tree **max-rate**
Range 1 to 6400000000
Default max
Units kilobps
Options max
Notes The following elements are part of a choice: **max-percent-rate** or **max-rate**.
Introduced 21.7.R1
Platforms 7750 SR-1, 7750 SR-s

monitor-threshold *number*

Synopsis Monitor threshold for the scheduler
Context **configure qos hw-agg-shaper-scheduler-policy** *string* **monitor-threshold** *number*
Tree **monitor-threshold**
Description This command configures the monitor threshold for the hardware aggregate shaper scheduler policy, which is used for egress scheduler monitoring. The value is expressed

as a percentage of the scheduler rate, which is considered as a limit for determining congestion.

Range	0 to 100
Default	0
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

sched-class [*class-id*] *number*

Synopsis	Enter the sched-class list instance
Context	configure qos hw-aggr-shaper-scheduler-policy <i>string</i> sched-class <i>number</i>
Tree	sched-class
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

[class-id] *number*

Synopsis	Scheduling class ID for the scheduler policy
Context	configure qos hw-aggr-shaper-scheduler-policy <i>string</i> sched-class <i>number</i>
Tree	sched-class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

group *reference*

Synopsis	Group associated with the scheduling class
Context	configure qos hw-aggr-shaper-scheduler-policy <i>string</i> sched-class <i>number</i> group <i>reference</i>
Tree	group
Description	This command assigns the specified scheduling class to a group within a hardware aggregate shaper scheduler policy.
Reference	configure qos hw-aggr-shaper-scheduler-policy <i>string</i> group <i>string</i>
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

weight *number*

Synopsis	Weight associated with the scheduling class
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i> sched-class <i>number</i> weight <i>number</i>
Tree	weight
Range	1 to 8
Default	1
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

match-list

Synopsis	Enter the match-list context
Context	configure qos match-list
Tree	match-list
Introduced	16.0.R1
Platforms	All

ip-prefix-list [*prefix-list-name*] *string*

Synopsis	Enter the ip-prefix-list list instance
Context	configure qos match-list ip-prefix-list <i>string</i>
Tree	ip-prefix-list
Max. Instances	512
Introduced	16.0.R1
Platforms	All

[*prefix-list-name*] *string*

Synopsis	IP prefix list name
Context	configure qos match-list ip-prefix-list <i>string</i>
Tree	ip-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R3
Platforms All

description *string*

Synopsis Text description
Context **configure qos match-list ip-prefix-list** *string description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

prefix [[ip-prefix](#)] *string*

Synopsis Add a list entry for **prefix**
Context **configure qos match-list ip-prefix-list** *string prefix string*
Tree [prefix](#)
Max. Instances 256
Introduced 16.0.R1
Platforms All

[ip-prefix] *string*

Synopsis IPv4 address prefix
Context **configure qos match-list ip-prefix-list** *string prefix string*
Tree [prefix](#)
Notes This element is part of a list key.
Introduced 16.0.R3
Platforms All

ipv6-prefix-list [[prefix-list-name](#)] *string*

Synopsis Enter the **ipv6-prefix-list** list instance
Context **configure qos match-list ipv6-prefix-list** *string*

Tree	ipv6-prefix-list
Max. Instances	128
Introduced	16.0.R4
Platforms	All

[prefix-list-name] string

Synopsis	IP prefix list name
Context	configure qos match-list ipv6-prefix-list string
Tree	ipv6-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

description string

Synopsis	Text description
Context	configure qos match-list ipv6-prefix-list string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

prefix [ipv6-prefix] string

Synopsis	Add a list entry for prefix
Context	configure qos match-list ipv6-prefix-list string prefix string
Tree	prefix
Max. Instances	128
Introduced	16.0.R4
Platforms	All

[ipv6-prefix] string

Synopsis	Ipv6 address prefix
Context	configure qos match-list ipv6-prefix-list string prefix string
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port-list [port-list-name] string

Synopsis	Enter the port-list list instance
Context	configure qos match-list port-list string
Tree	port-list
Max. Instances	16
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[port-list-name] string

Synopsis	Port list name
Context	configure qos match-list port-list string
Tree	port-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis	Text description
Context	configure qos match-list port-list string description string
Tree	description
String Length	1 to 80
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port [*value*] *number*

Synopsis Add a list entry for **port**
Context **configure qos match-list port-list** *string port number*
Tree [port](#)
Description Commands in this context specify ports for a port match list.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[value] *number*

Synopsis Port number
Context **configure qos match-list port-list** *string port number*
Tree [port](#)
Range 0 to 65535
Notes This element is part of a list key.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range [*start*] *number end number*

Synopsis Add a list entry for **range**
Context **configure qos match-list port-list** *string range number end number*
Tree [range](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[start] *number*

Synopsis Lower bound for the port range
Context **configure qos match-list port-list** *string range number end number*
Tree [range](#)
Range 0 to 65534

Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end number

Synopsis	Upper bound for the port range
Context	configure qos match-list port-list string range number end number
Tree	range
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mc-fr-profile-egress [mc-fr-egress-prof-index] number

Synopsis	Enter the mc-fr-profile-egress list instance
Context	configure qos mc-fr-profile-egress number
Tree	mc-fr-profile-egress
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[mc-fr-egress-prof-index] number

Synopsis	Egress MultiClass Frame Relay Profile Index
Context	configure qos mc-fr-profile-egress number
Tree	mc-fr-profile-egress
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

class [*class-id*] *number*

Synopsis	Enter the class list instance
Context	configure qos mc-fr-profile-egress <i>number class number</i>
Tree	<i>class</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[class-id] *number*

Synopsis	Frame-relay egress class per multi-class frame-relay egress profile
Context	configure qos mc-fr-profile-egress <i>number class number</i>
Tree	<i>class</i>
Range	0 to 3
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-queue-size *number*

Synopsis	Buffer queue size
Context	configure qos mc-fr-profile-egress <i>number class number max-queue-size number</i>
Tree	<i>max-queue-size</i>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mir *number*

Synopsis	Minimum information rate (MIR) as percentage
Context	configure qos mc-fr-profile-egress <i>number class number mir number</i>
Tree	<i>mir</i>
Range	1 to 100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight *number*

Synopsis	Weight of this multiclass class as a percentage
Context	configure qos mc-fr-profile-egress <i>number class number weight number</i>
Tree	weight
Range	1 to 100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure qos mc-fr-profile-egress <i>number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mc-fr-profile-ingress [[mc-fr-ingress-prof-index](#)] *number*

Synopsis	Enter the mc-fr-profile-ingress list instance
Context	configure qos mc-fr-profile-ingress <i>number</i>
Tree	mc-fr-profile-ingress
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[[mc-fr-ingress-prof-index](#)] *number*

Synopsis	Index of the ingress MultiClass Frame Relay profile
Context	configure qos mc-fr-profile-ingress <i>number</i>
Tree	mc-fr-profile-ingress
Range	1 to 65535
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

class [*class-id*] *number*

Synopsis Enter the **class** list instance
Context **configure qos mc-fr-profile-ingress** *number class number*
Tree [class](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[class-id] *number*

Synopsis Frame-relay ingress class per multi-class frame-relay ingress profile
Context **configure qos mc-fr-profile-ingress** *number class number*
Tree [class](#)
Range 0 to 3
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reassembly-timeout *number*

Synopsis Reassembly timeout for a specific frame-relay multi-class ingress class
Context **configure qos mc-fr-profile-ingress** *number class number reassembly-timeout number*
Tree [reassembly-timeout](#)
Range 1 to 1000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
Context **configure qos mc-fr-profile-ingress** *number description string*
Tree [description](#)

String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-auto-id

Synopsis Enter the **md-auto-id** context
Context **configure qos md-auto-id**
Tree [md-auto-id](#)
Introduced 16.0.R1
Platforms All

qos-policy-id-range

Synopsis Enable the **qos-policy-id-range** context
Context **configure qos md-auto-id qos-policy-id-range**
Tree [qos-policy-id-range](#)
Introduced 16.0.R1
Platforms All

end number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Upper bound of the ID range
Context **configure qos md-auto-id qos-policy-id-range end number**
Tree [end](#)
Range 2 to 65535
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

start *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	configure qos md-auto-id qos-policy-id-range start <i>number</i>
Tree	start
Range	2 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mlppp-profile-egress [**mc-mlppp-egress-prof-index**] *number*

Synopsis	Enter the mlppp-profile-egress list instance
Context	configure qos mlppp-profile-egress <i>number</i>
Tree	mlppp-profile-egress
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[mc-mlppp-egress-prof-index] *number*

Synopsis	Index of the egress MultiClass MLPPP profile
Context	configure qos mlppp-profile-egress <i>number</i>
Tree	mlppp-profile-egress
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

class [**class-id**] *number*

Synopsis	Enter the class list instance
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Context	configure qos mlppp-profile-egress <i>number class number</i>
Tree	class
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[class-id] *number*

Synopsis	Policy class
Context	configure qos mlppp-profile-egress <i>number class number</i>
Tree	class
Range	0 to 3
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-queue-size *number*

Synopsis	Buffer queue size
Context	configure qos mlppp-profile-egress <i>number class number max-queue-size number</i>
Tree	max-queue-size
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mir *number*

Synopsis	Minimum information rate (MIR) as percentage
Context	configure qos mlppp-profile-egress <i>number class number mir number</i>
Tree	mir
Range	1 to 100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight *number*

Synopsis	Weight of this multiclass class as a percentage
Context	configure qos mlppp-profile-egress <i>number</i> class <i>number</i> weight <i>number</i>
Tree	weight
Range	1 to 100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure qos mlppp-profile-egress <i>number</i> description <i>string</i>
Tree	description
String Length	0 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos mlppp-profile-egress <i>number</i> fc <i>keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[fc-name] *keyword*

Synopsis	Forwarding class name
Context	configure qos mlppp-profile-egress <i>number</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mlppp-class *number*

Synopsis	Mapping of the system forwarding class to the MLPPP classes
Context	configure qos mlppp-profile-egress <i>number</i> fc keyword mlppp-class <i>number</i>
Tree	mlppp-class
Range	0 to 3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mlppp-profile-ingress [[mc-mlppp-ingress-prof-index](#)] *number*

Synopsis	Enter the mlppp-profile-ingress list instance
Context	configure qos mlppp-profile-ingress <i>number</i>
Tree	mlppp-profile-ingress
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[[mc-mlppp-ingress-prof-index](#)] *number*

Synopsis	Index of the ingress MultiClass MLPPP profile
Context	configure qos mlppp-profile-ingress <i>number</i>
Tree	mlppp-profile-ingress
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

class [[class-id](#)] *number*

Synopsis	Enter the class list instance
Context	configure qos mlppp-profile-ingress <i>number</i> class <i>number</i>
Tree	class
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[class-id] *number*

Synopsis Policy class
Context **configure qos mlppp-profile-ingress** *number class number*
Tree [class](#)
Range 0 to 3
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reassemble-timeout *number*

Synopsis Reassembly timeout for this policy
Context **configure qos mlppp-profile-ingress** *number class number reassemble-timeout number*
Tree [reassemble-timeout](#)
Range 1 to 1000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
Context **configure qos mlppp-profile-ingress** *number description string*
Tree [description](#)
String Length 0 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

network [[network-policy-name](#)] *string*

Synopsis Enter the **network** list instance
Context **configure qos network** *string*
Tree [network](#)

Max. Instances	255
Introduced	16.0.R1
Platforms	All

[network-policy-name] string

Synopsis	QoS network policy name
Context	configure qos network string
Tree	network
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure qos network string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure qos network string egress
Tree	egress
Introduced	16.0.R1
Platforms	All

dscp [dscp-name] keyword

Synopsis	Enter the dscp list instance
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Context	configure qos network <i>string</i> egress dscp <i>keyword</i>
Tree	dscp
Introduced	16.0.R1
Platforms	All

[dscp-name] *keyword*

Synopsis	DSCP name to perform reclassification actions
Context	configure qos network <i>string</i> egress dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>string</i> egress dscp <i>keyword</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile to use for the ingressing traffic
Context	configure qos network <i>string</i> egress dscp <i>keyword</i> profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Notes	This element is mandatory.

Introduced 16.0.R1
Platforms All

fc [*fc-name*] *keyword*

Synopsis Enter the **fc** list instance
Context **configure qos network** *string egress fc keyword*
Tree **fc**
Introduced 16.0.R1
Platforms All

[fc-name] *keyword*

Synopsis Forwarding class name
Context **configure qos network** *string egress fc keyword*
Tree **fc**
Options be, l2, af, l1, h2, ef, h1, nc
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

de-mark

Synopsis Enable the **de-mark** context
Context **configure qos network** *string egress fc keyword de-mark*
Tree **de-mark**
Introduced 16.0.R1
Platforms All

force *number*

Synopsis DE value
Context **configure qos network** *string egress fc keyword de-mark force number*
Tree **force**
Range 0 to 1

Introduced 16.0.R1
Platforms All

dot1p-in-profile *number*

Synopsis Dot1p marking for in-profile marking
Context **configure qos network** *string egress fc keyword dot1p-in-profile number*
Tree [dot1p-in-profile](#)
Range 0 to 7
Introduced 16.0.R1
Platforms All

dot1p-out-profile *number*

Synopsis Dot1p marking for out-of-profile marking
Context **configure qos network** *string egress fc keyword dot1p-out-profile number*
Tree [dot1p-out-profile](#)
Range 0 to 7
Introduced 16.0.R1
Platforms All

dscp-in-profile *keyword*

Synopsis DSCP marking for in-profile marking
Context **configure qos network** *string egress fc keyword dscp-in-profile keyword*
Tree [dscp-in-profile](#)
Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced 16.0.R1
Platforms All

dscp-out-profile *keyword*

Synopsis DSCP marking for out-of-profile marking

Context	configure qos network <i>string</i> egress fc <i>keyword</i> dscp-out-profile <i>keyword</i>
Tree	dscp-out-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

lsp-exp-in-profile *number*

Synopsis	LSP-EXP marking for in-profile marking
Context	configure qos network <i>string</i> egress fc <i>keyword</i> lsp-exp-in-profile <i>number</i>
Tree	lsp-exp-in-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

lsp-exp-out-profile *number*

Synopsis	LSP-EXP marking for out-of-profile marking
Context	configure qos network <i>string</i> egress fc <i>keyword</i> lsp-exp-out-profile <i>number</i>
Tree	lsp-exp-out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure qos network <i>string</i> egress fc <i>keyword</i> port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

policer number

Synopsis	Policer to be used
Context	configure qos network <i>string</i> egress fc keyword port-redirect-group policer number
Tree	policer
Range	1 to 16
Introduced	16.0.R1
Platforms	All

queue number

Synopsis	Queue to be used
Context	configure qos network <i>string</i> egress fc keyword port-redirect-group queue number
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos network <i>string</i> egress ip-criteria
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] number

Synopsis	Enter the entry list instance
Context	configure qos network <i>string</i> egress ip-criteria entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	Entry ID for match criterion and corresponding action
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i>
Tree	entry
Description	This command uniquely identifies a match criterion and the corresponding action. Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> action fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> action port-redirect-group
Tree	port-redirect-group

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer *number*

Synopsis Policer ID to be used for the matched traffic
Context **configure qos network** *string* **egress ip-criteria entry** *number* **action port-redirect-group**
policer *number*
Tree **policer**
Range 1 to 16
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue *number*

Synopsis Queue to be used for post-policed traffic
Context **configure qos network** *string* **egress ip-criteria entry** *number* **action port-redirect-group**
queue *number*
Tree **queue**
Range 1 to 8
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis Profile reclassification action
Context **configure qos network** *string* **egress ip-criteria entry** *number* **action profile** *keyword*
Tree **profile**
Options in, out, exceed, inplus
Introduced 16.0.R1
Platforms All

type *keyword*

Synopsis Action for criteria entry
Context **configure qos network** *string* **egress ip-criteria entry** *number* **action type** *keyword*

Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> match dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network string egress ip-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Destination IPv4 address to match
Context	configure qos network string egress ip-criteria entry number match dst-ip address (<i>ipv4-address</i> <i>ipv4-prefix-with-host-bits</i>)
Tree	address
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Subnet mask
Context	configure qos network string egress ip-criteria entry number match dst-ip mask <i>string</i>
Tree	mask
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos network string egress ip-criteria entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
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Context	configure qos network <i>string egress ip-criteria entry number match dst-port eq number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos network <i>string egress ip-criteria entry number match dst-port gt number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Value 'less than' assigned as match condition
Context	configure qos network <i>string egress ip-criteria entry number match dst-port lt number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure qos network <i>string egress ip-criteria entry number match dst-port port-list reference</i>
Tree	port-list
Reference	configure qos match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network string egress ip-criteria entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network string egress ip-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network string egress ip-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment keyword

Synopsis	Fragmentation state as the match criterion
Context	configure qos network string egress ip-criteria entry number match fragment keyword

Tree	fragment
Description	This command configures fragmented or non-fragmented IP packets as a network QoS policy match criterion. When unconfigured, all packets match regardless of whether they are fragmented.
Options	false, true
Introduced	16.0.R1
Platforms	All

icmp-type *number*

Synopsis	ICMP type in the ICMP header of IPv4 packet to match
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> match icmp-type <i>number</i>
Tree	icmp-type
Description	This command configures matching on the ICMP type field in the ICMP header of an IPv4 packet as a network QoS match criterion. An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.
Range	0 to 255
Introduced	16.0.R1
Platforms	All

protocol (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network string egress ip-criteria entry number match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Source IPv4 address to match
Context	configure qos network string egress ip-criteria entry number match src-ip address (<i>ipv4-address</i> <i>ipv4-prefix-with-host-bits</i>)
Tree	address
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Subnet mask
Context	configure qos network string egress ip-criteria entry number match src-ip mask string
Tree	mask
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos network string egress ip-criteria entry number match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
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Context	configure qos network <i>string egress ip-criteria entry number match src-port eq number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos network <i>string egress ip-criteria entry number match src-port gt number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Value 'less than' assigned as match condition
Context	configure qos network <i>string egress ip-criteria entry number match src-port lt number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure qos network <i>string egress ip-criteria entry number match src-port port-list reference</i>
Tree	port-list
Reference	configure qos match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network string egress ip-criteria entry number match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network string egress ip-criteria entry number match src-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network string egress ip-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure qos network string egress ipv6-criteria

Tree	ipv6-criteria
Introduced	16.0.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	Entry ID for match criterion and corresponding action
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i>
Tree	entry
Description	This command uniquely identifies a match criterion and the corresponding action. Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> fc keyword
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer number

Synopsis	Policer ID to be used for the matched traffic
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> port-redirect-group policer number
Tree	policer
Range	1 to 16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue number

Synopsis	Queue to be used for post-policed traffic
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> port-redirect-group queue number
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis	Profile reclassification action
Context	configure qos network <i>string</i> <i>egress ipv6-criteria entry number action profile keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos network <i>string</i> <i>egress ipv6-criteria entry number action type keyword</i>
Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos network <i>string</i> <i>egress ipv6-criteria entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos network <i>string</i> <i>egress ipv6-criteria entry number match</i>
Tree	match
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos network string egress ipv6-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network string egress ipv6-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (ipv6-address | ipv6-prefix-with-host-bits)

Synopsis	Destination IPv6 address to match
Context	configure qos network string egress ipv6-criteria entry number match dst-ip address (ipv6-address ipv6-prefix-with-host-bits)
Tree	address
Introduced	16.0.R1
Platforms	All

mask string

Synopsis	Address mask
Context	configure qos network string egress ipv6-criteria entry number match dst-ip mask string
Tree	mask
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos network string egress ipv6-criteria entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos network string egress ipv6-criteria entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos network string egress ipv6-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Value 'less than' assigned as match condition
Context	configure qos network string egress ipv6-criteria entry number match dst-port lt number
Tree	lt

Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match dst-port port-list <i>reference</i>
Tree	port-list
Reference	configure qos match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of port range to match
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match dst-port range <i>end number</i>
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network string egress ipv6-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment keyword

Synopsis	Fragmentation state as the match criterion
Context	configure qos network string egress ipv6-criteria entry number match fragment keyword
Tree	fragment
Description	This command configures fragmented or non-fragmented IPv6 packets as a network QoS policy match criterion. When unconfigured, all packets match regardless of whether they are fragmented.
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

icmp-type number

Synopsis	ICMPv6 type in ICMPv6 header of IPv6 packet to match
Context	configure qos network string egress ipv6-criteria entry number match icmp-type number
Tree	icmp-type
Description	This command configures matching on the ICMPv6 type field in the ICMPv6 header of an IPv6 packet as a network QoS match criterion. An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.
Range	0 to 255
Introduced	16.0.R1
Platforms	All

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	Source IPv6 address to match
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match src-ip address (<i>ipv6-address</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	address
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Address mask
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match src-ip mask <i>string</i>
Tree	mask
Introduced	16.0.R1

Platforms All

src-port

Synopsis Enter the **src-port** context
Context **configure qos network string egress ipv6-criteria entry number match src-port**
Tree **src-port**
Introduced 16.0.R1
Platforms All

eq number

Synopsis Value 'equal to' assigned as match condition
Context **configure qos network string egress ipv6-criteria entry number match src-port eq number**
Tree **eq**
Range 0 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range.**
Introduced 16.0.R1
Platforms All

gt number

Synopsis Value 'greater than' assigned as match condition
Context **configure qos network string egress ipv6-criteria entry number match src-port gt number**
Tree **gt**
Range 0 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range.**
Introduced 16.0.R1
Platforms All

lt number

Synopsis Value 'less than' assigned as match condition
Context **configure qos network string egress ipv6-criteria entry number match src-port lt number**

Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	configure qos network <i>string</i> egress ipv6-criteria entry number match src-port port-list reference
Tree	port-list
Reference	configure qos match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network <i>string</i> egress ipv6-criteria entry number match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>string</i> egress ipv6-criteria entry number match src-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>string</i> egress ipv6-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

prec [prec-value] number

Synopsis	Enter the prec list instance
Context	configure qos network <i>string</i> egress prec number
Tree	prec
Introduced	16.0.R1
Platforms	All

[prec-value] number

Synopsis	Precedence value for which mapping is performed
Context	configure qos network <i>string</i> egress prec number
Tree	prec
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure qos network <i>string</i> egress prec number fc keyword
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.

Introduced 16.0.R1
Platforms All

profile *keyword*

Synopsis Default profile to use for the ingressing traffic
Context **configure qos network** *string egress prec number profile keyword*
Tree [profile](#)
Options in, out, exceed, inplus
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

remark-trusted

Synopsis Enable the **remark-trusted** context
Context **configure qos network** *string egress remark-trusted*
Tree [remark-trusted](#)
Introduced 16.0.R1
Platforms All

force-egress-marking *boolean*

Synopsis Remark DSCP bits in the internal IP header
Context **configure qos network** *string egress remark-trusted force-egress-marking boolean*
Tree [force-egress-marking](#)
Default false
Introduced 16.0.R1
Platforms All

ingress

Synopsis Enter the **ingress** context
Context **configure qos network** *string ingress*
Tree [ingress](#)

Introduced 16.0.R1
Platforms All

default-action

Synopsis Enter the **default-action** context
Context **configure qos network** *string* **ingress default-action**
Tree **default-action**
Introduced 16.0.R1
Platforms All

fc keyword

Synopsis Default forwarding class to use while classifying the ingress traffic
Context **configure qos network** *string* **ingress default-action fc keyword**
Tree **fc**
Default be
Options be, l2, af, l1, h2, ef, h1, nc
Introduced 16.0.R1
Platforms All

profile keyword

Synopsis Default profile for the ingressing traffic
Context **configure qos network** *string* **ingress default-action profile keyword**
Tree **profile**
Default out
Options in, out, exceed, inplus
Introduced 16.0.R1
Platforms All

dot1p [dot1p-value] number

Synopsis Enter the **dot1p** list instance
Context **configure qos network** *string* **ingress dot1p number**

Tree	dot1p
Introduced	16.0.R1
Platforms	All

[dot1p-value] *number*

Synopsis	Dot1p value to match in the packet
Context	configure qos network <i>string</i> ingress dot1p <i>number</i>
Tree	dot1p
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>string</i> ingress dot1p <i>number</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile to be used for the ingressing traffic
Context	configure qos network <i>string</i> ingress dot1p <i>number</i> profile <i>keyword</i>
Tree	profile
Options	in, out, de, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

dscp [**dscp-name**] *keyword*

Synopsis	Enter the dscp list instance
Context	configure qos network <i>string ingress dscp keyword</i>
Tree	dscp
Introduced	16.0.R1
Platforms	All

[dscp-name] *keyword*

Synopsis	DSCP associated with the forwarding class
Context	configure qos network <i>string ingress dscp keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>string ingress dscp keyword fc keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile to use for the ingress traffic
Context	configure qos network <i>string ingress dscp keyword profile keyword</i>
Tree	profile

Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos network <i>string</i> ingress fc <i>keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[fc-name] *keyword*

Synopsis	Forwarding class name
Context	configure qos network <i>string</i> ingress fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure qos network <i>string</i> ingress fc <i>keyword</i> fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

broadcast-policer *number*

Synopsis	Policer to be used for broadcast traffic
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Context	configure qos network <i>string</i> ingress fc <i>keyword</i> fp-redirect-group broadcast-policer <i>number</i>
Tree	broadcast-policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

multicast-policer *number*

Synopsis	Policer to be used for multicast traffic
Context	configure qos network <i>string</i> ingress fc <i>keyword</i> fp-redirect-group multicast-policer <i>number</i>
Tree	multicast-policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer *number*

Synopsis	Policer to be used for unicast traffic
Context	configure qos network <i>string</i> ingress fc <i>keyword</i> fp-redirect-group policer <i>number</i>
Tree	policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

unknown-policer *number*

Synopsis	Policer to be used for unknown traffic
Context	configure qos network <i>string</i> ingress fc <i>keyword</i> fp-redirect-group unknown-policer <i>number</i>
Tree	unknown-policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos network <i>string</i> ingress ip-criteria
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

entry [**entry-id**] *number*

Synopsis	Enter the entry list instance
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	Network Ingress IP Criteria Entry Index
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> action fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile keyword

Synopsis	Default profile for the matching traffic
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> action profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Action for criteria entry
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> action type <i>keyword</i>
Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos network string ingress ip-criteria entry number match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP to be used as network QoS policy match criterion
Context	configure qos network string ingress ip-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network string ingress ip-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Destination IPv4 address for network QoS policy match
Context	configure qos network string ingress ip-criteria entry number match dst-ip address (<i>ipv4-address</i> <i>ipv4-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1

Platforms All

ip-prefix-list *reference*

Synopsis IPv4 prefix list containing IPv4 prefixes to match

Context **configure qos network string ingress ip-criteria entry number match dst-ip ip-prefix-list reference**

Tree [ip-prefix-list](#)

Reference **configure qos match-list ip-prefix-list string**

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R4

Platforms All

mask *string*

Synopsis IP address to match with source IP of the packet

Context **configure qos network string ingress ip-criteria entry number match dst-ip mask string**

Tree [mask](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

dst-port

Synopsis Enter the **dst-port** context

Context **configure qos network string ingress ip-criteria entry number match dst-port**

Tree [dst-port](#)

Introduced 16.0.R1

Platforms All

eq *number*

Synopsis Exact destination port as the match criterion

Context **configure qos network string ingress ip-criteria entry number match dst-port eq number**

Tree [eq](#)

Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than destination port value as match criterion
Context	configure qos network string ingress ip-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than destination port value as the match criterion
Context	configure qos network string ingress ip-criteria entry number match dst-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Port list used as match criterion
Context	configure qos network string ingress ip-criteria entry number match dst-port port-list reference
Tree	port-list
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	configure qos match-list port-list string

Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network string ingress ip-criteria entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network string ingress ip-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network string ingress ip-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment keyword

Synopsis	Fragmentation state as the match criterion
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Context	configure qos network <i>string</i> ingress ip-criteria entry number match fragment keyword
Tree	fragment
Options	false, true
Introduced	16.0.R1
Platforms	All

protocol (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>string</i> ingress ip-criteria entry number match protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Source IPv4 address for network QoS policy match
Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-ip address (<i>ipv4-address</i> <i>ipv4-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IPv4 prefix list containing IPv4 prefixes to match
Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-ip ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list string
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact source port as the match criterion
Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .

Introduced 16.0.R1
Platforms All

gt *number*

Synopsis Greater than source port value as match criterion
Context **configure qos network** *string* **ingress ip-criteria entry** *number* **match src-port** **gt** *number*
Tree [gt](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced 16.0.R1
Platforms All

lt *number*

Synopsis Less than destination port value as the match criterion
Context **configure qos network** *string* **ingress ip-criteria entry** *number* **match src-port** **lt** *number*
Tree [lt](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced 16.0.R1
Platforms All

port-list *reference*

Synopsis Port list used as match criterion
Context **configure qos network** *string* **ingress ip-criteria entry** *number* **match src-port** **port-list** *reference*
Tree [port-list](#)
Description This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference **configure qos match-list** **port-list** *string*
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis Enter the **range** context

Context **configure qos network** *string* **ingress ip-criteria entry number match src-port range**

Tree [range](#)

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 16.0.R1

Platforms All

end number

Synopsis Upper bound of port range to match

Context **configure qos network** *string* **ingress ip-criteria entry number match src-port range end number**

Tree [end](#)

Range 0 to 65535

Introduced 16.0.R1

Platforms All

start number

Synopsis Lower bound of port range to match

Context **configure qos network** *string* **ingress ip-criteria entry number match src-port range start number**

Tree [start](#)

Range 0 to 65535

Introduced 16.0.R1

Platforms All

ipv6-criteria

Synopsis Enter the **ipv6-criteria** context

Context **configure qos network** *string* **ingress ipv6-criteria**

Tree [ipv6-criteria](#)

Introduced 16.0.R1
Platforms All

entry [*entry-id*] *number*

Synopsis Enter the **entry** list instance
Context **configure qos network** *string* **ingress ipv6-criteria entry number**
Tree **entry**
Introduced 16.0.R1
Platforms All

[entry-id] *number*

Synopsis Network Ingress IPv6 Criteria Entry Index
Context **configure qos network** *string* **ingress ipv6-criteria entry number**
Tree **entry**
Range 1 to 65535
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

action

Synopsis Enter the **action** context
Context **configure qos network** *string* **ingress ipv6-criteria entry number action**
Tree **action**
Introduced 16.0.R1
Platforms All

fc *keyword*

Synopsis Forwarding class
Context **configure qos network** *string* **ingress ipv6-criteria entry number action fc keyword**
Tree **fc**
Options be, l2, af, l1, h2, ef, h1, nc

Introduced 16.0.R1
Platforms All

profile *keyword*

Synopsis Default profile for the matching traffic
Context **configure qos network** *string* **ingress ipv6-criteria entry number action profile** *keyword*
Tree **profile**
Options in, out, exceed, inplus
Introduced 16.0.R1
Platforms All

type *keyword*

Synopsis Action for criteria entry
Context **configure qos network** *string* **ingress ipv6-criteria entry number action type** *keyword*
Tree **type**
Default ignore-match
Options ignore-match, accept
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure qos network** *string* **ingress ipv6-criteria entry number description** *string*
Tree **description**
String Length 1 to 80
Introduced 16.0.R1
Platforms All

match

Synopsis Enter the **match** context
Context **configure qos network** *string* **ingress ipv6-criteria entry number match**

Tree	match
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (ipv6-address | ipv6-prefix-with-host-bits)

Synopsis	Destination IPv6 address for network QoS policy match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-ip address (ipv6-address ipv6-prefix-with-host-bits)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list containing IPv6 prefixes to match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-ip ipv6-prefix-list reference
Tree	ipv6-prefix-list
Reference	configure qos match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact destination port as the match criterion
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-port eq number
Tree	eq
Range	0 to 65535

Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than destination port value as match criterion
Context	configure qos network string ingress ipv6-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than destination port value as the match criterion
Context	configure qos network string ingress ipv6-criteria entry number match dst-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Port list used as match criterion
Context	configure qos network string ingress ipv6-criteria entry number match dst-port port-list reference
Tree	port-list
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	configure qos match-list port-list string

Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network string ingress ipv6-criteria entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network string ingress ipv6-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network string ingress ipv6-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment keyword

Synopsis	Fragmentation state as the match criterion
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Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match fragment <i>keyword</i>
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	Source IPv6 address for network QoS policy match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match src-ip address (<i>ipv6-address</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1

Platforms All

ipv6-prefix-list *reference*

Synopsis IPv6 prefix list containing IPv6 prefixes to match

Context **configure qos network** *string* **ingress ipv6-criteria entry** *number* **match src-ip** **ipv6-prefix-list** *reference*

Tree [ipv6-prefix-list](#)

Reference **configure qos match-list** **ipv6-prefix-list** *string*

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 16.0.R4

Platforms All

mask *string*

Synopsis IP address to match with source IP of the packet

Context **configure qos network** *string* **ingress ipv6-criteria entry** *number* **match src-ip** **mask** *string*

Tree [mask](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 16.0.R1

Platforms All

src-port

Synopsis Enter the **src-port** context

Context **configure qos network** *string* **ingress ipv6-criteria entry** *number* **match src-port**

Tree [src-port](#)

Introduced 16.0.R1

Platforms All

eq *number*

Synopsis Exact source port as the match criterion

Context **configure qos network** *string* **ingress ipv6-criteria entry** *number* **match src-port** **eq** *number*

Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than source port value as match criterion
Context	configure qos network string ingress ipv6-criteria entry number match src-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than destination port value as the match criterion
Context	configure qos network string ingress ipv6-criteria entry number match src-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Port list used as match criterion
Context	configure qos network string ingress ipv6-criteria entry number match src-port port-list reference
Tree	port-list

Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	configure qos match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network <i>string</i> ingress ipv6-criteria entry <i>number</i> match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry <i>number</i> match src-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry <i>number</i> match src-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

ler-use-dscp *boolean*

Synopsis	Honor the DSCP markings instead of the LSP-EXP bits
Context	configure qos network <i>string</i> ingress ler-use-dscp <i>boolean</i>
Tree	ler-use-dscp
Default	false
Introduced	16.0.R1
Platforms	All

lsp-exp [**lsp-exp-value**] *number*

Synopsis	Enter the lsp-exp list instance
Context	configure qos network <i>string</i> ingress lsp-exp <i>number</i>
Tree	lsp-exp
Introduced	16.0.R1
Platforms	All

[lsp-exp-value] *number*

Synopsis	Value to assign the unique MPLS LSP EXP value that will match the lsp-exp rule
Context	configure qos network <i>string</i> ingress lsp-exp <i>number</i>
Tree	lsp-exp
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>string</i> ingress lsp-exp <i>number</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

profile *keyword*

Synopsis Default profile to use for the ingressing traffic

Context **configure** qos network *string* ingress lsp-exp *number* profile *keyword*

Tree profile

Options in, out, exceed, inplus

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

policy-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis QoS network policy ID

Context **configure** qos network *string* policy-id *number*

Tree policy-id

Description This command specifies the QoS network policy ID and uniquely identifies the policy on the router.

Network **policy-id 1** exists as the default policy that is applied to all network interfaces by default. The network policy-id 1 cannot be modified or deleted. It defines the default DSCP-to-FC mapping and MPLS EXP-to-FC mapping for the ingress. For the egress, it defines forwarding classes that represent individual queues and the packet marking criteria.

Network **policy-id 1** exists as the default policy that is applied to all network ports by default. This default policy cannot be modified or deleted. It defines the default DSCP-to-FC mapping and default unicast meters for ingress IP traffic. For the egress, it defines the forwarding class to dot1p and DSCP values and the packet marking criteria.

If a new network policy is created (for instance, **policy-id 3**), only the default action and egress forwarding class parameters are identical to the default policy. A new network policy does not contain the default DSCP-to-FC and MPLS-EXP-to-FC mapping for network QoS policy of type **ip-interface** or the DSCP-to-FC mapping (for network QoS policy of type **port**). The default network policy can be copied to create a new network policy that includes the default ingress DSCP-to-FC and MPLS EXP-to-FC mapping (as appropriate).

Range 1 to 65535

Introduced 16.0.R1
Platforms All

scope *keyword*

Synopsis Scope of the policy
Context **configure qos network** *string scope keyword*
Tree [scope](#)
Default template
Options exclusive, template
Introduced 16.0.R1
Platforms All

network-queue [[network-queue-policy](#)] *string*

Synopsis Enter the **network-queue** list instance
Context **configure qos network-queue** *string*
Tree [network-queue](#)
Max. Instances 255
Introduced 16.0.R1
Platforms All

[network-queue-policy] *string*

Synopsis Name for network queue policy
Context **configure qos network-queue** *string*
Tree [network-queue](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

description *string*

Synopsis	Text description
Context	configure qos network-queue <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

fc [[fc-name](#)] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos network-queue <i>string fc keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class name
Context	configure qos network-queue <i>string fc keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multicast-queue *reference*

Synopsis	Multicast queue for packets in this forwarding class
Context	configure qos network-queue <i>string fc keyword multicast-queue reference</i>
Tree	multicast-queue
Reference	configure qos network-queue <i>string queue number</i>
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue for packets in this forwarding class
Context	configure qos network-queue <i>string fc keyword queue reference</i>
Tree	queue
Reference	configure qos network-queue <i>string queue number</i>
Introduced	16.0.R1
Platforms	All

hs-attachment-policy *reference*

Synopsis	HS attachment policy applied
Context	configure qos network-queue <i>string hs-attachment-policy reference</i>
Tree	hs-attachment-policy
Reference	configure qos hs-attachment-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [[group-id](#)] *number*

Synopsis	Enter the hs-wrr-group list instance
Context	configure qos network-queue <i>string hs-wrr-group number</i>
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[[group-id](#)] *number*

Synopsis	HS WRR group identifier
Context	configure qos network-queue <i>string hs-wrr-group number</i>
Tree	hs-wrr-group
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos network-queue <i>string</i> hs-wrr-group <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos network-queue <i>string</i> hs-wrr-group <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Weight of scheduling class
Context	configure qos network-queue <i>string</i> hs-wrr-group <i>number</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *number*

Synopsis	PIR rate
Context	configure qos network-queue <i>string</i> hs-wrr-group <i>number</i> rate <i>number</i>
Tree	rate
Range	1 to 100
Default	100

Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

queue [queue-id] *number*

Synopsis	Enter the queue list instance
Context	configure qos network-queue <i>string queue number</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *number*

Synopsis	Queue identifier
Context	configure qos network-queue <i>string queue number</i>
Tree	queue
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos network-queue <i>string queue number adaptation-rule</i>
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos network-queue <i>string queue number adaptation-rule cir keyword</i>
Tree	cir

Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

fir keyword

Synopsis	Constraint used when deriving the operational FIR value
Context	configure qos network-queue <i>string</i> queue <i>number</i> adaptation-rule fir <i>keyword</i>
Tree	fir
Default	closest
Options	max, min, closest
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos network-queue <i>string</i> queue <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure qos network-queue <i>string</i> queue <i>number</i> avg-frame-overhead <i>decimal-number</i>
Tree	avg-frame-overhead
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

cbs *decimal-number*

Synopsis	Reserved buffer space for the queue
Context	configure qos network-queue <i>string queue number cbs decimal-number</i>
Tree	cbs
Range	0.00 to 100.00
Units	centipercen
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos network-queue <i>string queue number drop-tail</i>
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure qos network-queue <i>string queue number drop-tail low</i>
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number | keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos network-queue <i>string queue number drop-tail low percent-reduction-from-mbs (number keyword)</i>
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto

Introduced 16.0.R1
Platforms All

hs-alt-port-class-pool *boolean*

Synopsis Use HS alternate class port pool buffer for traffic
Context **configure qos network-queue** *string queue number hs-alt-port-class-pool boolean*
Tree [hs-alt-port-class-pool](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

hs-class-weight *number*

Synopsis Scheduling class weight
Context **configure qos network-queue** *string queue number hs-class-weight number*
Tree [hs-class-weight](#)
Range 1 | 2 | 4 | 8
Default 1
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

hs-mbs *decimal-number*

Synopsis Percentage of buffer space allowed for the HS queue
Context **configure qos network-queue** *string queue number hs-mbs decimal-number*
Tree [hs-mbs](#)
Range 0.00 to 100.00
Default 100.00
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

hs-wred-queue

Synopsis Enter the **hs-wred-queue** context

Context	configure qos network-queue <i>string queue number</i> hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy reference

Synopsis	Slope policy name
Context	configure qos network-queue <i>string queue number</i> hs-wred-queue <i>policy reference</i>
Tree	policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight number

Synopsis	Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
Context	configure qos network-queue <i>string queue number</i> hs-wrr-weight <i>number</i>
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs decimal-number

Synopsis	Percentage of buffer space allowed for the queue
Context	configure qos network-queue <i>string queue number</i> mbs <i>decimal-number</i>
Tree	mbs
Range	0.00 to 100.00
Units	centipercents
Introduced	16.0.R1
Platforms	All

multipoint *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Apply as a multicast queue
Context	configure qos network-queue <i>string queue number multipoint boolean</i>
Tree	multipoint
Introduced	16.0.R1
Platforms	All

port-parent

Synopsis	Enable the port-parent context
Context	configure qos network-queue <i>string queue number port-parent</i>
Tree	port-parent
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	configure qos network-queue <i>string queue number port-parent cir-level number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight to receive bandwidth at the within-CIR level
Context	configure qos network-queue <i>string queue number port-parent cir-weight number</i>
Tree	cir-weight
Range	0 to 100
Default	0

Introduced 16.0.R1
Platforms All

level *number*

Synopsis Port priority level for above-CIR behavior
Context **configure qos network-queue** *string queue number port-parent level number*
Tree [level](#)
Range 1 to 8
Default 1
Introduced 16.0.R1
Platforms All

weight *number*

Synopsis Weight that this queue uses to receive bandwidth from the port level scheduler
Context **configure qos network-queue** *string queue number port-parent weight number*
Tree [weight](#)
Range 0 to 100
Default 1
Introduced 16.0.R1
Platforms All

queue-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Priority that this queue receives from the hardware level schedulers
Context **configure qos network-queue** *string queue number queue-type keyword*
Tree [queue-type](#)
Default auto-expedited
Options expedited, auto-expedited, best-effort
Introduced 16.0.R1
Platforms All

rate

Synopsis	Enter the rate context
Context	configure qos network-queue <i>string queue number rate</i>
Tree	rate
Introduced	16.0.R1
Platforms	All

cir number

Synopsis	CIR percentage rate
Context	configure qos network-queue <i>string queue number rate cir number</i>
Tree	cir
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

fir number

Synopsis	FIR percentage
Context	configure qos network-queue <i>string queue number rate fir number</i>
Tree	fir
Description	This command defines an additional percentage at which the system prioritizes the queue over other queues competing for the same bandwidth above that used by the CIR percentage.
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir number

Synopsis	PIR percentage rate
Context	configure qos network-queue <i>string queue number rate pir number</i>

Tree	pir
Range	1 to 100
Default	100
Units	percent
Introduced	16.0.R1
Platforms	All

policer-control-policy [[policer-control-policy-name](#)] *string*

Synopsis	Enter the policer-control-policy list instance
Context	configure qos policer-control-policy <i>string</i>
Tree	policer-control-policy
Max. Instances	2047
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-control-policy-name] *string*

Synopsis	Policer control policy name
Context	configure qos policer-control-policy <i>string</i>
Tree	policer-control-policy
Description	This command specifies the policer control policy name. Each policer control policy must be created with a unique policy name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure qos policer-control-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis Enter the **root** context
Context **configure qos policer-control-policy string root**
Tree **root**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-percent-rate *decimal-number*

Synopsis Maximum rate of the arbiter
Context **configure qos policer-control-policy string root max-percent-rate decimal-number**
Tree **max-percent-rate**
Range 0.01 to 100.00
Notes The following elements are part of a choice: **max-percent-rate** or **max-rate**.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit of the arbiter
Context **configure qos policer-control-policy string root max-rate (*number* | *keyword*)**
Tree **max-rate**
Range 1 to 6400000000
Default max
Options max
Notes The following elements are part of a choice: **max-percent-rate** or **max-rate**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure qos policer-control-policy <i>string</i> root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum separation between policer discard thresholds
Context	configure qos policer-control-policy <i>string</i> root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [[priority-level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure qos policer-control-policy <i>string</i> root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[[priority-level](#)] *number*

Synopsis	Priority level
Context	configure qos policer-control-policy <i>string</i> root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fixed-mbs *boolean*

Synopsis Consider cumulative buffer space to be fixed
Context **configure** qos policer-control-policy string root priority-mbs-thresholds priority number
fixed-mbs boolean
Tree fixed-mbs
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number | keyword*)

Synopsis Minimum amount of cumulative buffer space
Context **configure** qos policer-control-policy string root priority-mbs-thresholds priority number
mbs-contribution (*number | keyword*)
Tree mbs-contribution
Range 0 to 16777216
Default auto
Units bytes
Options auto
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-preferred *boolean*

Synopsis Provide a preference to consume PIR bucket tokens at a given priority level
Context **configure** qos policer-control-policy string root profile-preferred boolean
Tree profile-preferred
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

tier [*tier-id*] *number*

Synopsis	Enter the tier list instance
Context	configure qos policer-control-policy <i>string tier number</i>
Tree	<i>tier</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[tier-id] *number*

Synopsis	Tier for policer control policer arbiter
Context	configure qos policer-control-policy <i>string tier number</i>
Tree	<i>tier</i>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter [*arbiter-name*] *string*

Synopsis	Enter the arbiter list instance
Context	configure qos policer-control-policy <i>string tier number arbiter string</i>
Tree	<i>arbiter</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[arbiter-name] *string*

Synopsis	Arbiter name
Context	configure qos policer-control-policy <i>string tier number arbiter string</i>
Tree	<i>arbiter</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-parent

Synopsis	Enter the arbiter-parent context
Context	configure qos policer-control-policy string tier number arbiter string arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-name *string*

Synopsis	Arbiter name
Context	configure qos policer-control-policy string tier number arbiter string arbiter-parent arbiter-name string
Tree	arbiter-name
Description	This command specifies the arbiter name. In tier 1, the arbiter name is not allowed and only the system reversed name "root" is accepted. The specified arbiter name must exist within the policer control policy at tier 1 or the parent command fails. When a tiered arbiter is acting as a parent for another tiered arbiter, the parent arbiter cannot be removed from the policy. The child arbiter receives all bandwidth directly from its parent arbiter (that receives bandwidth from the root arbiter).
String Length	1 to 32
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Level the child arbiter uses on its parent
Context	configure qos policer-control-policy string tier number arbiter string arbiter-parent level number
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight *number*

Synopsis	Weight attribute at parent level applied to children
Context	configure qos policer-control-policy <i>string tier number arbiter string arbiter-parent weight number</i>
Tree	weight
Description	This command defines how multiple children at the same parent strict level compete when insufficient bandwidth exists on the parent for that level. Each child's weight is divided by the sum of the active children's weights and the result is multiplied by the available bandwidth. If a child cannot receive its entire weighted fair share of bandwidth due to a defined child rate limit, the remainder of its bandwidth is distributed between the other children based on their weights.
Range	1 to 100
Default	1
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure qos policer-control-policy <i>string tier number arbiter string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate *decimal-number*

Synopsis	Maximum rate of the arbiter
Context	configure qos policer-control-policy <i>string tier number arbiter string percent-rate decimal-number</i>
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: (percent-rate and reference-rate) or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 6400000000
Default	max
Options	max
Notes	The following elements are part of a choice: (percent-rate and reference-rate) or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> reference-rate <i>keyword</i>
Tree	reference-rate
Default	local-limit
Options	local-limit, reference-port-limit
Notes	The following elements are part of a choice: (percent-rate and reference-rate) or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-scheduler-policy [*name*] *string*

Synopsis	Enter the port-scheduler-policy list instance
Context	configure qos port-scheduler-policy <i>string</i>
Tree	port-scheduler-policy
Max. Instances	1023
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Port scheduler policy name
Context	configure qos port-scheduler-policy <i>string</i>
Tree	port-scheduler-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos port-scheduler-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dist-lag-rate-shared *boolean*

Synopsis	Share rates when the port is part of a LAG configured in distribute mode
Context	configure qos port-scheduler-policy <i>string</i> dist-lag-rate-shared <i>boolean</i>
Tree	dist-lag-rate-shared
Default	false
Introduced	16.0.R1
Platforms	All

group [[group-name](#)] *string*

Synopsis	Enter the group list instance
Context	configure qos port-scheduler-policy <i>string</i> group <i>string</i>
Tree	group
Max. Instances	8
Introduced	16.0.R1

Platforms All

[group-name] *string*

Synopsis Weighted scheduler group name
 Context **configure** qos port-scheduler-policy *string group string*
 Tree [group](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

monitor-threshold *number*

Synopsis Congestion monitoring threshold
 Context **configure** qos port-scheduler-policy *string group string monitor-threshold number*
 Tree [monitor-threshold](#)
 Description This command defines the congestion monitoring threshold for the desired monitoring entity under the port scheduler for per aggregate port scheduler rate, per individual level, and per group that is aggregating multiple levels.

The congestion threshold is specified as a percentage of the configured PIR for the entity for which congestion monitoring is desired. For example, if the configured PIR for level 1 is 100000 kb/s, and the monitoring threshold is set to 90%, an event where the offered rate is greater than 90,000 kb/s is recorded. This event is shown as part of the cumulative count of congestion threshold exceeds since the last clearing of the counters.

 Range 0 to 100
 Default 0
 Introduced 16.0.R1
 Platforms All

percent-rate

Synopsis Enter the **percent-rate** context
 Context **configure** qos port-scheduler-policy *string group string percent-rate*
 Tree [percent-rate](#)
 Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1
Platforms All

cir *decimal-number*

Synopsis Administrative CIR percent
Context **configure** qos port-scheduler-policy *string* group *string* percent-rate cir *decimal-number*
Tree [cir](#)
Range 0.00 to 100.00
Default 100.00
Introduced 16.0.R1
Platforms All

pir *decimal-number*

Synopsis Administrative PIR percent
Context **configure** qos port-scheduler-policy *string* group *string* percent-rate pir *decimal-number*
Tree [pir](#)
Range 0.01 to 100.00
Introduced 16.0.R1
Platforms All

rate

Synopsis Enter the **rate** context
Context **configure** qos port-scheduler-policy *string* group *string* rate
Tree [rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms All

cir (*number* | *keyword*)

Synopsis Administrative CIR
Context **configure** qos port-scheduler-policy *string* group *string* rate cir (*number* | *keyword*)

Tree	cir
Range	0 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos port-scheduler-policy <i>string</i> group <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

hqos-algorithm *keyword*

Synopsis	Port scheduler H-QoS algorithm
Context	configure qos port-scheduler-policy <i>string</i> hqos-algorithm <i>keyword</i>
Tree	hqos-algorithm
Description	This command configures the port scheduler H-QoS algorithm used to calculate the operational rates for the children connected to the port scheduler.
Default	default
Options	default, above-offered-allowance-control
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level [[level-id](#)] *number*

Synopsis	Enter the level list instance
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Context	configure qos port-scheduler-policy <i>string level number</i>
Tree	level
Introduced	16.0.R1
Platforms	All

[level-id] *number*

Synopsis	Priority level this port scheduler policy
Context	configure qos port-scheduler-policy <i>string level number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Associated group
Context	configure qos port-scheduler-policy <i>string level number group reference</i>
Tree	group
Reference	configure qos port-scheduler-policy <i>string group string</i>
Introduced	16.0.R1
Platforms	All

monitor-threshold *number*

Synopsis	Monitoring threshold of the configured rate
Context	configure qos port-scheduler-policy <i>string level number monitor-threshold number</i>
Tree	monitor-threshold
Description	This command specifies the configured rate as a percentage. If the offered rate exceeds the configured threshold, a counter monitoring the threshold is increased.
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos port-scheduler-policy <i>string level number percent-rate</i>
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos port-scheduler-policy <i>string level number percent-rate cir decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos port-scheduler-policy <i>string level number percent-rate pir decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos port-scheduler-policy <i>string level number rate</i>
Tree	rate

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos port-scheduler-policy <i>string</i> level <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos port-scheduler-policy <i>string</i> level <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight of the level in the weighted scheduler group
Context	configure qos port-scheduler-policy <i>string</i> level <i>number</i> weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1

Introduced	16.0.R1
Platforms	All

max-percent-rate *decimal-number*

Synopsis	Maximum frame-based bandwidth limit
Context	configure qos port-scheduler-policy <i>string</i> max-percent-rate <i>decimal-number</i>
Tree	max-percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: max-percent-rate or max-rate .
Introduced	16.0.R1
Platforms	All

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure qos port-scheduler-policy <i>string</i> max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Default	max
Options	max
Notes	The following elements are part of a choice: max-percent-rate or max-rate .
Introduced	16.0.R1
Platforms	All

monitor-threshold *number*

Synopsis	Congestion monitoring threshold
Context	configure qos port-scheduler-policy <i>string</i> monitor-threshold <i>number</i>
Tree	monitor-threshold
Description	<p>This command defines the congestion monitoring threshold for the desired monitoring entity under the port-scheduler for per aggregate port scheduler rate, per individual level, and per group that is aggregating multiple levels.</p> <p>The congestion threshold is specified as a percentage of the configured PIR rate for the entity for which congestion monitoring is desired. For example, if the configured PIR rate for level 1 is 1000,000 kb/s, and the monitoring threshold is set to 90%, an event where the offered rate is >90,000 kb/s is recorded. This event is shown as part</p>

of the cumulative count of congestion threshold exceeds since the last clearing of the counters.

Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

orphan-overrides

Synopsis	Enter the orphan-overrides context
Context	configure qos port-scheduler-policy string orphan-overrides
Tree	orphan-overrides
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority level for within-CIR orphan behavior
Context	configure qos port-scheduler-policy string orphan-overrides cir-level <i>number</i>
Tree	cir-level
Description	This command defines the port priority that the orphan queues and schedulers use to receive bandwidth for their within-CIR offered-load. If the cir-weight command is set to the default value, the orphan queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and this command setting is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	configure qos port-scheduler-policy string orphan-overrides cir-weight <i>number</i>
Tree	cir-weight
Description	This command defines the weight the orphan queues and schedulers will use in the within-CIR port priority level. When this command is set to the default value, the orphan

queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and the **cir-level** command is ignored.

Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

level number

Synopsis	Port priority level for above-CIR orphan behavior
Context	configure qos port-scheduler-policy <i>string</i> orphan-overrides <i>level number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight number

Synopsis	Weight to use in the above-CIR port priority level
Context	configure qos port-scheduler-policy <i>string</i> orphan-overrides <i>weight number</i>
Tree	weight
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

post-policer-mapping [[name](#)] *string*

Synopsis	Enter the post-policer-mapping list instance
Context	configure qos post-policer-mapping <i>string</i>
Tree	post-policer-mapping
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[name] *string*

Synopsis	Post-policer mapping policy name
Context	configure qos post-policer-mapping string
Tree	post-policer-mapping
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure qos post-policer-mapping string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fc [**fc-name**] *keyword profile keyword*

Synopsis	Enter the fc list instance
Context	configure qos post-policer-mapping string fc keyword profile keyword
Tree	fc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[fc-name] *keyword*

Synopsis	Forwarding class remapping
Context	configure qos post-policer-mapping string fc keyword profile keyword
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis Egress packet profile remapping
Context **configure** qos post-policer-mapping string fc keyword profile keyword
Tree fc
Options in, out, exceed, inplus
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

maps-to

Synopsis Enter the **maps-to** context
Context **configure** qos post-policer-mapping string fc keyword profile keyword maps-to
Tree maps-to
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fc *keyword*

Synopsis Forwarding class remapping
Context **configure** qos post-policer-mapping string fc keyword profile keyword maps-to fc keyword
Tree fc
Options be, l2, af, l1, h2, ef, h1, nc
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis Egress packet profile remapping
Context **configure** qos post-policer-mapping string fc keyword profile keyword maps-to profile keyword
Tree profile

Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-group-redirect-list [*name*] *string*

Synopsis	Enter the queue-group-redirect-list list instance
Context	configure qos queue-group-redirect-list <i>string</i>
Tree	queue-group-redirect-list
Max. Instances	2047
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Queue group redirect list name
Context	configure qos queue-group-redirect-list <i>string</i>
Tree	queue-group-redirect-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

match [*field-value*] *number*

Synopsis	Enter the match list instance
Context	configure qos queue-group-redirect-list <i>string match number</i>
Tree	match
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[field-value] number

Synopsis	Field value in the ingress or egress packet to match
Context	configure qos queue-group-redirect-list <i>string match number</i>
Tree	<i>match</i>
Description	This command specifies the value of the field in the ingress or egress packet. When there is a match, the packet is redirected to the specified queue group instance. The field must be a valid VXLAN VNI.
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

instance number

Synopsis	Queue group instance for traffic redirection
Context	configure qos queue-group-redirect-list <i>string match number instance number</i>
Tree	<i>instance</i>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Type for queue-group redirect list
Context	configure qos queue-group-redirect-list <i>string type keyword</i>
Tree	<i>type</i>
Default	vxlan-vni
Options	vxlan-vni
Introduced	16.0.R1
Platforms	All

queue-group-templates

Synopsis	Enter the queue-group-templates context
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Context	configure qos queue-group-templates
Tree	queue-group-templates
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure qos queue-group-templates egress
Tree	egress
Introduced	16.0.R1
Platforms	All

queue-group [[egress-queue-group-name](#)] *string*

Synopsis	Enter the queue-group list instance
Context	configure qos queue-group-templates egress queue-group <i>string</i>
Tree	queue-group
Introduced	16.0.R1
Platforms	All

[egress-queue-group-name] *string*

Synopsis	Egress queue group template name
Context	configure qos queue-group-templates egress queue-group <i>string</i>
Tree	queue-group
Description	This command specifies the name of the egress queue group template. Each ingress queue group template must be uniquely named within the system. Multiple ingress queue group templates may not share the same name. An ingress and egress queue group template may share the same name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos queue-group-templates egress queue-group <i>string</i> description <i>string</i>
Tree	description
String Length	0 to 80
Introduced	16.0.R1
Platforms	All

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos queue-group-templates egress queue-group <i>string</i> fc <i>keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class name
Context	configure qos queue-group-templates egress queue-group <i>string</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

queue

Synopsis	Enter the queue context
Context	configure qos queue-group-templates egress queue-group <i>string</i> fc <i>keyword</i> queue
Tree	queue
Introduced	16.0.R1
Platforms	All

none

Synopsis	No mid-pool is associated with this parent-pool
Context	configure qos queue-group-templates egress queue-group string fc keyword queue none
Tree	none
Notes	The following elements are part of a choice: none or queue-id .
Introduced	16.0.R1
Platforms	All

queue-id *reference*

Synopsis	Queue defined in forwarding class mapping
Context	configure qos queue-group-templates egress queue-group string fc keyword queue queue-id <i>reference</i>
Tree	queue-id
Reference	configure qos queue-group-templates egress queue-group string queue number
Notes	The following elements are part of a choice: none or queue-id .
Introduced	16.0.R1
Platforms	All

hs-attachment-policy *reference*

Synopsis	HS attachment policy applied
Context	configure qos queue-group-templates egress queue-group string hs-attachment-policy <i>reference</i>
Tree	hs-attachment-policy
Reference	configure qos hs-attachment-policy string
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [group-id] number

Synopsis	Enter the hs-wrr-group list instance
Context	configure qos queue-group-templates egress queue-group string hs-wrr-group number
Tree	hs-wrr-group

Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

[group-id] *number*

Synopsis HS WRR group identifier
Context **configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number*
Tree [hs-wrr-group](#)
Range 1 to 2
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

adaptation-rule

Synopsis Enter the **adaptation-rule** context
Context **configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number* [adaptation-rule](#)
Tree [adaptation-rule](#)
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

pir *keyword*

Synopsis Constraint used when deriving the operational PIR value
Context **configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number* [adaptation-rule](#) *pir* *keyword*
Tree [pir](#)
Default closest
Options max, min, closest
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

hs-class-weight *number*

Synopsis Weight of scheduling class

Context	configure qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 2000000000
Default	max
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer [*policer-id*] *number*

Synopsis	Enter the policer list instance
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Context	configure qos queue-group-templates egress queue-group <i>string policer number</i>
Tree	policer
Description	Commands in this context configure a QoS egress queue-group policer.
Introduced	16.0.R1
Platforms	All

[policer-id] *number*

Synopsis	Egress queue-group policer ID
Context	configure qos queue-group-templates egress queue-group <i>string policer number</i>
Tree	policer
Description	This command specifies the queue-group policer that will either be created or edited within the queue group template. For VSR, the queue group template may only have up to eight policers (numbered 1 through 8).
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos queue-group-templates egress queue-group <i>string policer number adaptation-rule</i>
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos queue-group-templates egress queue-group <i>string policer number adaptation-rule cir keyword</i>
Tree	cir
Default	closest
Options	max, min, closest

Introduced 16.0.R1
Platforms All

pir *keyword*

Synopsis Constraint used when deriving the operational PIR value
Context **configure qos queue-group-templates egress queue-group** *string policer number adaptation-rule pir keyword*
Tree [pir](#)
Default closest
Options max, min, closest
Introduced 16.0.R1
Platforms All

adv-config-policy *reference*

Synopsis Advanced QoS policy name
Context **configure qos queue-group-templates egress queue-group** *string policer number adv-config-policy reference*
Tree [adv-config-policy](#)
Reference **configure qos adv-config-policy** *string*
Introduced 16.0.R1
Platforms All

arbiter-parent

Synopsis Enter the **arbiter-parent** context
Context **configure qos queue-group-templates egress queue-group** *string policer number arbiter-parent*
Tree [arbiter-parent](#)
Introduced 16.0.R1
Platforms All

arbiter-name *string*

Synopsis Arbiter name

Context	configure qos queue-group-templates egress queue-group <i>string</i> policer number arbiter-parent arbiter-name <i>string</i>
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Priority level
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer number arbiter-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight in the priority level
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer number arbiter-parent weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer number cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456

Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <i>description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

exceed-pir *boolean*

Synopsis	Allow forwarding of packets with an exceed-profile state and traffic exceeding the PIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <i>exceed-pir</i> <i>boolean</i>
Tree	exceed-pir
Default	false
Introduced	16.0.R1
Platforms	All

high-prio-only (*number* | *keyword*)

Synopsis	Percentage of PIR leaky bucket's MBS of this policer that is reserved for high priority traffic
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <i>high-prio-only</i> (<i>number</i> <i>keyword</i>)
Tree	high-prio-only
Range	0 to 100
Default	auto
Options	auto

Introduced 16.0.R1
Platforms All

mbs (*number* | *keyword*)

Synopsis High priority 'violate' threshold of PIR leaky bucket of this policer
Context **configure** [qos queue-group-templates egress queue-group](#) *string* [policer](#) *number* **mbs** (*number* | *keyword*)
Tree [mbs](#)
Range 0 to 268435456
Default auto
Units bytes
Options auto
Introduced 16.0.R1
Platforms All

packet-byte-offset *number*

Synopsis Packet size modification for policing information
Context **configure** [qos queue-group-templates egress queue-group](#) *string* [policer](#) *number* **packet-byte-offset** *number*
Tree [packet-byte-offset](#)
Range -64 to 31
Default 0
Introduced 16.0.R1
Platforms All

percent-rate

Synopsis Enter the **percent-rate** context
Context **configure** [qos queue-group-templates egress queue-group](#) *string* [policer](#) *number* **percent-rate**
Tree [percent-rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 20.10.R1
Platforms All

cir *decimal-number*

Synopsis	Administrative CIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	20.10.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Default	local-limit
Options	local-limit, reference-port-limit
Introduced	20.10.R1
Platforms	All

profile-capped *boolean*

Synopsis	Enforce a limit on the profile
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Context	configure qos queue-group-templates egress queue-group <i>string policer number profile-capped boolean</i>
Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos queue-group-templates egress queue-group <i>string policer number rate</i>
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos queue-group-templates egress queue-group <i>string policer number rate cir (number keyword)</i>
Tree	cir
Range	0 to 2000000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates egress queue-group <i>string policer number rate pir (number keyword)</i>
Tree	pir
Range	1 to 2000000000

Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> stat-mode <i>keyword</i>
Tree	stat-mode
Default	minimal
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	All

queue [*queue-id*] *number*

Synopsis	Enter the queue list instance
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *number*

Synopsis	Egress Queue-Group queue identifier
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Tree	queue
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adaptation-rule cir keyword
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adaptation-rule pir keyword
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

adv-config-policy *reference*

Synopsis	Name of the advanced configuration policy
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adv-config-policy <i>reference</i>

Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue number burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue number cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Default	auto
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue number drop-tail

Tree	drop-tail
Introduced	16.0.R1
Platforms	All

exceed

Synopsis	Enter the exceed context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail exceed
Tree	exceed
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage of drop-tail that is reduced from MBS for exceed profile packets
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail exceed percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the high context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail high
Tree	high
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage of drop-tail being that is reduced from MBS for high profile packets
Context	configure qos queue-group-templates egress queue-group <i>string queue number drop-tail high percent-reduction-from-mbs</i> (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

highplus

Synopsis	Enter the highplus context
Context	configure qos queue-group-templates egress queue-group <i>string queue number drop-tail highplus</i>
Tree	highplus
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage of drop-tail being that is reduced from MBS for high plus profile packets
Context	configure qos queue-group-templates egress queue-group <i>string queue number drop-tail highplus percent-reduction-from-mbs</i> (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
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Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

dynamic-mbs *boolean*

Synopsis	Allow modifying of the MBS size for a queue to maintain maximum latency for traffic
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> dynamic-mbs <i>boolean</i>
Tree	dynamic-mbs
Default	false
Introduced	16.0.R1
Platforms	All

hs-alt-port-class-pool *boolean*

Synopsis	Use HS alternate class port pool buffer for traffic
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> hs-alt-port-class-pool <i>boolean</i>
Tree	hs-alt-port-class-pool
Default	false
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

hs-class-weight *number*

Synopsis Scheduling class weight

Context **configure** qos queue-group-templates egress queue-group *string* queue *number* **hs-class-weight** *number*

Tree [hs-class-weight](#)

Range 1 | 2 | 4 | 8

Default 1

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

hs-wred-queue

Synopsis Enter the **hs-wred-queue** context

Context **configure** qos queue-group-templates egress queue-group *string* queue *number* **hs-wred-queue**

Tree [hs-wred-queue](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

policy *reference*

Synopsis Slope policy name

Context **configure** qos queue-group-templates egress queue-group *string* queue *number* **hs-wred-queue** *policy* *reference*

Tree [policy](#)

Reference **configure** qos slope-policy *string*

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis Weighted Round Robin (WRR) weight to parent with this queue into the scheduler

Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> hs-wrr-weight <i>number</i>
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs (*number* | *keyword*)

Synopsis	Buffer space allowed for the queue
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet byte offset for addition of policing information
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
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Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Default	port-limit
Options	port-limit, local-limit, reference-port-limit

Introduced 20.10.R1
Platforms All

port-parent

Synopsis Enable the **port-parent** context
Context **configure qos queue-group-templates egress queue-group string queue number port-parent**
Tree [port-parent](#)
Notes The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced 16.0.R1
Platforms All

cir-level *number*

Synopsis Port priority to receive bandwidth for within-CIR pass
Context **configure qos queue-group-templates egress queue-group string queue number port-parent cir-level *number***
Tree [cir-level](#)
Range 0 to 8
Default 0
Introduced 16.0.R1
Platforms All

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level
Context **configure qos queue-group-templates egress queue-group string queue number port-parent cir-weight *number***
Tree [cir-weight](#)
Range 0 to 100
Default 0
Introduced 16.0.R1
Platforms All

level *number*

Synopsis	Port priority that this queue uses to receive bandwidth from the port level scheduler
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight that this queue uses to receive bandwidth from the port level scheduler
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

queue-delay *number*

Synopsis	Target queue delay for forwarding packets through this queue
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> queue-delay <i>number</i>
Tree	queue-delay
Range	1 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

queue-type *keyword*

Synopsis	Priority that this queue receives from the hardware level schedulers
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Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> queue-type <i>keyword</i>
Tree	queue-type
Options	expedited, best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 2000000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000

Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-parent

Synopsis	Enable the scheduler-parent context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	All

cir-level number

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight number

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1

Platforms All

level *number*

Synopsis Level of priority while feeding to the parent

Context **configure** qos queue-group-templates egress queue-group *string* queue *number*
scheduler-parent level *number*

Tree [level](#)

Range 1 to 8

Default 1

Introduced 16.0.R1

Platforms All

scheduler-name *string*

Synopsis Parent scheduler name

Context **configure** qos queue-group-templates egress queue-group *string* queue *number*
scheduler-parent scheduler-name *string*

Tree [scheduler-name](#)

Description This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

weight *number*

Synopsis Weight to be used by the scheduler for feeding this queue

Context **configure** qos queue-group-templates egress queue-group *string* queue *number*
scheduler-parent weight *number*

Tree [weight](#)

Range 0 to 100

Default 1

Introduced 16.0.R1
Platforms All

wred-queue

Synopsis Enter the **wred-queue** context
Context **configure** qos queue-group-templates egress queue-group *string* queue number wred-queue
Tree [wred-queue](#)
Introduced 16.0.R1
Platforms All

mode keyword

Synopsis Generic pool association of the queue to allow queue-specific WRED slopes
Context **configure** qos queue-group-templates egress queue-group *string* queue number wred-queue mode *keyword*
Tree [mode](#)
Options native, pool-per-queue
Introduced 16.0.R1
Platforms All

policy reference

Synopsis Slope policy name
Context **configure** qos queue-group-templates egress queue-group *string* queue number wred-queue policy *reference*
Tree [policy](#)
Reference **configure** qos slope-policy *string*
Introduced 16.0.R1
Platforms All

usage keyword

Synopsis Congestion control type

Context	configure qos queue-group-templates egress queue-group <i>string queue number wred-queue usage keyword</i>
Tree	usage
Options	auto, exceed-low
Introduced	16.0.R1
Platforms	All

queues-hqos-manageable *boolean*

Synopsis	Manage queues through the Hierarchical QoS process
Context	configure qos queue-group-templates egress queue-group <i>string queues-hqos-manageable boolean</i>
Tree	queues-hqos-manageable
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure qos queue-group-templates ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

queue-group [[ingress-queue-group-name](#)] *string*

Synopsis	Enter the queue-group list instance
Context	configure qos queue-group-templates ingress queue-group <i>string</i>
Tree	queue-group
Introduced	16.0.R1
Platforms	All

[ingress-queue-group-name] string

Synopsis	Ingress queue group template name
Context	configure qos queue-group-templates ingress queue-group string
Tree	queue-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure qos queue-group-templates ingress queue-group string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

policer [policer-id] number

Synopsis	Enter the policer list instance
Context	configure qos queue-group-templates ingress queue-group string policer number
Tree	policer
Introduced	16.0.R1
Platforms	All

[policer-id] number

Synopsis	Ingress Queue-Group Policer identifier
Context	configure qos queue-group-templates ingress queue-group string policer number
Tree	policer
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

adaptation-rule

Synopsis Enter the **adaptation-rule** context

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number*
adaptation-rule

Tree *adaptation-rule*

Introduced 16.0.R1

Platforms All

cir keyword

Synopsis Constraint used when deriving the operational CIR value

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number*
adaptation-rule cir keyword

Tree *cir*

Default closest

Options max, min, closest

Introduced 16.0.R1

Platforms All

pir keyword

Synopsis Constraint used when deriving the operational PIR value

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number*
adaptation-rule pir keyword

Tree *pir*

Default closest

Options max, min, closest

Introduced 16.0.R1

Platforms All

adv-config-policy *reference*

Synopsis Advanced QoS policy name

Context	configure qos queue-group-templates ingress queue-group <i>string policer number adv-config-policy reference</i>
Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

arbiter-parent

Synopsis	Enter the arbiter-parent context
Context	configure qos queue-group-templates ingress queue-group <i>string policer number arbiter-parent</i>
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	All

arbiter-name *string*

Synopsis	Arbiter name
Context	configure qos queue-group-templates ingress queue-group <i>string policer number arbiter-parent arbiter-name</i> <i>string</i>
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates ingress queue-group <i>string policer number arbiter-parent level</i> <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight to be used by the arbiter for feeding this policer
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> arbiter-parent weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

high-prio-only (*number* | *keyword*)

Synopsis	Percentage of PIR leaky bucket's MBS of this policer that is reserved for high priority traffic
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> high-prio-only (<i>number</i> <i>keyword</i>)
Tree	high-prio-only
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	High priority 'violate' threshold of PIR leaky bucket of this policer
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.2.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	20.2.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.2.R1
Platforms	All

profile-capped *boolean*

Synopsis	Enforce a limit on the profile
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> profile-capped <i>boolean</i>

Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 2000000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000
Default	max

Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> stat-mode <i>keyword</i>
Tree	stat-mode
Default	minimal
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	All

queue [*queue-id*] *number*

Synopsis	Enter the queue list instance
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *number*

Synopsis	Ingress Queue-Group Queue identifier
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint for deriving operational CIR for the queue
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

fir keyword

Synopsis	Constraint for deriving operational FIR for the queue
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule fir <i>keyword</i>
Tree	fir
Default	closest
Options	max, min, closest
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir keyword

Synopsis	Constraint for deriving operational FIR for the queue
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule pir <i>keyword</i>

Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

adv-config-policy *reference*

Synopsis	Advanced QoS policy name
Context	configure qos queue-group-templates ingress queue-group <i>string queue number</i> adv-config-policy reference
Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

burst-limit (*number | keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	configure qos queue-group-templates ingress queue-group <i>string queue number</i> burst-limit (number keyword)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number | keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos queue-group-templates ingress queue-group <i>string queue number</i> cbs (number keyword)
Tree	cbs
Range	0 to 1048576

Default	auto
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

cir-non-profiling *boolean*

Synopsis	Prevent profile modification of CIR dependent packet
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> cir-non-profiling <i>boolean</i>
Tree	cir-non-profiling
Description	<p>When configured to true, the system prevents the modification of the profile of a packet-dependent queue rate compared to its configured CIR. The CIR continues to be used to affect the scheduling priority of a queue.</p> <p>This command is only supported on hardware that is FP4-based and later and is ignored when the related policy is applied to FP3-based hardware.</p> <p>This command should not be configured under an ingress queue group template queue associated with a LAG which spans FP4-based and later and FP3-based hardware as the resulting operation could be different depending on which hardware type the traffic ingresses.</p>
Default	false
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
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Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	Maximum buffer space that is allowed for queue
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

multipoint *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create an ingress multipoint queue
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> multipoint <i>boolean</i>
Tree	multipoint
Default	false
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet size modification for queue accounting
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00

Default	0.00
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	20.10.R1
Platforms	All

fir *decimal-number*

Synopsis	Administrative FIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue number percent-rate fir <i>decimal-number</i>
Tree	fir
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	20.10.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue number percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

police

Synopsis	Drop out-of-profile traffic feeding into physical queue
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue number percent-rate police
Tree	police
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	20.10.R1

Platforms All

reference-rate *keyword*

Synopsis Reference rate

Context **configure** qos queue-group-templates ingress queue-group *string* queue *number*
percent-rate reference-rate *keyword*

Tree [reference-rate](#)

Default port-limit

Options port-limit, local-limit, reference-port-limit

Introduced 20.10.R1

Platforms All

queue-mode *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Queue operational mode for explicitly profiled packets

Context **configure** qos queue-group-templates ingress queue-group *string* queue *number*
queue-mode *keyword*

Tree [queue-mode](#)

Default priority

Options priority, profile

Introduced 16.0.R1

Platforms All

queue-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Priority that this queue receives from the hardware level schedulers

Context **configure** qos queue-group-templates ingress queue-group *string* queue *number*
queue-type *keyword*

Tree [queue-type](#)

Default	best-effort
Options	expedited, best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue number rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue number rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 2000000000
Default	0
Units	kilobps
Options	max
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R1
Platforms	All

fir (*number* | *keyword*)

Synopsis	Administrative FIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue number rate fir (<i>number</i> <i>keyword</i>)
Tree	fir
Range	0 to 2000000000

Default	0
Units	kilobps
Options	max
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

police

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> rate police
Tree	police
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R1
Platforms	All

scheduler-parent

Synopsis	Enter the scheduler-parent context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> scheduler-parent
Tree	scheduler-parent

Introduced 16.0.R1
Platforms All

cir-level *number*

Synopsis Level of priority while feeding to the parent
Context **configure** qos queue-group-templates ingress queue-group *string* queue *number*
scheduler-parent cir-level *number*
Tree [cir-level](#)
Range 0 to 8
Default 0
Introduced 16.0.R1
Platforms All

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level
Context **configure** qos queue-group-templates ingress queue-group *string* queue *number*
scheduler-parent cir-weight *number*
Tree [cir-weight](#)
Range 0 to 100
Default 1
Introduced 16.0.R1
Platforms All

level *number*

Synopsis Level of priority while feeding to the parent
Context **configure** qos queue-group-templates ingress queue-group *string* queue *number*
scheduler-parent level *number*
Tree [level](#)
Range 1 to 8
Default 1
Introduced 16.0.R1
Platforms All

scheduler-name *string*

Synopsis	Scheduler name
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> scheduler-parent scheduler-name <i>string</i>
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight to be used by the scheduler for feeding this queue
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> scheduler-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

sap-egress [**sap-egress-policy-name**] *string*

Synopsis	Enter the sap-egress list instance
Context	configure qos sap-egress <i>string</i>
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

[sap-egress-policy-name] *string*

Synopsis	Policy name
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Context	configure qos sap-egress string
Tree	sap-egress
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure qos sap-egress string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dot1p [dot1p-value] number

Synopsis	Enter the dot1p list instance
Context	configure qos sap-egress string dot1p number
Tree	dot1p
Introduced	16.0.R1
Platforms	All

[dot1p-value] number

Synopsis	Dot1p value to match in the packet
Context	configure qos sap-egress string dot1p number
Tree	dot1p
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure qos sap-egress <i>string dot1p number fc keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile keyword

Synopsis	Default profile for the ingressing traffic
Context	configure qos sap-egress <i>string dot1p number profile keyword</i>
Tree	profile
Options	in, out, de, exceed, inplus
Introduced	16.0.R1
Platforms	All

dscp [**dscp-name**] keyword

Synopsis	Enter the dscp list instance
Context	configure qos sap-egress <i>string dscp keyword</i>
Tree	dscp
Introduced	16.0.R1
Platforms	All

[dscp-name] keyword

Synopsis	DSCP name to perform reclassification actions
Context	configure qos sap-egress <i>string dscp keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

fc *keyword*

Synopsis Forwarding class
Context **configure qos sap-egress** *string dscp keyword fc keyword*
Tree **fc**
Options be, l2, af, l1, h2, ef, h1, nc
Introduced 16.0.R1
Platforms All

profile *keyword*

Synopsis Default profile for the ingressing traffic
Context **configure qos sap-egress** *string dscp keyword profile keyword*
Tree **profile**
Options in, out, exceed, inplus
Introduced 16.0.R1
Platforms All

ethernet-ctag *boolean*

Synopsis Tag value for dot1p and DE (Drop-Eligible) that are used by all dot1-p entries
Context **configure qos sap-egress** *string ethernet-ctag boolean*
Tree **ethernet-ctag**
Default false
Introduced 16.0.R1
Platforms All

fc [**fc-name**] *keyword*

Synopsis Enter the **fc** list instance
Context **configure qos sap-egress** *string fc keyword*
Tree **fc**

Introduced 16.0.R1
Platforms All

[fc-name] *keyword*

Synopsis Forwarding class
Context **configure qos sap-egress** *string fc keyword*
Tree **fc**
Options be, l2, af, l1, h2, ef, h1, nc
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

de-mark

Synopsis Enable the **de-mark** context
Context **configure qos sap-egress** *string fc keyword de-mark*
Tree **de-mark**
Introduced 16.0.R1
Platforms All

force *number*

Synopsis DE value
Context **configure qos sap-egress** *string fc keyword de-mark force number*
Tree **force**
Range 0 to 1
Introduced 16.0.R1
Platforms All

de-mark-inner

Synopsis Enable the **de-mark-inner** context
Context **configure qos sap-egress** *string fc keyword de-mark-inner*
Tree **de-mark-inner**

Introduced 16.0.R1
Platforms All

force number

Synopsis DE value to set in inner VLAN tag
Context **configure qos sap-egress** *string fc keyword de-mark-inner force number*
Tree [force](#)
Range 0 to 1
Introduced 16.0.R1
Platforms All

de-mark-outer

Synopsis Enable the **de-mark-outer** context
Context **configure qos sap-egress** *string fc keyword de-mark-outer*
Tree [de-mark-outer](#)
Introduced 16.0.R1
Platforms All

force number

Synopsis DE value to set in outer VLAN tag
Context **configure qos sap-egress** *string fc keyword de-mark-outer force number*
Tree [force](#)
Range 0 to 1
Introduced 16.0.R1
Platforms All

dot1p

Synopsis Enter the **dot1p** context
Context **configure qos sap-egress** *string fc keyword dot1p*
Tree [dot1p](#)
Introduced 16.0.R1

Platforms All

exceed-profile *number*

Synopsis Dot1p value for exceed-profile frames
Context **configure qos sap-egress** *string fc keyword dot1p exceed-profile number*
Tree [exceed-profile](#)
Range 0 to 7
Introduced 16.0.R1
Platforms All

in-profile *number*

Synopsis Dot1p value for in-profile frames
Context **configure qos sap-egress** *string fc keyword dot1p in-profile number*
Tree [in-profile](#)
Range 0 to 7
Introduced 16.0.R1
Platforms All

out-profile *number*

Synopsis Dot1p value for out-of-profile frames
Context **configure qos sap-egress** *string fc keyword dot1p out-profile number*
Tree [out-profile](#)
Range 0 to 7
Introduced 16.0.R1
Platforms All

dot1p-inner

Synopsis Enter the **dot1p-inner** context
Context **configure qos sap-egress** *string fc keyword dot1p-inner*
Tree [dot1p-inner](#)
Introduced 16.0.R1

Platforms All

in-profile *number*

Synopsis Inner Dot1p value for in-profile frames
Context **configure** qos sap-egress string fc keyword dot1p-inner in-profile number
Tree [in-profile](#)
Range 0 to 7
Introduced 16.0.R1
Platforms All

out-profile *number*

Synopsis Inner Dot1p value for out-of-profile frames
Context **configure** qos sap-egress string fc keyword dot1p-inner out-profile number
Tree [out-profile](#)
Range 0 to 7
Introduced 16.0.R1
Platforms All

dot1p-outer

Synopsis Enter the **dot1p-outer** context
Context **configure** qos sap-egress string fc keyword dot1p-outer
Tree [dot1p-outer](#)
Introduced 16.0.R1
Platforms All

exceed-profile *number*

Synopsis Outer Dot1p value for exceed-profile frames
Context **configure** qos sap-egress string fc keyword dot1p-outer exceed-profile number
Tree [exceed-profile](#)
Range 0 to 7
Introduced 16.0.R1

Platforms All

in-profile *number*

Synopsis Outer Dot1p value for in-profile frames
Context **configure qos sap-egress** *string fc keyword dot1p-outer in-profile number*
Tree [in-profile](#)
Range 0 to 7
Introduced 16.0.R1
Platforms All

out-profile *number*

Synopsis Outer Dot1p value for out-of-profile frames
Context **configure qos sap-egress** *string fc keyword dot1p-outer out-profile number*
Tree [out-profile](#)
Range 0 to 7
Introduced 16.0.R1
Platforms All

dscp

Synopsis Enter the **dscp** context
Context **configure qos sap-egress** *string fc keyword dscp*
Tree [dscp](#)
Notes The following elements are part of a choice: **dscp** or **prec**.
Introduced 16.0.R1
Platforms All

exceed-profile *keyword*

Synopsis DSCP name for exceed-profile frames
Context **configure qos sap-egress** *string fc keyword dscp exceed-profile keyword*
Tree [exceed-profile](#)
Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31,

cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1
Platforms All

in-profile keyword

Synopsis DSCP name for in-profile frames
Context **configure qos sap-egress string fc keyword dscp in-profile keyword**
Tree [in-profile](#)
Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced 16.0.R1
Platforms All

out-profile keyword

Synopsis DSCP name for out-of-profile frames
Context **configure qos sap-egress string fc keyword dscp out-profile keyword**
Tree [out-profile](#)
Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced 16.0.R1
Platforms All

policer reference

Synopsis Policer to forward the traffic
Context **configure qos sap-egress string fc keyword policer reference**
Tree [policer](#)
Reference **configure qos sap-egress string policer number**

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-redirect-group-queue

Synopsis	Enable the port-redirect-group-queue context
Context	configure qos sap-egress <i>string</i> fc <i>keyword</i> port-redirect-group-queue
Tree	port-redirect-group-queue
Notes	The following elements are part of a choice: port-redirect-group-queue , queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Queue to forward the traffic
Context	configure qos sap-egress <i>string</i> fc <i>keyword</i> port-redirect-group-queue queue <i>number</i>
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

prec

Synopsis	Enter the prec context
Context	configure qos sap-egress <i>string</i> fc <i>keyword</i> prec
Tree	prec
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

exceed-profile *number*

Synopsis	Precedence for exceed-profile frames
Context	configure qos sap-egress <i>string</i> fc <i>keyword</i> prec exceed-profile <i>number</i>

Tree	exceed-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

in-profile *number*

Synopsis	Precedence value for in-profile frames
Context	configure qos sap-egress <i>string</i> fc <i>keyword</i> prec in-profile <i>number</i>
Tree	in-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

out-profile *number*

Synopsis	Precedence value for out-of-profile frames
Context	configure qos sap-egress <i>string</i> fc <i>keyword</i> prec out-profile <i>number</i>
Tree	out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue to forward the traffic
Context	configure qos sap-egress <i>string</i> fc <i>keyword</i> queue <i>reference</i>
Tree	queue
Reference	configure qos sap-egress <i>string</i> queue <i>number</i>
Notes	The following elements are part of a choice: port-redirect-group-queue , queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue-group-queue

Synopsis	Enable the queue-group-queue context
Context	configure qos sap-egress <i>string</i> fc keyword queue-group-queue
Tree	queue-group-queue
Notes	The following elements are part of a choice: port-redirect-group-queue , queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance ID
Context	configure qos sap-egress <i>string</i> fc keyword queue-group-queue instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	SAP egress queue ID
Context	configure qos sap-egress <i>string</i> fc keyword queue-group-queue queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Introduced	16.0.R1
Platforms	All

queue-group-name *reference*

Synopsis	Queue group to forward traffic
Context	configure qos sap-egress <i>string</i> fc keyword queue-group-queue queue-group-name <i>reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates egress queue-group <i>string</i>
Notes	This element is mandatory.

Introduced 16.0.R1
Platforms All

hs-attachment-policy *reference*

Synopsis HS attachment policy applied
Context **configure qos sap-egress** *string* **hs-attachment-policy** *reference*
Tree [hs-attachment-policy](#)
Reference **configure qos hs-attachment-policy** *string*
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

hs-wrr-group [[group-id](#)] *number*

Synopsis Enter the **hs-wrr-group** list instance
Context **configure qos sap-egress** *string* **hs-wrr-group** *number*
Tree [hs-wrr-group](#)
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

[group-id] *number*

Synopsis HS WRR group identifier
Context **configure qos sap-egress** *string* **hs-wrr-group** *number*
Tree [hs-wrr-group](#)
Range 1 to 2
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

adaptation-rule

Synopsis Enter the **adaptation-rule** context
Context **configure qos sap-egress** *string* **hs-wrr-group** *number* **adaptation-rule**
Tree [adaptation-rule](#)

Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

pir *keyword*

Synopsis Constraint used when deriving the operational PIR value
Context **configure qos sap-egress** *string* **hs-wrr-group** *number* **adaptation-rule** **pir** *keyword*
Tree **pir**
Default closest
Options max, min, closest
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

hs-class-weight *number*

Synopsis Weight of scheduling class
Context **configure qos sap-egress** *string* **hs-wrr-group** *number* **hs-class-weight** *number*
Tree **hs-class-weight**
Range 1 | 2 | 4 | 8
Default 1
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis Administrative PIR percent
Context **configure qos sap-egress** *string* **hs-wrr-group** *number* **percent-rate** *decimal-number*
Tree **percent-rate**
Range 0.01 to 100.00
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 2000000000
Default	max
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos sap-egress <i>string</i> ip-criteria
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	IP Criteria Entry Index
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

action

Synopsis Enter the **action** context
Context **configure qos sap-egress** *string ip-criteria entry number action*
Tree [action](#)
Introduced 16.0.R1
Platforms All

fc keyword

Synopsis Forwarding class
Context **configure qos sap-egress** *string ip-criteria entry number action fc keyword*
Tree [fc](#)
Options be, l2, af, l1, h2, ef, h1, nc
Introduced 16.0.R1
Platforms All

policer reference

Synopsis Policer identifier for the matched traffic
Context **configure qos sap-egress** *string ip-criteria entry number action policer reference*
Tree [policer](#)
Reference **configure qos sap-egress** *string policer number*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-redirect-group-queue boolean

Synopsis Use the queue specified in egress access port queue-group instance
Context **configure qos sap-egress** *string ip-criteria entry number action port-redirect-group-queue boolean*
Tree [port-redirect-group-queue](#)

Default	false
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the matching traffic
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> action profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Queue to use when the matched traffic is policed by the local policer
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> action queue <i>number</i>
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> action type <i>keyword</i>
Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

use-fc-mapped-queue *boolean*

Synopsis	Redirect policer output to the configured queues
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Context	configure qos sap-egress <i>string ip-criteria entry number action use-fc-mapped-queue boolean</i>
Tree	use-fc-mapped-queue
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos sap-egress <i>string ip-criteria entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos sap-egress <i>string ip-criteria entry number match</i>
Tree	match
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	configure qos sap-egress <i>string ip-criteria entry number match dscp keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Destination IPv4 address for SAP QoS policy match
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-ip address (<i>ipv4-address</i> <i>ipv4-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	List of IPv4 prefixes for the match criteria
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IP address mask to match with source IP of the packet
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .

Introduced 16.0.R1
Platforms All

dst-port

Synopsis Enter the **dst-port** context
Context **configure qos sap-egress string ip-criteria entry number match dst-port**
Tree [dst-port](#)
Introduced 16.0.R1
Platforms All

eq number

Synopsis Value 'equal to' as match condition
Context **configure qos sap-egress string ip-criteria entry number match dst-port eq number**
Tree [eq](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

gt number

Synopsis Value 'greater than' as match condition
Context **configure qos sap-egress string ip-criteria entry number match dst-port gt number**
Tree [gt](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

lt number

Synopsis Value 'less than' as match condition
Context **configure qos sap-egress string ip-criteria entry number match dst-port lt number**

Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> match <i>dst-port</i> range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> match <i>dst-port</i> range <i>end</i> <i>number</i>
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> match <i>dst-port</i> range <i>start</i> <i>number</i>
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Matching criteria to be used for fragmented or non-fragmented packets
Context	configure qos sap-egress <i>string ip-criteria entry number match fragment keyword</i>
Tree	fragment
Options	false, true
Introduced	16.0.R1
Platforms	All

protocol (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos sap-egress <i>string ip-criteria entry number match protocol (number keyword)</i>
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos sap-egress <i>string ip-criteria entry number match src-ip</i>
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Source IPv4 address for SAP QoS policy match criterion
Context	configure qos sap-egress <i>string ip-criteria entry number match src-ip address (ipv4-address ipv4-prefix-with-host-bits)</i>
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .

Introduced 16.0.R1
Platforms All

ip-prefix-list *reference*

Synopsis List of IPv4 prefixes for the match criteria
Context **configure qos sap-egress** *string ip-criteria entry number match src-ip ip-prefix-list reference*
Tree [ip-prefix-list](#)
Reference **configure qos match-list ip-prefix-list** *string*
Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced 16.0.R1
Platforms All

mask *string*

Synopsis IP address mask to match with source IP of the packet
Context **configure qos sap-egress** *string ip-criteria entry number match src-ip mask string*
Tree [mask](#)
Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced 16.0.R1
Platforms All

src-port

Synopsis Enter the **src-port** context
Context **configure qos sap-egress** *string ip-criteria entry number match src-port*
Tree [src-port](#)
Introduced 16.0.R1
Platforms All

eq *number*

Synopsis Value 'equal to' as match condition
Context **configure qos sap-egress** *string ip-criteria entry number match src-port eq number*

Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' as match condition
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> match <i>src-port</i> gt <i>number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Value 'less than' as match condition
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> match <i>src-port</i> lt <i>number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> match <i>src-port</i> range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range
Context	configure qos sap-egress string ip-criteria entry number match src-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-egress string ip-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure qos sap-egress string ipv6-criteria
Tree	ipv6-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] number

Synopsis	Enter the entry list instance
Context	configure qos sap-egress string ipv6-criteria entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	IP Criteria Entry Index
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> action fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

policer *reference*

Synopsis	Policer identifier for the matched traffic
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> action policer <i>reference</i>
Tree	policer
Reference	configure qos sap-egress <i>string</i> policer <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-redirect-group-queue *boolean*

Synopsis	Use the queue specified in egress access port queue-group instance
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number action port-redirect-group-queue <i>boolean</i>
Tree	port-redirect-group-queue
Default	false
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the matching traffic
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number action profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Queue to use when the matched traffic is policed by the local policer
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number action queue <i>number</i>
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number action type <i>keyword</i>
Tree	type
Default	ignore-match
Options	ignore-match, accept

Introduced 16.0.R1
Platforms All

use-fc-mapped-queue *boolean*

Synopsis Redirect policer output to the configured queues
Context **configure qos sap-egress** *string ipv6-criteria entry number action use-fc-mapped-queue boolean*
Tree [use-fc-mapped-queue](#)
Default false
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure qos sap-egress** *string ipv6-criteria entry number description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

match

Synopsis Enter the **match** context
Context **configure qos sap-egress** *string ipv6-criteria entry number match*
Tree [match](#)
Introduced 16.0.R1
Platforms All

dscp *keyword*

Synopsis DSCP value to match in the packet
Context **configure qos sap-egress** *string ipv6-criteria entry number match dscp keyword*
Tree [dscp](#)

Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	Destination IPv6 address for SAP QoS policy match
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number match dst-ip address (<i>ipv6-address</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number match dst-ip ipv6-prefix-list reference
Tree	ipv6-prefix-list
Reference	configure qos match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask string

Synopsis	IP address mask to match with destination IP of the packet
Context	configure qos sap-egress string ipv6-criteria entry number match dst-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos sap-egress string ipv6-criteria entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Value 'equal to' as match condition
Context	configure qos sap-egress string ipv6-criteria entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' as match condition
Context	configure qos sap-egress string ipv6-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1

Platforms All

lt number

Synopsis Value 'less than' as match condition
Context **configure qos sap-egress string ipv6-criteria entry number match dst-port lt number**
Tree **lt**
Range 0 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

range

Synopsis Enter the **range** context
Context **configure qos sap-egress string ipv6-criteria entry number match dst-port range**
Tree **range**
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

end number

Synopsis Upper bound of the port range
Context **configure qos sap-egress string ipv6-criteria entry number match dst-port range end number**
Tree **end**
Range 0 to 65535
Introduced 16.0.R1
Platforms All

start number

Synopsis Lower bound of the port range
Context **configure qos sap-egress string ipv6-criteria entry number match dst-port range start number**

Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	Source IPv6 address for SAP QoS policy match
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip address (<i>ipv6-address</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number match src-ip ipv6-prefix-list reference
Tree	ipv6-prefix-list
Reference	configure qos match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IP address mask to match with source IP of the packet
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number match src-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' as match condition
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1

Platforms All

gt number

Synopsis Value 'greater than' as match condition
Context **configure qos sap-egress string ipv6-criteria entry number match src-port gt number**
Tree [gt](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

lt number

Synopsis Value 'less than' as match condition
Context **configure qos sap-egress string ipv6-criteria entry number match src-port lt number**
Tree [lt](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

range

Synopsis Enter the **range** context
Context **configure qos sap-egress string ipv6-criteria entry number match src-port range**
Tree [range](#)
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

end number

Synopsis Upper bound of the port range

Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number match src-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

parent-location keyword

Synopsis	Location where queues look to find parent scheduler
Context	configure qos sap-egress <i>string</i> parent-location keyword
Tree	parent-location
Default	auto
Options	auto, sla
Introduced	16.0.R1
Platforms	All

policer [policer-id] number

Synopsis	Enter the policer list instance
Context	configure qos sap-egress <i>string</i> policer number
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] number

Synopsis	SAP egress policer ID
Context	configure qos sap-egress <i>string policer number</i>
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos sap-egress <i>string policer number adaptation-rule</i>
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos sap-egress <i>string policer number adaptation-rule cir keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos sap-egress <i>string policer number adaptation-rule pir keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adv-config-policy *reference*

Synopsis Advanced QoS policy name
 Context **configure qos sap-egress** *string* **policer** *number* **adv-config-policy** *reference*
 Tree **adv-config-policy**
 Reference **configure qos adv-config-policy** *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-parent

Synopsis Enter the **arbiter-parent** context
 Context **configure qos sap-egress** *string* **policer** *number* **arbiter-parent**
 Tree **arbiter-parent**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-name *string*

Synopsis Arbiter name
 Context **configure qos sap-egress** *string* **policer** *number* **arbiter-parent** **arbiter-name** *string*
 Tree **arbiter-name**
 Description This command specifies an arbiter name. The policer is intended to become a child to one of the tiered arbiters with the specified arbiter name where an instance of the policer is created. If the specified arbiter name does not exist, the policer is placed in the orphan state.
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis Level of priority while feeding to the parent
 Context **configure qos sap-egress** *string* **policer** *number* **arbiter-parent** **level** *number*

Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight number

Synopsis	Weight to be used by the arbiter for feeding this policer
Context	configure qos sap-egress string policer number arbiter-parent weight number
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (number | keyword)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos sap-egress string policer number cbs (number keyword)
Tree	cbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description string

Synopsis	Text description
Context	configure qos sap-egress string policer number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

dscp-prec-remarking *boolean*

Synopsis Remark DSCP and precedence based on the profile state of a forwarding packet
Context **configure qos sap-egress** *string* **policer** *number* **dscp-prec-remarking** *boolean*
Tree [dscp-prec-remarking](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

exceed-pir *boolean*

Synopsis Allow forwarding of packets with an exceed-profile state and traffic exceeding the PIR
Context **configure qos sap-egress** *string* **policer** *number* **exceed-pir** *boolean*
Tree [exceed-pir](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

high-prio-only (*number* | *keyword*)

Synopsis Percentage of PIR leaky bucket's MBS of this policer that is reserved for high priority traffic
Context **configure qos sap-egress** *string* **policer** *number* **high-prio-only** (*number* | *keyword*)
Tree [high-prio-only](#)
Range 0 to 100
Default auto
Options auto
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis High priority 'violate' threshold of PIR leaky bucket of this policer
Context **configure qos sap-egress** *string* **policer** *number* **mbs** (*number* | *keyword*)

Tree	mbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos sap-egress <i>string</i> policer <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos sap-egress <i>string</i> policer <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos sap-egress <i>string</i> policer <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis Administrative PIR percent
Context **configure qos sap-egress** *string* **policer** *number* **percent-rate** **pir** *decimal-number*
Tree **pir**
Range 0.01 to 100.00
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

reference-rate *keyword*

Synopsis Reference rate
Context **configure qos sap-egress** *string* **policer** *number* **percent-rate** **reference-rate** *keyword*
Tree **reference-rate**
Default local-limit
Options local-limit, reference-port-limit
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-parent

Synopsis Enable the **port-parent** context
Context **configure qos sap-egress** *string* **policer** *number* **port-parent**
Tree **port-parent**
Notes The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-level *number*

Synopsis Port priority level for within-CIR offered load
Context **configure qos sap-egress** *string* **policer** *number* **port-parent** **cir-level** *number*
Tree **cir-level**

Description	This command defines the port priority that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the port schedulers with-CIR pass and the cir-weight command is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	configure qos sap-egress <i>string</i> policer <i>number</i> port-parent cir-weight <i>number</i>
Tree	cir-weight
Description	<p>This command defines the weight that the policer uses at the within-CIR port priority level.</p> <p>All CIR weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight is considered active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to the default value, the policer receives bandwidth only after other children with a non-zero weight at this level have been serviced.</p>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Port priority level for above-CIR behavior
Context	configure qos sap-egress <i>string</i> policer <i>number</i> port-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight number

Synopsis	Weight to use in the above-CIR port priority level
Context	configure qos sap-egress <i>string</i> policer <i>number</i> port-parent <i>weight number</i>
Tree	<i>weight</i>
Description	<p>This command defines the weight that the policer uses at the above-CIR port priority level.</p> <p>All weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after other children with a non-zero weight at this level.</p>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-capped boolean

Synopsis	Enforce an overall in-profile burst limit to the CIR bucket at egress policer
Context	configure qos sap-egress <i>string</i> policer <i>number</i> profile-capped <i>boolean</i>
Tree	<i>profile-capped</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-out-preserve boolean

Synopsis	Preserve the color of offered out-of-profile traffic at SAP-egress policer
Context	configure qos sap-egress <i>string</i> policer <i>number</i> profile-out-preserve <i>boolean</i>
Tree	<i>profile-out-preserve</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure qos sap-egress <i>string</i> policer <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos sap-egress <i>string</i> policer <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-egress <i>string</i> policer <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-parent

Synopsis	Enable the scheduler-parent context
Context	configure qos sap-egress string policer number scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-level number

Synopsis	Port priority level for within-CIR offered load
Context	configure qos sap-egress string policer number scheduler-parent cir-level number
Tree	cir-level
Description	This command defines the hierarchy priority level when compared with other policers, queues, and schedulers that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the schedulers within-CIR pass and the cir-weight command is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-weight number

Synopsis	Weight to use in the within-CIR port priority level
Context	configure qos sap-egress string policer number scheduler-parent cir-weight number
Tree	cir-weight
Description	<p>The command defines the relative weight of the policer in comparison with other child policers, queues, or schedulers competing for bandwidth on the parent scheduler name at the within-CIR priority level.</p> <p>A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after the other children with a non-zero weight at this level have been serviced.</p>
Range	0 to 100
Default	1

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Priority level for bandwidth on the parent scheduler
Context	configure qos sap-egress <i>string</i> policer <i>number</i> scheduler-parent <i>level number</i>
Tree	level
Description	This command defines the priority level when compared with other policers, queues, and schedulers when competing for bandwidth on the parent scheduler. Children of the parent scheduler with a lower priority do not receive bandwidth until all children with a higher priority have either reached their maximum bandwidth or are idle. Children with the same level are serviced in relation to their relative weights.
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-name *string*

Synopsis	Scheduler name
Context	configure qos sap-egress <i>string</i> policer <i>number</i> scheduler-parent <i>scheduler-name string</i>
Tree	scheduler-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight *number*

Synopsis	Policer weight at the above-CIR priority level
Context	configure qos sap-egress <i>string</i> policer <i>number</i> scheduler-parent <i>weight number</i>
Tree	weight
Range	0 to 100
Default	1

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis Mode of statistics collected by the policer
Context **configure qos sap-egress** *string policer number stat-mode keyword*
Tree [stat-mode](#)
Default minimal
Options no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policers-hqos-manageable *boolean*

Synopsis Manage policers through the Hierarchical QoS process
Context **configure qos sap-egress** *string policers-hqos-manageable boolean*
Tree [policers-hqos-manageable](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, VSR

policy-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Egress SAP QoS policy ID
Context **configure qos sap-egress** *string policy-id number*
Tree [policy-id](#)
Range 1 to 65535
Introduced 16.0.R1
Platforms All

post-policer-mapping *reference*

Synopsis	Post policer mapping policy applied to this policy
Context	configure qos sap-egress <i>string post-policer-mapping reference</i>
Tree	post-policer-mapping
Reference	configure qos post-policer-mapping <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

prec [[prec-value](#)] *number*

Synopsis	Enter the prec list instance
Context	configure qos sap-egress <i>string prec number</i>
Tree	prec
Introduced	16.0.R1
Platforms	All

[prec-value] *number*

Synopsis	Precedence value for which mapping is performed
Context	configure qos sap-egress <i>string prec number</i>
Tree	prec
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos sap-egress <i>string prec number fc keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the ingressing traffic
Context	configure qos sap-egress <i>string prec number profile keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue [[queue-id](#)] *number*

Synopsis	Enter the queue list instance
Context	configure qos sap-egress <i>string queue number</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[[queue-id](#)] *number*

Synopsis	Egress Queue-Group queue identifier
Context	configure qos sap-egress <i>string queue number</i>
Tree	queue
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos sap-egress <i>string queue number adaptation-rule</i>
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos sap-egress <i>string queue number adaptation-rule cir keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos sap-egress <i>string queue number adaptation-rule pir keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

adv-config-policy reference

Synopsis	Name of the advanced configuration policy
Context	configure qos sap-egress <i>string queue number adv-config-policy reference</i>
Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

agg-shaper-weight number

Synopsis	Aggregate shaper weight of the sap-egress queue
Context	configure qos sap-egress <i>string queue number agg-shaper-weight number</i>
Tree	agg-shaper-weight
Range	1 to 100

Default	1
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure qos sap-egress <i>string</i> queue <i>number</i> avg-frame-overhead <i>decimal-number</i>
Tree	avg-frame-overhead
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	configure qos sap-egress <i>string</i> queue <i>number</i> burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos sap-egress <i>string</i> queue <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Default	auto
Units	kilobytes
Options	auto

Introduced 16.0.R1
Platforms All

drop-tail

Synopsis Enter the **drop-tail** context
Context **configure qos sap-egress** *string queue number drop-tail*
Tree [drop-tail](#)
Introduced 16.0.R1
Platforms All

exceed

Synopsis Enter the **exceed** context
Context **configure qos sap-egress** *string queue number drop-tail exceed*
Tree [exceed](#)
Introduced 16.0.R1
Platforms All

percent-reduction-from-mbs (*number | keyword*)

Synopsis Percentage of drop-tail that is reduced from MBS for exceed profile packets
Context **configure qos sap-egress** *string queue number drop-tail exceed percent-reduction-from-mbs* (*number | keyword*)
Tree [percent-reduction-from-mbs](#)
Range 0 to 100
Default auto
Options auto
Introduced 16.0.R1
Platforms All

high

Synopsis Enter the **high** context
Context **configure qos sap-egress** *string queue number drop-tail high*
Tree [high](#)

Introduced 16.0.R1
Platforms All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis Percentage of drop-tail being that is reduced from MBS for high profile packets
Context **configure qos sap-egress** *string* **queue** *number* **drop-tail high percent-reduction-from-mbs** (*number* | *keyword*)
Tree [percent-reduction-from-mbs](#)
Range 0 to 100
Default auto
Options auto
Introduced 16.0.R1
Platforms All

highplus

Synopsis Enter the **highplus** context
Context **configure qos sap-egress** *string* **queue** *number* **drop-tail highplus**
Tree [highplus](#)
Introduced 16.0.R1
Platforms All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis Percentage of drop-tail being that is reduced from MBS for high plus profile packets
Context **configure qos sap-egress** *string* **queue** *number* **drop-tail highplus percent-reduction-from-mbs** (*number* | *keyword*)
Tree [percent-reduction-from-mbs](#)
Range 0 to 100
Default auto
Options auto
Introduced 16.0.R1
Platforms All

low

Synopsis	Enter the low context
Context	configure qos sap-egress <i>string queue number drop-tail low</i>
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number | keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos sap-egress <i>string queue number drop-tail low percent-reduction-from-mbs (number keyword)</i>
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

fir-burst-limit (*number | keyword*)

Synopsis	Burst limit for FIR
Context	configure qos sap-egress <i>string queue number fir-burst-limit (number keyword)</i>
Tree	fir-burst-limit
Description	This command configures a burst limit for the FIR of the specified queue. If the keyword auto is used, the FIR burst limit is based on the PIR. In this case, it is recommended to use the explicit PIR value in the queue configuration.
Range	1 to 102400
Default	auto
Units	bytes
Options	auto
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

hs-alt-port-class-pool *boolean*

Synopsis	Use HS alternate class port pool buffer for traffic
Context	configure qos sap-egress <i>string</i> queue <i>number</i> hs-alt-port-class-pool <i>boolean</i>
Tree	hs-alt-port-class-pool
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Scheduling class weight
Context	configure qos sap-egress <i>string</i> queue <i>number</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the hs-wred-queue context
Context	configure qos sap-egress <i>string</i> queue <i>number</i> hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy name
Context	configure qos sap-egress <i>string</i> queue <i>number</i> hs-wred-queue policy <i>reference</i>
Tree	policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
Context	configure qos sap-egress <i>string</i> queue <i>number</i> hs-wrr-weight <i>number</i>
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs (*number* | *keyword*)

Synopsis	Buffer space allowed for the queue
Context	configure qos sap-egress <i>string</i> queue <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet byte offset for addition of policing information
Context	configure qos sap-egress <i>string</i> queue <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 32
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
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Context	configure qos sap-egress <i>string queue number percent-rate</i>
Tree	<i>percent-rate</i>
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos sap-egress <i>string queue number percent-rate cir decimal-number</i>
Tree	<i>cir</i>
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos sap-egress <i>string queue number percent-rate pir decimal-number</i>
Tree	<i>pir</i>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos sap-egress <i>string queue number percent-rate reference-rate keyword</i>
Tree	<i>reference-rate</i>
Default	port-limit
Options	port-limit, local-limit, reference-port-limit
Introduced	16.0.R1
Platforms	All

port-parent

Synopsis	Enable the port-parent context
Context	configure qos sap-egress <i>string queue number</i> port-parent
Tree	port-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	configure qos sap-egress <i>string queue number</i> port-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos sap-egress <i>string queue number</i> port-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Port priority that this queue uses to receive bandwidth from the port level scheduler
Context	configure qos sap-egress <i>string queue number</i> port-parent level <i>number</i>
Tree	level
Range	1 to 8

Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight that this queue uses to receive bandwidth from the port level scheduler
Context	configure qos sap-egress <i>string queue number port-parent weight number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

queue-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	configure qos sap-egress <i>string queue number queue-type keyword</i>
Tree	queue-type
Default	auto-expedited
Options	expedited, auto-expedited, best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos sap-egress <i>string queue number rate</i>
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos sap-egress <i>string queue number rate cir</i> (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-egress <i>string queue number rate pir</i> (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

sched-class (*number* | *keyword*)

Synopsis	Scheduler class for the sap-egress queue
Context	configure qos sap-egress <i>string queue number sched-class</i> (<i>number</i> <i>keyword</i>)
Tree	sched-class
Description	This command configures a scheduling class for the specified queue. If the keyword auto is used, the scheduling class mapping is done automatically.
Range	1 to 6
Default	auto
Options	auto
Introduced	21.7.R1

Platforms 7750 SR-1, 7750 SR-s

scheduler-parent

Synopsis Enable the **scheduler-parent** context
Context **configure qos sap-egress string queue number scheduler-parent**
Tree [scheduler-parent](#)
Notes The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced 16.0.R1
Platforms All

cir-level number

Synopsis Level of priority while feeding to the parent
Context **configure qos sap-egress string queue number scheduler-parent cir-level number**
Tree [cir-level](#)
Range 0 to 8
Default 0
Introduced 16.0.R1
Platforms All

cir-weight number

Synopsis Weight used at the within-CIR port priority level
Context **configure qos sap-egress string queue number scheduler-parent cir-weight number**
Tree [cir-weight](#)
Range 0 to 100
Default 1
Introduced 16.0.R1
Platforms All

level number

Synopsis Level of priority while feeding to the parent
Context **configure qos sap-egress string queue number scheduler-parent level number**

Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

scheduler-name *string*

Synopsis	Parent scheduler name
Context	configure qos sap-egress <i>string</i> queue <i>number</i> scheduler-parent scheduler-name <i>string</i>
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight to be used by the scheduler for feeding this queue
Context	configure qos sap-egress <i>string</i> queue <i>number</i> scheduler-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

wred-queue

Synopsis	Enter the wred-queue context
Context	configure qos sap-egress <i>string</i> queue <i>number</i> wred-queue
Tree	wred-queue

Introduced 16.0.R1
Platforms All

mode *keyword*

Synopsis Generic pool association of the queue to allow queue-specific WRED slopes
Context **configure qos sap-egress** *string queue number wred-queue mode keyword*
Tree [mode](#)
Options native, pool-per-queue
Introduced 16.0.R1
Platforms All

policy *reference*

Synopsis Slope policy name
Context **configure qos sap-egress** *string queue number wred-queue policy reference*
Tree [policy](#)
Reference **configure qos slope-policy** *string*
Introduced 16.0.R1
Platforms All

usage *keyword*

Synopsis Congestion control type
Context **configure qos sap-egress** *string queue number wred-queue usage keyword*
Tree [usage](#)
Options auto, exceed-low
Introduced 16.0.R1
Platforms All

sched-class-elevation

Synopsis Enter the **sched-class-elevation** context
Context **configure qos sap-egress** *string sched-class-elevation*
Tree [sched-class-elevation](#)

Introduced 21.7.R1
Platforms 7750 SR-1, 7750 SR-s

sched-class [*class-id*] *number*

Synopsis Enter the **sched-class** list instance
Context **configure qos sap-egress** *string sched-class-elevation sched-class number*
Tree [sched-class](#)
Introduced 21.7.R1
Platforms 7750 SR-1, 7750 SR-s

[class-id] *number*

Synopsis Scheduling class associated with this SAP egress
Context **configure qos sap-egress** *string sched-class-elevation sched-class number*
Tree [sched-class](#)
Range 1 to 6
Notes This element is part of a list key.
Introduced 21.7.R1
Platforms 7750 SR-1, 7750 SR-s

weight *number*

Synopsis Weight of the schedule class
Context **configure qos sap-egress** *string sched-class-elevation sched-class number weight number*
Tree [weight](#)
Range 1 to 8
Default 1
Introduced 21.7.R1
Platforms 7750 SR-1, 7750 SR-s

scope *keyword*

Synopsis Scope of the policy

Context	configure qos sap-egress <i>string scope keyword</i>
Tree	scope
Default	template
Options	exclusive, template
Introduced	16.0.R1
Platforms	All

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure qos sap-egress <i>string subscriber-mgmt</i>
Tree	subscriber-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-policer

Synopsis	Enter the dynamic-policer context
Context	configure qos sap-egress <i>string subscriber-mgmt dynamic-policer</i>
Tree	dynamic-policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-parent

Synopsis	Enter the arbiter-parent context
Context	configure qos sap-egress <i>string subscriber-mgmt dynamic-policer arbiter-parent</i>
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-name *string*

Synopsis	Arbiter name
Context	configure qos sap-egress <i>string subscriber-mgmt dynamic-policer arbiter-parent arbiter-name string</i>

Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level number

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-egress string subscriber-mgmt dynamic-policer arbiter-parent level number
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight number

Synopsis	Weight to be used by the arbiter for feeding this policer
Context	configure qos sap-egress string subscriber-mgmt dynamic-policer arbiter-parent weight number
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs (number | keyword)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos sap-egress string subscriber-mgmt dynamic-policer cbs (number keyword)
Tree	cbs
Range	0 to 268435456
Default	auto
Units	bytes

Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mbs (*number* | *keyword*)

Synopsis	High priority 'violate' threshold of PIR leaky bucket of this policer
Context	configure qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-id-range

Synopsis	Enable the policer-id-range context
Context	configure qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range
Tree	policer-id-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the dynamic policer ID range
Context	configure qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range end number
Tree	end
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the dynamic policer ID range
Context	configure qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range start number
Tree	start
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stat-mode keyword

Synopsis	Mode of statistics collected by the policer
Context	configure qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer stat-mode keyword
Tree	stat-mode
Default	minimal
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule-entry

Synopsis	Enter the pcc-rule-entry context
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Context	configure qos sap-egress <i>string</i> <i>subscriber-mgmt</i> <i>pcc-rule-entry</i>
Tree	<i>pcc-rule-entry</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure qos sap-egress <i>string</i> <i>subscriber-mgmt</i> <i>pcc-rule-entry</i> range
Tree	<i>range</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the filter and QoS policy entries range
Context	configure qos sap-egress <i>string</i> <i>subscriber-mgmt</i> <i>pcc-rule-entry</i> range end <i>number</i>
Tree	<i>end</i>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the filter and QoS policy entries range
Context	configure qos sap-egress <i>string</i> <i>subscriber-mgmt</i> <i>pcc-rule-entry</i> range start <i>number</i>
Tree	<i>start</i>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-ingress [[sap-ingress-policy-name](#)] *string*

Synopsis	Enter the sap-ingress list instance
Context	configure qos sap-ingress <i>string</i>
Tree	sap-ingress
Introduced	16.0.R1
Platforms	All

[sap-ingress-policy-name] *string*

Synopsis	Policy name
Context	configure qos sap-ingress <i>string</i>
Tree	sap-ingress
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-fc *string*

Synopsis	Default forwarding class or sub forwarding class for traffic not matching specific classification
Context	configure qos sap-ingress <i>string default-fc</i> <i>string</i>
Tree	default-fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

default-priority *keyword*

Synopsis	Priority to assign to traffic ingressing as the default action queue
Context	configure qos sap-ingress <i>string default-priority</i> <i>keyword</i>
Tree	default-priority
Default	low
Options	low, high
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description
Context **configure qos sap-ingress** *string description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

dot1p [[dot1p-value](#)] *number*

Synopsis Enter the **dot1p** list instance
Context **configure qos sap-ingress** *string dot1p number*
Tree [dot1p](#)
Introduced 16.0.R1
Platforms All

[dot1p-value] *number*

Synopsis Dot1p value to match in the packet
Context **configure qos sap-ingress** *string dot1p number*
Tree [dot1p](#)
Range 0 to 7
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

fc *string*

Synopsis Forwarding class or sub forwarding class to classify traffic matching the specific Dot1p
Context **configure qos sap-ingress** *string dot1p number fc string*
Tree [fc](#)
String Length 1 to 32

Introduced	16.0.R1
Platforms	All

priority *keyword*

Synopsis	Priority for packets that match the Dot1p value
Context	configure qos sap-ingress <i>string dot1p number</i> priority <i>keyword</i>
Tree	priority
Default	auto
Options	low, high, auto
Introduced	16.0.R1
Platforms	All

dscp [[dscp-name](#)] *keyword*

Synopsis	Enter the dscp list instance
Context	configure qos sap-ingress <i>string dscp</i> <i>keyword</i>
Tree	dscp
Introduced	16.0.R1
Platforms	All

[[dscp-name](#)] *keyword*

Synopsis	Name for the Differentiated Services Code Point (DSCP)
Context	configure qos sap-ingress <i>string dscp</i> <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc string

Synopsis	Forwarding class or sub forwarding class to classify traffic matching the specific DSCP
Context	configure qos sap-ingress string dscp keyword fc string
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

priority keyword

Synopsis	Priority for the packet
Context	configure qos sap-ingress string dscp keyword priority keyword
Tree	priority
Default	auto
Options	low, high, auto
Introduced	16.0.R1
Platforms	All

fc [fc-name] string

Synopsis	Enter the fc list instance
Context	configure qos sap-ingress string fc string
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] string

Synopsis	Forwarding class (and optional subclass) name
Context	configure qos sap-ingress string fc string
Tree	fc
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast-policer *number*

Synopsis	Policer identifier for the unknown broadcast traffic in this forwarding class
Context	configure qos sap-ingress <i>string fc string broadcast-policer number</i>
Tree	broadcast-policer
Range	1 to 63
Notes	The following elements are part of a choice: (broadcast-policer and fp-redirect-group-broadcast-policer), broadcast-queue , or broadcast-queue-group-queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

broadcast-queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress <i>string fc string broadcast-queue reference</i>
Tree	broadcast-queue
Reference	configure qos sap-ingress <i>string queue number</i>
Notes	The following elements are part of a choice: (broadcast-policer and fp-redirect-group-broadcast-policer), broadcast-queue , or broadcast-queue-group-queue .
Introduced	16.0.R1
Platforms	All

broadcast-queue-group-queue

Synopsis	Enable the broadcast-queue-group-queue context
Context	configure qos sap-ingress <i>string fc string broadcast-queue-group-queue</i>
Tree	broadcast-queue-group-queue
Notes	The following elements are part of a choice: (broadcast-policer and fp-redirect-group-broadcast-policer), broadcast-queue , or broadcast-queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
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Context	configure qos sap-ingress <i>string</i> fc <i>string</i> broadcast-queue-group-queue <i>queue reference</i>
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

queue-group-name *reference*

Synopsis	Queue group name to forward traffic
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> broadcast-queue-group-queue <i>queue-group-name reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

de-1-out-profile *boolean*

Synopsis	Frames with DE value to be assigned as out of profile
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> de-1-out-profile <i>boolean</i>
Tree	de-1-out-profile
Default	false
Introduced	16.0.R1
Platforms	All

egress-fc *keyword*

Synopsis	Forwarding class to override the forwarding class determined by ingress classification
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> egress-fc <i>keyword</i>
Tree	egress-fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1

Platforms All

fp-redirect-group-broadcast-policer

Synopsis Use policer as defined in FP queue-group for the SAP

Context **configure qos sap-ingress string fc string fp-redirect-group-broadcast-policer**

Tree [fp-redirect-group-broadcast-policer](#)

Notes The following elements are part of a choice: (**broadcast-policer** and **fp-redirect-group-broadcast-policer**), **broadcast-queue**, or **broadcast-queue-group-queue**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group-multicast-policer

Synopsis Use policer as defined in FP queue-group for the SAP

Context **configure qos sap-ingress string fc string fp-redirect-group-multicast-policer**

Tree [fp-redirect-group-multicast-policer](#)

Notes The following elements are part of a choice: (**fp-redirect-group-multicast-policer** and **multicast-policer**), **multicast-queue**, or **multicast-queue-group-queue**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group-policer

Synopsis Use policer as defined in FP queue-group for the SAP

Context **configure qos sap-ingress string fc string fp-redirect-group-policer**

Tree [fp-redirect-group-policer](#)

Notes The following elements are part of a choice: (**fp-redirect-group-policer** and **policer**), **queue**, or **queue-group-queue**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group-unknown-policer

Synopsis Use policer as defined in FP queue-group for the SAP

Context **configure qos sap-ingress string fc string fp-redirect-group-unknown-policer**

Tree	fp-redirect-group-unknown-policer
Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

in-remark

Synopsis	Enter the in-remark context
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> in-remark
Tree	in-remark
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP to override DSCP bits of the matching packet
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> in-remark dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

prec number

Synopsis	Value to override precedence bits of matching packet
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> in-remark prec <i>number</i>
Tree	prec
Range	0 to 7
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1

Platforms All

multicast-policer *number*

Synopsis Policer identifier for the unknown broadcast traffic in this forwarding class

Context **configure qos sap-ingress** *string fc string multicast-policer number*

Tree [multicast-policer](#)

Range 1 to 63

Notes The following elements are part of a choice: (**fp-redirect-group-multicast-policer** and **multicast-policer**), **multicast-queue**, or **multicast-queue-group-queue**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

multicast-queue *reference*

Synopsis Broadcast queue to assign for packets in this forwarding class

Context **configure qos sap-ingress** *string fc string multicast-queue reference*

Tree [multicast-queue](#)

Reference **configure qos sap-ingress** *string queue number*

Notes The following elements are part of a choice: (**fp-redirect-group-multicast-policer** and **multicast-policer**), **multicast-queue**, or **multicast-queue-group-queue**.

Introduced 16.0.R1

Platforms All

multicast-queue-group-queue

Synopsis Enable the **multicast-queue-group-queue** context

Context **configure qos sap-ingress** *string fc string multicast-queue-group-queue*

Tree [multicast-queue-group-queue](#)

Notes The following elements are part of a choice: (**fp-redirect-group-multicast-policer** and **multicast-policer**), **multicast-queue**, or **multicast-queue-group-queue**.

Introduced 16.0.R1

Platforms All

queue reference

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress <i>string fc string multicast-queue-group-queue queue reference</i>
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group <i>string queue number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

queue-group-name reference

Synopsis	Queue group name to forward traffic
Context	configure qos sap-ingress <i>string fc string multicast-queue-group-queue queue-group-name reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

out-remark

Synopsis	Enter the out-remark context
Context	configure qos sap-ingress <i>string fc string out-remark</i>
Tree	out-remark
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP to override DSCP bits of the matching packet
Context	configure qos sap-ingress <i>string fc string out-remark dscp keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31,

cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

prec *number*

Synopsis	Value to override precedence bits of matching packet
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> out-remark prec <i>number</i>
Tree	prec
Range	0 to 7
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

policer *number*

Synopsis	Policer identifier for the unicast normal traffic in this forwarding class
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: (fp-redirect-group-policer and policer), queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis	Profile of the packets associated with this forwarding class
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue to assign for packets in this forwarding class
Context	configure qos sap-ingress string fc string queue reference
Tree	queue
Reference	configure qos sap-ingress string queue number
Notes	The following elements are part of a choice: (fp-redirect-group-policer and policer), queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue-group-queue

Synopsis	Enable the queue-group-queue context
Context	configure qos sap-ingress string fc string queue-group-queue
Tree	queue-group-queue
Notes	The following elements are part of a choice: (fp-redirect-group-policer and policer), queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue to assign for packets in this forwarding class
Context	configure qos sap-ingress string fc string queue-group-queue queue reference
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group string queue number
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

queue-group-name *reference*

Synopsis	Queue group to forward traffic
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Context	configure qos sap-ingress <i>string</i> fc <i>string</i> queue-group-queue queue-group-name <i>reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

unknown-policer *number*

Synopsis	Policer identifier for the unknown broadcast traffic in this forwarding class
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> unknown-policer <i>number</i>
Tree	unknown-policer
Range	1 to 63
Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

unknown-queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> unknown-queue <i>reference</i>
Tree	unknown-queue
Reference	configure qos sap-ingress <i>string</i> queue <i>number</i>
Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .
Introduced	16.0.R1
Platforms	All

unknown-queue-group-queue

Synopsis	Enable the unknown-queue-group-queue context
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> unknown-queue-group-queue
Tree	unknown-queue-group-queue

Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue reference

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress string fc string unknown-queue-group-queue queue reference
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group string queue number
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

queue-group-name reference

Synopsis	Queue group name to forward traffic
Context	configure qos sap-ingress string fc string unknown-queue-group-queue queue-group-name reference
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos sap-ingress string ip-criteria
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

entry [*entry-id*] *number*

Synopsis	Enter the entry list instance
Context	configure qos sap-ingress string ip-criteria entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	IP criteria entry to create or edit for the policy
Context	configure qos sap-ingress string ip-criteria entry number
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos sap-ingress string ip-criteria entry number action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *string*

Synopsis	Forwarding class or sub forwarding class to classify traffic matching the criteria
Context	configure qos sap-ingress string ip-criteria entry number action fc string
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

policer *reference*

Synopsis	Policer identifier for the traffic matching MAC Criteria
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> action policer <i>reference</i>
Tree	policer
Reference	configure qos sap-ingress <i>string</i> policer <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority *keyword*

Synopsis	Priority for the packet
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> action priority <i>keyword</i>
Tree	priority
Default	auto
Options	low, high, auto
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> action type <i>keyword</i>
Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

match

Synopsis Enter the **match** context

Context **configure qos sap-ingress** *string ip-criteria entry number match*

Tree [match](#)

Introduced 16.0.R1

Platforms All

dscp keyword

Synopsis DSCP value to match in the packet

Context **configure qos sap-ingress** *string ip-criteria entry number match dscp keyword*

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms All

dst-ip

Synopsis Enter the **dst-ip** context

Context **configure qos sap-ingress** *string ip-criteria entry number match dst-ip*

Tree [dst-ip](#)

Introduced 16.0.R1

Platforms All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis Destination IPv4 address for SAP QoS policy match

Context **configure qos sap-ingress** *string ip-criteria entry number match dst-ip address (ipv4-address | ipv4-prefix-with-host-bits)*

Tree [address](#)

Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IP-prefix list as match criterion
Context	configure qos sap-ingress string ip-criteria entry number match dst-ip ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list string
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	configure qos sap-ingress string ip-criteria entry number match dst-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos sap-ingress string ip-criteria entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
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Context	configure qos sap-ingress <i>string ip-criteria entry number match dst-port eq number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos sap-ingress <i>string ip-criteria entry number match dst-port gt number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Value 'less than' assigned as match condition
Context	configure qos sap-ingress <i>string ip-criteria entry number match dst-port lt number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure qos sap-ingress <i>string ip-criteria entry number match dst-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1

Platforms All

end number

Synopsis Upper bound of the port range
Context **configure qos sap-ingress string ip-criteria entry number match dst-port range end number**
Tree **end**
Range 0 to 65535
Introduced 16.0.R1
Platforms All

start number

Synopsis Lower bound of the port range
Context **configure qos sap-ingress string ip-criteria entry number match dst-port range start number**
Tree **start**
Range 0 to 65535
Introduced 16.0.R1
Platforms All

fragment keyword

Synopsis Match performed when the packet is either a fragment or not, or matches all packets
Context **configure qos sap-ingress string ip-criteria entry number match fragment keyword**
Tree **fragment**
Options false, true
Introduced 16.0.R1
Platforms All

protocol (number | keyword)

Synopsis IP protocol to match
Context **configure qos sap-ingress string ip-criteria entry number match protocol (number | keyword)**

Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos sap-ingress <i>string</i> ip-criteria <i>entry</i> <i>number</i> match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis	Source IPv4 address for SAP QoS policy match criterion
Context	configure qos sap-ingress <i>string</i> ip-criteria <i>entry</i> <i>number</i> match src-ip <i>address</i> (<i>ipv4-address</i> <i>ipv4-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IP-prefix list as match criterion
Context	configure qos sap-ingress <i>string</i> ip-criteria <i>entry</i> <i>number</i> match src-ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

mask string

Synopsis	IP address to match with source IP of the packet
Context	configure qos sap-ingress string ip-criteria entry number match src-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos sap-ingress string ip-criteria entry number match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress string ip-criteria entry number match src-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos sap-ingress string ip-criteria entry number match src-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1

Platforms All

lt number

Synopsis Value 'less than' assigned as match condition
Context **configure qos sap-ingress string ip-criteria entry number match src-port lt number**
Tree **lt**
Range 0 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

range

Synopsis Enter the **range** context
Context **configure qos sap-ingress string ip-criteria entry number match src-port range**
Tree **range**
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

end number

Synopsis Upper bound of the port range
Context **configure qos sap-ingress string ip-criteria entry number match src-port range end number**
Tree **end**
Range 0 to 65535
Introduced 16.0.R1
Platforms All

start number

Synopsis Lower bound of the port range
Context **configure qos sap-ingress string ip-criteria entry number match src-port range start number**

Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

vxlan-vni

Synopsis	Enter the vxlan-vni context
Context	configure qos sap-ingress <i>string</i> ip-criteria <i>entry number</i> match vxlan-vni
Tree	vxlan-vni
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress <i>string</i> ip-criteria <i>entry number</i> match vxlan-vni eq number
Tree	eq
Range	1 to 16777215
Notes	The following elements are part of a choice: eq or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure qos sap-ingress <i>string</i> ip-criteria <i>entry number</i> match vxlan-vni range
Tree	range
Notes	The following elements are part of a choice: eq or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the VNI range
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Context	configure qos sap-ingress <i>string ip-criteria entry number match vxlan-vni range end number</i>
Tree	end
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the VNI range
Context	configure qos sap-ingress <i>string ip-criteria entry number match vxlan-vni range start number</i>
Tree	start
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

tag number

Synopsis	Tag ID associated with the criteria entry
Context	configure qos sap-ingress <i>string ip-criteria entry number tag number</i>
Tree	tag
Description	This command associates a tag with the criteria entry. Tag identifiers are not supported in SAP ingress QoS policies, MAC criteria statements, or in SAP egress QoS policies.
Range	0 to 255
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 criteria entry type
Context	configure qos sap-ingress <i>string ip-criteria type keyword</i>

Tree	type
Description	This command specifies the type of entries that can be configured for IPv4 match criteria.
Default	normal
Options	normal, vxlan-vni, tagged-entries
Introduced	16.0.R1
Platforms	All

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure qos sap-ingress <i>string</i> ipv6-criteria
Tree	ipv6-criteria
Introduced	16.0.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[[entry-id](#)] *number*

Synopsis	IPv6 criteria entry to create or edit for the policy
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos sap-ingress string ipv6-criteria entry number action
Tree	action
Introduced	16.0.R1
Platforms	All

fc string

Synopsis	Forwarding class or sub forwarding class to classify traffic matching the criteria
Context	configure qos sap-ingress string ipv6-criteria entry number action fc string
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

policer reference

Synopsis	Policer identifier for the traffic matching MAC Criteria
Context	configure qos sap-ingress string ipv6-criteria entry number action policer reference
Tree	policer
Reference	configure qos sap-ingress string policer number
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority keyword

Synopsis	Priority for the packet
Context	configure qos sap-ingress string ipv6-criteria entry number action priority keyword
Tree	priority
Default	auto
Options	low, high, auto
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry number action <i>type</i> keyword
Tree	<i>type</i>
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry number description <i>string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry number match
Tree	<i>match</i>
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry number match dscp <i>keyword</i>
Tree	<i>dscp</i>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,

	cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address to match destination IP of the packet
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry number match dst-ip address (<i>ipv6-address</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry number match dst-ip ipv6-prefix-list reference
Tree	ipv6-prefix-list
Reference	configure qos match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask string

Synopsis	IP address to match with source IP of the packet
Context	configure qos sap-ingress string ipv6-criteria entry number match dst-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos sap-ingress string ipv6-criteria entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress string ipv6-criteria entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos sap-ingress string ipv6-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1

Platforms All

lt number

Synopsis Value 'less than' assigned as match condition
Context **configure qos sap-ingress string ipv6-criteria entry number match dst-port lt number**
Tree **lt**
Range 0 to 65535
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

range

Synopsis Enter the **range** context
Context **configure qos sap-ingress string ipv6-criteria entry number match dst-port range**
Tree **range**
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

end number

Synopsis Upper bound of the port range
Context **configure qos sap-ingress string ipv6-criteria entry number match dst-port range end number**
Tree **end**
Range 0 to 65535
Introduced 16.0.R1
Platforms All

start number

Synopsis Lower bound of the port range
Context **configure qos sap-ingress string ipv6-criteria entry number match dst-port range start number**

Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Match performed when the packet is either a fragment or not, or matches all packets
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IPv4 address to match
Context	configure qos sap-ingress string ipv6-criteria entry number match src-ip address (<i>ipv6-address</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	configure qos sap-ingress string ipv6-criteria entry number match src-ip ipv6-prefix-list reference
Tree	ipv6-prefix-list
Reference	configure qos match-list ipv6-prefix-list string
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	configure qos sap-ingress string ipv6-criteria entry number match src-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos sap-ingress string ipv6-criteria entry number match src-port
Tree	src-port
Introduced	16.0.R1

Platforms All

eq number

Synopsis Value 'equal to' assigned as match condition
Context **configure qos sap-ingress string ipv6-criteria entry number match src-port eq number**
Tree [eq](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

gt number

Synopsis Value 'greater than' assigned as match condition
Context **configure qos sap-ingress string ipv6-criteria entry number match src-port gt number**
Tree [gt](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

lt number

Synopsis Value 'less than' assigned as match condition
Context **configure qos sap-ingress string ipv6-criteria entry number match src-port lt number**
Tree [lt](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq, gt, lt, or range**.
Introduced 16.0.R1
Platforms All

range

Synopsis Enter the **range** context

Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>src-port</i> <i>range</i>
Tree	<i>range</i>
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range
Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>src-port</i> <i>range</i> <i>end</i> <i>number</i>
Tree	<i>end</i>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>src-port</i> <i>range</i> <i>start</i> <i>number</i>
Tree	<i>start</i>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

vxlan-vni

Synopsis	Enter the vxlan-vni context
Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>vxlan-vni</i>
Tree	<i>vxlan-vni</i>
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match vxlan-vni eq <i>number</i>
Tree	eq
Range	1 to 16777215
Notes	The following elements are part of a choice: eq or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match vxlan-vni range
Tree	range
Notes	The following elements are part of a choice: eq or range .
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the VNI range
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match vxlan-vni range end <i>number</i>
Tree	end
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the VNI range
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match vxlan-vni range start <i>number</i>
Tree	start
Range	1 to 16777215

Introduced 16.0.R1
Platforms All

tag *number*

Synopsis Tag ID associated with the criteria entry
Context **configure qos sap-ingress** *string ipv6-criteria entry number tag number*
Tree [tag](#)
Description This command associates a tag with the criteria entry. Tag identifiers are not supported in SAP ingress QoS policies, MAC criteria statements, or in SAP egress QoS policies.
Range 0 to 255
Default 0
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IPv6 criteria entry type
Context **configure qos sap-ingress** *string ipv6-criteria type keyword*
Tree [type](#)
Description This command specifies the type of entries that can be configured for IPv6 match criteria.
Default normal
Options normal, vxlan-vni, tagged-entries
Introduced 16.0.R1
Platforms All

lsp-exp [[lsp-exp-value](#)] *number*

Synopsis Enter the **lsp-exp** list instance
Context **configure qos sap-ingress** *string lsp-exp number*
Tree [lsp-exp](#)

Introduced 16.0.R1
Platforms All

[lsp-exp-value] *number*

Synopsis Value to assign the unique MPLS LSP EXP value that will match the lsp-exp rule
Context **configure qos sap-ingress** *string* **lsp-exp** *number*
Tree **lsp-exp**
Range 0 to 7
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

fc *string*

Synopsis Forwarding class or sub forwarding class to classify traffic matching the LSP EXP value
Context **configure qos sap-ingress** *string* **lsp-exp** *number* **fc** *string*
Tree **fc**
String Length 1 to 32
Introduced 16.0.R1
Platforms All

priority *keyword*

Synopsis Priority for the matching traffic
Context **configure qos sap-ingress** *string* **lsp-exp** *number* **priority** *keyword*
Tree **priority**
Default auto
Options low, high, auto
Introduced 16.0.R1
Platforms All

mac-criteria

Synopsis Enter the **mac-criteria** context

Context	configure qos sap-ingress string mac-criteria
Tree	mac-criteria
Introduced	16.0.R1
Platforms	All

entry [**entry-id**] *number*

Synopsis	Enter the entry list instance
Context	configure qos sap-ingress string mac-criteria entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	Identifier for MAC match criteria and the corresponding action for a SAP-ingress policy
Context	configure qos sap-ingress string mac-criteria entry number
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos sap-ingress string mac-criteria entry number action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *string*

Synopsis	Forwarding class or sub forwarding class to classify traffic matching the criteria
Context	configure qos sap-ingress string mac-criteria entry number action fc string

Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

policer *reference*

Synopsis	Policer identifier for the traffic matching MAC Criteria
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> action policer <i>reference</i>
Tree	policer
Reference	configure qos sap-ingress <i>string</i> policer <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority *keyword*

Synopsis	Priority for the packet
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> action priority <i>keyword</i>
Tree	priority
Default	auto
Options	low, high, auto
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> action type <i>keyword</i>
Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match
Tree	match
Introduced	16.0.R1
Platforms	All

atm-vci *number*

Synopsis	ATM VC Identifier to match as part of the MAC match criteria
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match atm-vci <i>number</i>
Tree	atm-vci
Range	1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

dot1p

Synopsis	Enable the dot1p context
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match dot1p
Tree	dot1p
Introduced	16.0.R1
Platforms	All

mask number

Synopsis	3-bit mask for the 802.1p value
Context	configure qos sap-ingress string mac-criteria entry number match dot1p mask number
Tree	mask
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

priority number

Synopsis	802.1P priority value to use as the match criterion
Context	configure qos sap-ingress string mac-criteria entry number match dot1p priority number
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

dst-mac

Synopsis	Enable the dst-mac context
Context	configure qos sap-ingress string mac-criteria entry number match dst-mac
Tree	dst-mac
Introduced	16.0.R1
Platforms	All

address string

Synopsis	Destination MAC address as QoS policy match criterion
Context	configure qos sap-ingress string mac-criteria entry number match dst-mac address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

mask string

Synopsis Mask for destination MAC address
 Context **configure qos sap-ingress string mac-criteria entry number match dst-mac mask string**
 Tree [mask](#)
 Default ff:ff:ff:ff:ff:ff
 Introduced 16.0.R1
 Platforms All

etype string

Synopsis Ethernet type
 Context **configure qos sap-ingress string mac-criteria entry number match etype string**
 Tree [etype](#)
 String Length 5 to 6
 Introduced 16.0.R1
 Platforms All

frame-type keyword

Synopsis Match MAC criteria for ingress SAP QoS policy
 Context **configure qos sap-ingress string mac-criteria entry number match frame-type keyword**
 Tree [frame-type](#)
 Options 802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii, atm
 Introduced 16.0.R1
 Platforms All

inner-tag

Synopsis Enable the **inner-tag** context
 Context **configure qos sap-ingress string mac-criteria entry number match inner-tag**
 Tree [inner-tag](#)
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value

Context **configure** qos sap-ingress string mac-criteria entry number match inner-tag mask number

Tree [mask](#)

Range 1 to 4095

Default 4095

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan number

Synopsis Value to match against the VID of the second VLAN tag

Context **configure** qos sap-ingress string mac-criteria entry number match inner-tag vlan number

Tree [vlan](#)

Range 0 to 4095

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

llc-dsap

Synopsis Enable the **llc-dsap** context

Context **configure** qos sap-ingress string mac-criteria entry number match llc-dsap

Tree [llc-dsap](#)

Introduced 16.0.R1

Platforms All

dsap number

Synopsis DSAP value

Context	configure qos sap-ingress <i>string mac-criteria entry number match llc-dsap dsap number</i>
Tree	dsap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mask number

Synopsis	DSAP mask
Context	configure qos sap-ingress <i>string mac-criteria entry number match llc-dsap mask number</i>
Tree	mask
Range	0 to 255
Default	255
Introduced	16.0.R1
Platforms	All

llc-ssap

Synopsis	Enable the llc-ssap context
Context	configure qos sap-ingress <i>string mac-criteria entry number match llc-ssap</i>
Tree	llc-ssap
Introduced	16.0.R1
Platforms	All

mask number

Synopsis	Source SAP mask
Context	configure qos sap-ingress <i>string mac-criteria entry number match llc-ssap mask number</i>
Tree	mask
Range	0 to 255
Default	255
Introduced	16.0.R1

Platforms All

ssap number

Synopsis SSAP value
Context **configure qos sap-ingress string mac-criteria entry number match llc-ssap ssap number**
Tree [ssap](#)
Range 0 to 255
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

outer-tag

Synopsis Enable the **outer-tag** context
Context **configure qos sap-ingress string mac-criteria entry number match outer-tag**
Tree [outer-tag](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis First tag carried transparently through the service
Context **configure qos sap-ingress string mac-criteria entry number match outer-tag mask number**
Tree [mask](#)
Range 1 to 4095
Default 4095
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan number

Synopsis Match against VID of the first VLAN tag in the packet carried transparently through service

Context	configure qos sap-ingress string mac-criteria entry number match outer-tag vlan number
Tree	vlan
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

snap-oui *keyword*

Synopsis	Parameter snap-oui as MAC filter match criteria
Context	configure qos sap-ingress string mac-criteria entry number match snap-oui keyword
Tree	snap-oui
Options	zero, non-zero
Introduced	16.0.R1
Platforms	All

snap-pid *number*

Synopsis	Parameter snap-pid as MAC filter match criteria
Context	configure qos sap-ingress string mac-criteria entry number match snap-pid number
Tree	snap-pid
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

src-mac

Synopsis	Enable the src-mac context
Context	configure qos sap-ingress string mac-criteria entry number match src-mac
Tree	src-mac
Introduced	16.0.R1
Platforms	All

address string

Synopsis	Source MAC address as QoS policy match criterion
Context	configure qos sap-ingress string mac-criteria entry number match src-mac address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mask string

Synopsis	Mask for source MAC address
Context	configure qos sap-ingress string mac-criteria entry number match src-mac mask string
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	All

type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC criteria filter type
Context	configure qos sap-ingress string mac-criteria type keyword
Tree	type
Default	normal
Options	normal, vid
Introduced	16.0.R1
Platforms	All

policer [policer-id] number

Synopsis	Enter the policer list instance
Context	configure qos sap-ingress string policer number

Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] *number*

Synopsis	SAP-ingress policer identifier
Context	configure qos sap-ingress <i>string</i> policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
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Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> <i>adaptation-rule</i> <i>pir</i> <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adv-config-policy *reference*

Synopsis	Advanced QoS policy name
Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> adv-config-policy <i>reference</i>
Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-parent

Synopsis	Enter the arbiter-parent context
Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-name *string*

Synopsis	Arbiter name
Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> arbiter-parent arbiter-name <i>string</i>
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> arbiter-parent <i>level</i> <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> arbiter-parent <i>weight</i> <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> description <i>string</i>

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

high-prio-only (*number* | *keyword*)

Synopsis	Percentage of PIR leaky bucket's MBS of this policer that is reserved for high priority traffic
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> high-prio-only (<i>number</i> <i>keyword</i>)
Tree	high-prio-only
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	High priority violate threshold of PIR leaky bucket
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31

Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos sap-ingress string policer number percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir decimal-number

Synopsis	Administrative CIR percent
Context	configure qos sap-ingress string policer number percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir decimal-number

Synopsis	Administrative PIR percent
Context	configure qos sap-ingress string policer number percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

reference-rate keyword

Synopsis	Reference rate
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Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> <i>percent-rate</i> <i>reference-rate</i> <i>keyword</i>
Tree	reference-rate
Default	local-limit
Options	local-limit, reference-port-limit
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-capped *boolean*

Synopsis	Enforce an overall in-profile burst limit to the CIR bucket at ingress policer
Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> profile-capped <i>boolean</i>
Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> <i>rate</i> cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis Administrative PIR

Context **configure qos sap-ingress** *string* **policer** *number* **rate** **pir** (*number* | *keyword*)

Tree [pir](#)

Range 1 to 6400000000

Default max

Units kilobps

Options max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-parent

Synopsis Enter the **scheduler-parent** context

Context **configure qos sap-ingress** *string* **policer** *number* **scheduler-parent**

Tree [scheduler-parent](#)

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

cir-level *number*

Synopsis Port priority level for within-CIR offered load

Context **configure qos sap-ingress** *string* **policer** *number* **scheduler-parent** **cir-level** *number*

Tree [cir-level](#)

Description This command defines the hierarchy priority level when compared with other policers, queues, and schedulers that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the within-CIR pass of the scheduler and the **cir-weight** command is ignored.

Range 0 to 8

Default 0

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

cir-weight *number*

Synopsis Weight to use in the within-CIR port priority level

Context **configure** qos sap-ingress *string* policer *number* scheduler-parent cir-weight *number*

Tree **cir-weight**

Description The command defines the relative weight of the policer in comparison with other child policers, queues, or schedulers competing for bandwidth on the parent scheduler name at the within-CIR priority level.

A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.

When this command is set to a value of 0, the policer receives bandwidth only after the other children with a non-zero weight at this level have been serviced.

Range 0 to 100

Default 1

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

level *number*

Synopsis Priority level for bandwidth on the parent scheduler

Context **configure** qos sap-ingress *string* policer *number* scheduler-parent level *number*

Tree **level**

Description This command defines the priority level when compared with other policers, queues, and schedulers when competing for bandwidth on the parent scheduler.

Children of the parent scheduler with a lower priority do not receive bandwidth until all children with a higher priority have either reached their maximum bandwidth or are idle. Children with the same level are serviced in relation to their relative weights.

Range 1 to 8

Default 1

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

scheduler-name *string*

Synopsis	Scheduler name
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> scheduler-parent scheduler-name <i>string</i>
Tree	scheduler-name
String Length	1 to 32
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

weight *number*

Synopsis	Policer weight at the above-CIR priority level
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> scheduler-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir, offered-profile-with-discards
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policers-hqos-manageable *boolean*

Synopsis	Manage policers through the hierarchical QoS process
Context	configure qos sap-ingress <i>string</i> policers-hqos-manageable <i>boolean</i>

Tree	policers-hqos-manageable
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

policy-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ingress SAP QoS policy ID
Context	configure qos sap-ingress <i>string</i> policy-id <i>number</i>
Tree	policy-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

prec [[prec-value](#)] *number*

Synopsis	Enter the prec list instance
Context	configure qos sap-ingress <i>string</i> prec <i>number</i>
Tree	prec
Introduced	16.0.R1
Platforms	All

[[prec-value](#)] *number*

Synopsis	Precedence value for which mapping is performed
Context	configure qos sap-ingress <i>string</i> prec <i>number</i>
Tree	prec
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc string

Synopsis	Forwarding class or sub forwarding class to classify traffic matching the precedence value
Context	configure qos sap-ingress string prec number fc string
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

priority keyword

Synopsis	Priority for the matching traffic
Context	configure qos sap-ingress string prec number priority keyword
Tree	priority
Default	auto
Options	low, high, auto
Introduced	16.0.R1
Platforms	All

queue [queue-id] number

Synopsis	Enter the queue list instance
Context	configure qos sap-ingress string queue number
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] number

Synopsis	SAP-ingress policer identifier
Context	configure qos sap-ingress string queue number
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos sap-ingress <i>string queue number adaptation-rule</i>
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos sap-ingress <i>string queue number adaptation-rule cir keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

fir keyword

Synopsis	Constraint used when deriving the operational FIR value
Context	configure qos sap-ingress <i>string queue number adaptation-rule fir keyword</i>
Tree	fir
Default	closest
Options	max, min, closest
Introduced	16.0.R2
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos sap-ingress <i>string queue number adaptation-rule pir keyword</i>

Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

adv-config-policy *reference*

Synopsis	Advanced QoS policy name
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> adv-config-policy <i>reference</i>
Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Default	auto
Units	kilobytes

Options	auto
Introduced	16.0.R1
Platforms	All

cir-non-profiling *boolean*

Synopsis	Prevent profile modification of CIR dependent packets
Context	configure qos sap-ingress <i>string queue number cir-non-profiling boolean</i>
Tree	cir-non-profiling
Default	false
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos sap-ingress <i>string queue number drop-tail</i>
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure qos sap-ingress <i>string queue number drop-tail low</i>
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number | keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos sap-ingress <i>string queue number drop-tail low percent-reduction-from-mbs (number keyword)</i>
Tree	percent-reduction-from-mbs
Range	0 to 100

Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	Maximum buffer space that is allowed for queue
Context	configure qos sap-ingress <i>string queue number mbs</i> (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

multipoint *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Apply as a multicast queue
Context	configure qos sap-ingress <i>string queue number multipoint boolean</i>
Tree	multipoint
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet size modification for queue accounting
Context	configure qos sap-ingress <i>string queue number packet-byte-offset number</i>
Tree	packet-byte-offset
Range	-32 to 30
Default	0

Introduced 16.0.R1
Platforms All

percent-rate

Synopsis Enter the **percent-rate** context
Context **configure qos sap-ingress** *string queue number percent-rate*
Tree [percent-rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms All

cir decimal-number

Synopsis Administrative CIR percent
Context **configure qos sap-ingress** *string queue number percent-rate cir decimal-number*
Tree [cir](#)
Range 0.00 to 100.00
Default 0.00
Notes The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced 16.0.R1
Platforms All

fir decimal-number

Synopsis Administrative FIR percent
Context **configure qos sap-ingress** *string queue number percent-rate fir decimal-number*
Tree [fir](#)
Range 0.00 to 100.00
Default 0.00
Notes The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced 16.0.R2
Platforms All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos sap-ingress <i>string queue number percent-rate pir decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

police

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	configure qos sap-ingress <i>string queue number percent-rate police</i>
Tree	police
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos sap-ingress <i>string queue number percent-rate reference-rate keyword</i>
Tree	reference-rate
Default	port-limit
Options	port-limit, local-limit, reference-port-limit
Introduced	16.0.R1
Platforms	All

queue-mode *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operating mode for this queue
Context	configure qos sap-ingress <i>string queue number queue-mode keyword</i>
Tree	queue-mode

Default	priority
Options	priority, profile
Introduced	16.0.R1
Platforms	All

queue-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	configure qos sap-ingress <i>string queue number queue-type keyword</i>
Tree	<i>queue-type</i>
Default	auto-expedited
Options	expedited, auto-expedited, best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos sap-ingress <i>string queue number rate</i>
Tree	<i>rate</i>
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos sap-ingress <i>string queue number rate cir (number keyword)</i>
Tree	<i>cir</i>
Range	0 to 6400000000
Default	0
Units	kilobps

Options	max
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R1
Platforms	All

fir (*number* | *keyword*)

Synopsis	Administrative FIR
Context	configure qos sap-ingress string queue number rate fir (<i>number</i> <i>keyword</i>)
Tree	fir
Range	0 to 6400000000
Default	0
Units	kilobps
Options	max
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R2
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-ingress string queue number rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

police

Synopsis	Drop the traffic feeding into queue above the PIR rate
Context	configure qos sap-ingress string queue number rate police
Tree	police

Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R1
Platforms	All

scheduler-parent

Synopsis	Enter the scheduler-parent context
Context	configure qos sap-ingress <i>string queue number scheduler-parent</i>
Tree	scheduler-parent
Introduced	16.0.R1
Platforms	All

cir-level number

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-ingress <i>string queue number scheduler-parent cir-level number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight number

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos sap-ingress <i>string queue number scheduler-parent cir-weight number</i>
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level number

Synopsis	Level of priority while feeding to the parent
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Context	configure qos sap-ingress <i>string queue number scheduler-parent level number</i>
Tree	<i>level</i>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

scheduler-name *string*

Synopsis	Scheduler name
Context	configure qos sap-ingress <i>string queue number scheduler-parent scheduler-name string</i>
Tree	<i>scheduler-name</i>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure qos sap-ingress <i>string queue number scheduler-parent weight number</i>
Tree	<i>weight</i>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Scope of the policy
Context	configure qos sap-ingress <i>string scope keyword</i>
Tree	<i>scope</i>
Default	template
Options	exclusive, template
Introduced	16.0.R1

Platforms All

subscriber-mgmt

Synopsis Enter the **subscriber-mgmt** context
Context **configure qos sap-ingress string subscriber-mgmt**
Tree [subscriber-mgmt](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-policer

Synopsis Enter the **dynamic-policer** context
Context **configure qos sap-ingress string subscriber-mgmt dynamic-policer**
Tree [dynamic-policer](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-parent

Synopsis Enter the **arbiter-parent** context
Context **configure qos sap-ingress string subscriber-mgmt dynamic-policer arbiter-parent**
Tree [arbiter-parent](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-name *string*

Synopsis Arbiter name
Context **configure qos sap-ingress string subscriber-mgmt dynamic-policer arbiter-parent
arbiter-name string**
Tree [arbiter-name](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level number

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent <i>level number</i>
Tree	<i>level</i>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight number

Synopsis	Weight used by the arbiter for feeding the policer
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent <i>weight number</i>
Tree	<i>weight</i>
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs (number | keyword)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer cbs (<i>number keyword</i>)
Tree	<i>cbs</i>
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mbs (*number* | *keyword*)

Synopsis	High priority violate threshold of PIR leaky bucket of this policer
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-id-range

Synopsis	Enable the policer-id-range context
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range
Tree	policer-id-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the dynamic policer ID range
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range end <i>number</i>

Tree	end
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the dynamic policer ID range
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range start number
Tree	start
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stat-mode keyword

Synopsis	Mode of statistics collected by the policer
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer stat-mode keyword
Tree	stat-mode
Default	minimal
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule-entry

Synopsis	Enter the pcc-rule-entry context
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt pcc-rule-entry
Tree	pcc-rule-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt pcc-rule-entry range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the filter and QoS policy entries range
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt pcc-rule-entry range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the filter and QoS policy entries range
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt pcc-rule-entry range start number
Tree	start
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy [*scheduler-policy-name*] *string*

Synopsis	Enter the scheduler-policy list instance
Context	configure qos scheduler-policy <i>string</i>
Tree	scheduler-policy
Max. Instances	2047

Introduced 16.0.R1
Platforms All

[scheduler-policy-name] *string*

Synopsis Scheduler policy name
Context **configure qos scheduler-policy** *string*
Tree [scheduler-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure qos scheduler-policy** *string description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

frame-based-accounting *boolean*

Synopsis Use frame-based accounting for schedulers and children within scheduler policy
Context **configure qos scheduler-policy** *string frame-based-accounting boolean*
Tree [frame-based-accounting](#)
Default false
Introduced 16.0.R1
Platforms All

tier [[tier-id](#)] *number*

Synopsis Enter the **tier** list instance
Context **configure qos scheduler-policy** *string tier number*

Tree	tier
Introduced	16.0.R1
Platforms	All

[tier-id] *number*

Synopsis	Tier for scheduler-policy scheduler
Context	configure qos scheduler-policy <i>string</i> tier <i>number</i>
Tree	tier
Range	1 to 3
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent-location *keyword*

Synopsis	Location in which the tier 1 schedulers can find their parent
Context	configure qos scheduler-policy <i>string</i> tier <i>number</i> parent-location <i>keyword</i>
Tree	parent-location
Default	auto
Options	auto, sub, vport
Introduced	16.0.R1
Platforms	All

scheduler [[scheduler-name](#)] *string*

Synopsis	Enter the scheduler list instance
Context	configure qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i>
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
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Context	configure qos scheduler-policy <i>string tier number scheduler string</i>
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos scheduler-policy <i>string tier number scheduler string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	configure qos scheduler-policy <i>string tier number scheduler string limit-unused-bandwidth boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos scheduler-policy <i>string tier number scheduler string percent-rate</i>
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	All

cir (*keyword* | *decimal-number*)

Synopsis	Scheduler CIR
Context	configure qos scheduler-policy <i>string tier number scheduler string percent-rate cir</i> (<i>keyword</i> <i>decimal-number</i>)
Tree	cir
Range	0.00 to 100.00
Default	sum
Options	sum
Introduced	20.10.R1
Platforms	All

pir *decimal-number*

Synopsis	Scheduler PIR
Context	configure qos scheduler-policy <i>string tier number scheduler string percent-rate pir</i> <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos scheduler-policy <i>string tier number scheduler string percent-rate</i> reference-rate <i>keyword</i>

Tree	reference-rate
Default	reference-port-limit
Options	local-limit, reference-port-limit
Introduced	20.10.R1
Platforms	All

port-parent

Synopsis	Enable the port-parent context
Context	configure qos scheduler-policy <i>string tier number scheduler string</i> port-parent
Tree	port-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	configure qos scheduler-policy <i>string tier number scheduler string</i> port-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos scheduler-policy <i>string tier number scheduler string</i> port-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	16.0.R1

Platforms All

level number

Synopsis Port priority that this queue uses to receive bandwidth from the port level scheduler

Context **configure qos scheduler-policy string tier number scheduler string port-parent level number**

Tree **level**

Range 1 to 8

Default 1

Introduced 16.0.R1

Platforms All

weight number

Synopsis Weight used at the above-CIR port priority level

Context **configure qos scheduler-policy string tier number scheduler string port-parent weight number**

Tree **weight**

Range 0 to 100

Default 1

Introduced 16.0.R1

Platforms All

rate

Synopsis Enter the **rate** context

Context **configure qos scheduler-policy string tier number scheduler string rate**

Tree **rate**

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

cir (number | keyword)

Synopsis Administrative CIR

Context	configure qos scheduler-policy <i>string tier number scheduler string rate cir</i> (<i>number keyword</i>)
Tree	cir
Range	0 to 6400000000
Default	sum
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number | keyword*)

Synopsis	Administrative PIR
Context	configure qos scheduler-policy <i>string tier number scheduler string rate pir</i> (<i>number keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-parent

Synopsis	Enable the scheduler-parent context
Context	configure qos scheduler-policy <i>string tier number scheduler string scheduler-parent</i>
Tree	scheduler-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Level of priority while feeding to the parent
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Context	configure qos scheduler-policy <i>string tier number scheduler string scheduler-parent cir-level number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos scheduler-policy <i>string tier number scheduler string scheduler-parent cir-weight number</i>
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos scheduler-policy <i>string tier number scheduler string scheduler-parent level number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

scheduler-name *string*

Synopsis	Scheduler name
Context	configure qos scheduler-policy <i>string tier number scheduler string scheduler-parent scheduler-name string</i>
Tree	scheduler-name

String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i> scheduler-parent <i>weight</i> <i>number</i>
Tree	<i>weight</i>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

shared-queue [*shared-queue-policy-name*] *string*

Synopsis	Enter the shared-queue list instance
Context	configure qos shared-queue <i>string</i>
Tree	<i>shared-queue</i>
Introduced	16.0.R1
Platforms	All

[shared-queue-policy-name] *string*

Synopsis	Name of the default shared queue policy
Context	configure qos shared-queue <i>string</i>
Tree	<i>shared-queue</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos shared-queue <i>string</i> description <i>string</i>
Tree	description
String Length	0 to 80
Introduced	16.0.R1
Platforms	All

fc [*fc-name*] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos shared-queue <i>string</i> fc <i>keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class mapping to queue mapping
Context	configure qos shared-queue <i>string</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast-queue *number*

Synopsis	Logical queue that the broadcast traffic, classified into this forwarding class, should use
Context	configure qos shared-queue <i>string</i> fc <i>keyword</i> broadcast-queue <i>number</i>
Tree	broadcast-queue
Range	9 to 32
Introduced	16.0.R1
Platforms	All

multicast-queue *number*

Synopsis	Logical queue that the multicast traffic, classified into this forwarding class, should use
Context	configure qos shared-queue <i>string</i> fc keyword multicast-queue <i>number</i>
Tree	multicast-queue
Range	9 to 32
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Logical queue that the traffic, classified into this forwarding class, should use
Context	configure qos shared-queue <i>string</i> fc keyword queue <i>number</i>
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

unknown-queue *number*

Synopsis	Logical queue that the unknown traffic, classified into this forwarding class, should use
Context	configure qos shared-queue <i>string</i> fc keyword unknown-queue <i>number</i>
Tree	unknown-queue
Range	9 to 32
Introduced	16.0.R1
Platforms	All

queue [**queue-id**] *number*

Synopsis	Enter the queue list instance
Context	configure qos shared-queue <i>string</i> queue <i>number</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *number*

Synopsis	Shared queue identifier
Context	configure qos shared-queue <i>string queue number</i>
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

cbs *number*

Synopsis	Committed burst size as a percentage of the maximum reserved buffer space for the queue
Context	configure qos shared-queue <i>string queue number cbs number</i>
Tree	cbs
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos shared-queue <i>string queue number drop-tail</i>
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure qos shared-queue <i>string queue number drop-tail low</i>
Tree	low
Introduced	16.0.R1

Platforms All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis Low drop-tail percent from MBS that is reduced

Context **configure qos shared-queue** *string queue number drop-tail low percent-reduction-from-mbs* (*number* | *keyword*)

Tree [percent-reduction-from-mbs](#)

Range 0 to 100

Default auto

Options auto

Introduced 16.0.R1

Platforms All

mbs *number*

Synopsis Maximum burst size as a percentage of maximum reserved buffer space for the queue

Context **configure qos shared-queue** *string queue number mbs number*

Tree [mbs](#)

Range 0 to 100

Units percent

Introduced 16.0.R1

Platforms All

multipoint *boolean*

Synopsis Apply as a multicast queue

Context **configure qos shared-queue** *string queue number multipoint boolean*

Tree [multipoint](#)

Introduced 16.0.R1

Platforms All

queue-type *keyword*

Synopsis Priority that this queue receives from the hardware level schedulers

Context **configure qos shared-queue** *string queue number queue-type keyword*

Tree	queue-type
Default	auto-expedited
Options	expedited, auto-expedited, best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos shared-queue <i>string queue number rate</i>
Tree	rate
Introduced	16.0.R1
Platforms	All

cir number

Synopsis	CIR percentage rate
Context	configure qos shared-queue <i>string queue number rate cir number</i>
Tree	cir
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

fir number

Synopsis	FIR percentage rate
Context	configure qos shared-queue <i>string queue number rate fir number</i>
Tree	fir
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R2
Platforms	All

pir *number*

Synopsis	PIR percentage rate
Context	configure qos shared-queue <i>string</i> queue <i>number</i> rate pir <i>number</i>
Tree	pir
Range	1 to 100
Default	100
Units	percent
Introduced	16.0.R1
Platforms	All

slope-policy [**slope-policy-name**] *string*

Synopsis	Enter the slope-policy list instance
Context	configure qos slope-policy <i>string</i>
Tree	slope-policy
Max. Instances	511
Introduced	16.0.R1
Platforms	All

[**slope-policy-name**] *string*

Synopsis	Slope policy name
Context	configure qos slope-policy <i>string</i>
Tree	slope-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos slope-policy <i>string</i> description <i>string</i>

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

exceed-slope

Synopsis	Enter the exceed-slope context
Context	configure qos slope-policy <i>string</i> exceed-slope
Tree	exceed-slope
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the exceed-priority RED slope
Context	configure qos slope-policy <i>string</i> exceed-slope admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

max-avg *number*

Synopsis	Buffer percentage after which the drop probability reaches maximum average
Context	configure qos slope-policy <i>string</i> exceed-slope max-avg <i>number</i>
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

max-prob *number*

Synopsis	Drop probability to increase at exceed start-average
Context	configure qos slope-policy <i>string</i> exceed-slope max-prob <i>number</i>

Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

start-avg *number*

Synopsis	Buffer percentage after which the drop probability starts to rise above value
Context	configure qos slope-policy <i>string</i> exceed-slope start-avg <i>number</i>
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

high-slope

Synopsis	Enter the high-slope context
Context	configure qos slope-policy <i>string</i> high-slope
Tree	high-slope
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the high priority RED slope
Context	configure qos slope-policy <i>string</i> high-slope admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

max-avg *number*

Synopsis	Buffer percentage after which the drop probability reaches maximum average
Context	configure qos slope-policy <i>string</i> high-slope max-avg <i>number</i>

Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

max-prob *number*

Synopsis	Drop probability to increase at high start-average
Context	configure qos slope-policy <i>string</i> high-slope max-prob <i>number</i>
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

start-avg *number*

Synopsis	Buffer percentage after which the drop probability starts to rise above value
Context	configure qos slope-policy <i>string</i> high-slope start-avg <i>number</i>
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

highplus-slope

Synopsis	Enter the highplus-slope context
Context	configure qos slope-policy <i>string</i> highplus-slope
Tree	highplus-slope
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the highplus priority RED slope
Context	configure qos slope-policy <i>string</i> highplus-slope admin-state <i>keyword</i>

Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

max-avg *number*

Synopsis	Buffer percentage after which the drop probability reaches maximum average
Context	configure qos slope-policy <i>string</i> highplus-slope max-avg <i>number</i>
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

max-prob *number*

Synopsis	Drop probability increase at highplus start-average
Context	configure qos slope-policy <i>string</i> highplus-slope max-prob <i>number</i>
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

start-avg *number*

Synopsis	Buffer percentage after which the drop probability starts to rise above value
Context	configure qos slope-policy <i>string</i> highplus-slope start-avg <i>number</i>
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

low-slope

Synopsis	Enter the low-slope context
----------	------------------------------------

Context	configure qos slope-policy <i>string</i> low-slope
Tree	low-slope
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the low priority RED slope
Context	configure qos slope-policy <i>string</i> low-slope admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

max-avg *number*

Synopsis	Buffer percentage after which the drop probability reaches maximum average
Context	configure qos slope-policy <i>string</i> low-slope max-avg <i>number</i>
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

max-prob *number*

Synopsis	Drop probability to increase at low start-average
Context	configure qos slope-policy <i>string</i> low-slope max-prob <i>number</i>
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

start-avg *number*

Synopsis	Buffer percentage after which the drop probability starts to rise above value
----------	---

Context	configure qos slope-policy <i>string</i> low-slope start-avg <i>number</i>
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

time-average-factor *number*

Synopsis	Apply time average factor to weight between previous and new shared buffer utilization result
Context	configure qos slope-policy <i>string</i> time-average-factor <i>number</i>
Tree	time-average-factor
Range	0 to 15
Default	7
Introduced	16.0.R1
Platforms	All

3.38 redundancy commands

```

configure
- redundancy
- apply-groups reference
- apply-groups-exclude reference
- bgp-evpn
- ethernet-segment
- activation-timer number
- apply-groups reference
- apply-groups-exclude reference
- boot-timer number
- bgp-mh
- apply-groups reference
- apply-groups-exclude reference
- site
- activation-timer number
- boot-timer number
- min-down-timer number
- cert-sync boolean
- mgmt-ethernet
- revert number
- multi-chassis
- ipsec-domain number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- designated-role keyword
- priority number
- revertive boolean
- tunnel-group reference
- options
- sub-mgmt
- apply-groups reference
- apply-groups-exclude reference
- dhcp-lease-time-threshold number
- peer (ipv4-address-no-zone | ipv6-address-no-zone)
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- description string
- mc-endpoint
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bfd boolean
- boot-timer number
- hold-on-neighbor-failure number
- keep-alive-interval number
- passive-mode boolean
- system-priority number
- mc-ipsec
- apply-groups reference
- apply-groups-exclude reference
- bfd-liveness boolean
- discovery-interval
- boot number
- interval-secs number
- domain reference
- admin-state keyword

```


configure redundancy multi-chassis peer mc-ipsec domain apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **hold-on-neighbor-failure** *number*
- **keep-alive-interval** *number*
- **tunnel-group** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **peer-group** *number*
 - **priority** *number*
- **mc-lag**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hold-on-neighbor-failure** *number*
 - **keep-alive-interval** *number*
 - **lag** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **lACP-key** *number*
 - **remote-lag** *string*
 - **source-bmac-lsb** (*keyword* | *bmac-lsb*)
 - **system-id** *string*
 - **system-priority** *number*
- **mc-ring**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ring** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **in-band-control-path**
 - **debounce** *boolean*
 - **dst-ip** *string*
 - **interface** *string*
 - **max-debounce-time** *number*
 - **service-name** *string*
 - **path-b**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range start** *number* **end** *number*
 - **wildcard-saps** *boolean*
 - **path-excl**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range start** *number* **end** *number*
 - **wildcard-saps** *boolean*
 - **ring-node** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dst-ip** *string*
 - **interval** *number*
 - **service-name** *string*
 - **src-ip** *string*
 - **src-mac** (*keyword* | *ring-node-mac-address*)
 - **vlan** *string*
 - **srrp-instance** *number*
 - **type** *keyword*
 - **peer-name** *string*
 - **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **sync**
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure redundancy multi-chassis peer sync apply-groups-exclude

```

- apply-groups-exclude reference
- diameter-node
  - node reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
- diameter-proxy boolean
- igmp boolean
- igmp-snooping boolean
- ipsec boolean
- l2tp boolean
- local-dhcp-server boolean
- mc-ring boolean
- mld boolean
- mld-snooping boolean
- nat
  - nat-group reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
- pim-snooping
  - saps boolean
  - spoke-sdps boolean
- python boolean
- srrp boolean
- sub-host-trk boolean
- sub-mgmt
  - ipoe boolean
  - pppoe boolean
- tags
  - lag reference
    - apply-groups reference
    - apply-groups-exclude reference
    - range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
  - port reference
    - apply-groups reference
    - apply-groups-exclude reference
    - range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
  - pw-port reference
    - apply-groups reference
    - apply-groups-exclude reference
    - range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
  - sdp number
    - apply-groups reference
    - apply-groups-exclude reference
    - range start number end number
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
- track-srrp number
  - apply-groups reference

```

configure redundancy multi-chassis peer sync track-srrp apply-groups-exclude

- **apply-groups-exclude** *reference*
- **l2tp-tunnel-id-range**
 - **end** *number*
 - **start** *number*
- **transport-encryption**
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **keychain** *reference*
- **tunnel-group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
- **rollback-sync** *keyword*
- **srrp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-srrp-id-range**
 - **end** *number*
 - **start** *number*
- **switchover-exec** *string*
- **synchronize** *keyword*

3.38.1 redundancy command descriptions

redundancy

Synopsis	Enter the redundancy context
Context	configure redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	All

bgp-evpn

Synopsis	Enter the bgp-evpn context
Context	configure redundancy bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

ethernet-segment

Synopsis	Enter the ethernet-segment context
Context	configure redundancy bgp-evpn ethernet-segment
Tree	ethernet-segment
Introduced	16.0.R1
Platforms	All

activation-timer *number*

Synopsis	Time before activating specified Ethernet segment on specified PE that is elected as DF
Context	configure redundancy bgp-evpn ethernet-segment activation-timer <i>number</i>
Tree	activation-timer
Range	0 to 100
Default	3
Units	seconds
Introduced	16.0.R1

Platforms All

boot-timer *number*

Synopsis	Time before BGP EVPN multi-homing DF election algorithm
Context	configure redundancy bgp-evpn ethernet-segment boot-timer <i>number</i>
Tree	boot-timer
Description	<p>This command allows the necessary time for the control plane protocols to come up upon PE boot-up before bringing up the ESs and running the DF algorithm.</p> <p>The following considerations apply to this command:</p> <ul style="list-style-type: none">• The boot-timer command must provide enough time to allow the IOMs and BGP sessions to come up before exchanging ES routes and running the DF election for each EVI or ISID.• The boot-timer is synchronized across CPMs and is relative to the system up time; it is not changed or reset upon CPM switchover.• The boot-timer is never interrupted (the es-activation-timer, however, can be interrupted if there is a new event triggering the DF election).• The boot-timer runs per EVI or ISID on the ESs in the system. If the system up time (time the system has been up since the last reboot) is less than the boot-timer value, the system does not run the DF election for any EVI or ISID. When the boot-timer value expires, the DF election runs, and if the system is elected DF for the EVI or ISID, the es-activation-timer is triggered.• The system does not advertise ES routes until the boot timer expires, which guarantees that the peer ES PEs only run the DF election when the PE is ready to become the DF, if required.
Range	0 to 1800
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

bgp-mh

Synopsis	Enter the bgp-mh context
Context	configure redundancy bgp-mh
Tree	bgp-mh
Introduced	16.0.R1
Platforms	All

site

Synopsis	Enter the site context
Context	configure redundancy bgp-mh site
Tree	site
Introduced	16.0.R1
Platforms	All

activation-timer *number*

Synopsis	Time to keep local sites in standby status before running DF election algorithm
Context	configure redundancy bgp-mh site activation-timer <i>number</i>
Tree	activation-timer
Range	0 to 100
Default	2
Units	seconds
Introduced	16.0.R1
Platforms	All

boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	configure redundancy bgp-mh site boot-timer <i>number</i>
Tree	boot-timer
Range	0 to 600
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

min-down-timer *number*

Synopsis	Min downtime for BGP multi-homing site after transition
Context	configure redundancy bgp-mh site min-down-timer <i>number</i>
Tree	min-down-timer

Description	<p>This command configures the BGP multi-homing site minimum down time. When this value is set and the site goes operationally down, it remains operationally down for at least the length of time configured by this timer, regardless of whether other state changes might cause the site to go operationally up. This timer is restarted every time the site transitions from operationally up to down.</p> <p>This timer is optimized in the following circumstances:</p> <ul style="list-style-type: none"> • If the site goes down on the DF but there are no BGP multi-homing peers with the same site in an up state, this timer is not used. • If the site goes down on the DF but there are no active BGP multi-homing peers, this timer is not used. • If this timer is active and a BGP multihoming update is received from the DF indicating its site is down, this timer is immediately terminated and the BGP multihoming algorithm is triggered to determine whether this PE should become the DF.
Range	1 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

cert-sync *boolean*

Synopsis	Synchronize redundancy certificate files between the primary and secondary CPMs
Context	configure redundancy cert-sync <i>boolean</i>
Tree	cert-sync
Default	true
Introduced	16.0.R1
Platforms	All

mgmt-ethernet

Synopsis	Enable the mgmt-ethernet context
Context	configure redundancy mgmt-ethernet
Tree	mgmt-ethernet
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

revert *number*

Synopsis	Time before reverting standby CPM management Ethernet port to active CPM
Context	configure redundancy mgmt-ethernet revert <i>number</i>
Tree	revert
Range	1 to 300
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

multi-chassis

Synopsis	Enter the multi-chassis context
Context	configure redundancy multi-chassis
Tree	multi-chassis
Description	Commands in this context configure the attributes of multi-chassis redundancy.
Introduced	16.0.R1
Platforms	All

ipsec-domain [*id*] *number*

Synopsis	Enter the ipsec-domain list instance
Context	configure redundancy multi-chassis ipsec-domain <i>number</i>
Tree	ipsec-domain
Description	Commands in this context configure an IPsec domain used for N:M IPsec redundancy.
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	IPsec domain ID
Context	configure redundancy multi-chassis ipsec-domain <i>number</i>
Tree	ipsec-domain

Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec domain
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

designated-role *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designated role for the IPsec domain
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> designated-role <i>keyword</i>
Tree	designated-role
Description	This command configures the designated role of the tunnel group in the IPsec domain.
Default	standby
Options	standby, active
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority *number*

Synopsis	Priority for the IPsec domain
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> priority <i>number</i>
Tree	priority

Description	This command configures the priority for the tunnel group in the IPsec domain. The node with the higher priority is more likely to be elected as active within the domain.
Range	0 to 255
Default	100
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

revertive *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable revertive behavior for the tunnel group
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> revertive <i>boolean</i>
Tree	revertive
Description	When configured to true , the router enables the revertive behavior of the tunnel group, which allows a router in an N:M domain to automatically take over as the active router in the domain when it becomes eligible to do so. When configured to false , the revertive behavior of the tunnel group is disabled.
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID for an IPsec domain
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> tunnel-group <i>reference</i>
Tree	tunnel-group
Description	This command specifies the tunnel group ID for the IPsec domain.
Reference	configure isa tunnel-group <i>number</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure redundancy multi-chassis options
Tree	options
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-mgmt

Synopsis	Enter the sub-mgmt context
Context	configure redundancy multi-chassis options sub-mgmt
Tree	sub-mgmt
Description	Commands in this context configure subscriber management options for multi-chassis redundancy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-lease-time-threshold *number*

Synopsis	DHCP lease threshold to skip MCS synchronization
Context	configure redundancy multi-chassis options sub-mgmt dhcp-lease-time-threshold <i>number</i>
Tree	dhcp-lease-time-threshold
Description	This command configures the DHCP lease time threshold to skip MCS synchronization. DHCP leases for the sub-mgmt MCS applications are eligible to skip synchronization if the committed lease time is less than the active threshold on a multi-chassis peer. The active threshold is the minimum value of the thresholds configured on the nodes at each end of a multi-chassis peer. The threshold is inactive when it is unconfigured on at least one end of the multi-chassis peer.
Range	0 to 86400
Units	seconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Description	This command configures the IP address of the peer in a redundant multi-chassis setup, and enters the context for further application-specific configuration options.
Max. Instances	20
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer IP address
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MC redundancy peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Authentication key used between this node and the multi-chassis peer
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

mc-endpoint

Synopsis	Enable the mc-endpoint context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-endpoint
Tree	mc-endpoint
Introduced	22.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MC-EP
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-endpoint admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.10.R1
Platforms	All

bfd boolean

Synopsis	Enable BFD detection for the MC-EP peering tunnel
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint bfd boolean
Tree	bfd
Description	When configured to true , the system uses Bidirectional Forwarding Detection (BFD) to control the state of the associated protocol interface, where the state of the protocol interface is tied to the state of the BFD session between the local and remote nodes. The BFD settings are configured in the IP interface contexts.
Default	false
Introduced	22.10.R1
Platforms	All

boot-timer number

Synopsis	Time to attempt connection before declaring failure
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint boot-timer number
Tree	boot-timer
Description	This command configures the time interval to attempt connection that applies after the node reboots. This command specifies the time the multi-chassis endpoint (MC-EP) protocol takes to establish a connection before declaring a connection failure with the remote peer. When the time interval expires, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	1 to 600
Default	300
Units	seconds
Introduced	22.10.R1
Platforms	All

hold-on-neighbor-failure *number*

Synopsis	Number of keepalive intervals to wait for packets
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint hold-on-neighbor-failure <i>number</i>
Tree	hold-on-neighbor-failure
Description	This command configures the number of keepalive intervals that the local node waits for packets from the MC-EP peer before declaring a connection failure. When the number of intervals is reached, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	2 to 25
Default	3
Introduced	22.10.R1
Platforms	All

keep-alive-interval *number*

Synopsis	Interval for exchange of keepalive messages
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint keep-alive-interval <i>number</i>
Tree	keep-alive-interval
Description	This command configures the interval for which keepalive messages are exchanged between two systems participating as MC-EP when BFD is not active. The fast keepalive messages are used to detect remote node failure.
Range	5 to 500
Default	10
Introduced	22.10.R1
Platforms	All

passive-mode *boolean*

Synopsis	Enable passive mode for the MC-EP tunnel
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint passive-mode <i>boolean</i>
Tree	passive-mode
Description	When configured to true , the system enables passive mode behavior for the MC-EP protocol. Assuming the remote pair is configured with regular MC-EP in passive mode, the MC-EP pair remains dormant until two of the pseudowires in an MC-EP are activated by the remote PEs.

When one pseudowire is active, the dormant MC-EP pair becomes active. The regular mechanism to select the best pseudowire between the active pair is initiated, and the system blocks the Rx and Tx directions of the other pseudowire.

Default	false
Introduced	22.10.R1
Platforms	All

system-priority *number*

Synopsis	System priority of the MC-EP
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint system-priority <i>number</i>
Tree	system-priority
Description	This command configures the system priority of the MC-EP. The peer configured with the lower value is selected as the master. If the system priority values are equal, the peer with the higher system ID (chassis MAC address) becomes the master.
Range	0 to 255
Default	0
Introduced	22.10.R1
Platforms	All

mc-ipsec

Synopsis	Enable the mc-ipsec context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec
Tree	mc-ipsec
Description	This command enables the context to configure multi-chassis peer parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec bfd-liveness <i>boolean</i>
Tree	bfd-liveness

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

discovery-interval

Synopsis	Enter the discovery-interval context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec discovery-interval
Tree	discovery-interval
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

boot number

Synopsis	Maximum interval after system bootup
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec discovery-interval boot number
Tree	boot
Range	1 to 1800
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval-secs number

Synopsis	Maximum discovery interval
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec discovery-interval interval-secs number
Tree	interval-secs
Range	1 to 1800
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

domain [*id*] *reference*

Synopsis	Enter the domain list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ipsec domain <i>reference</i>
Tree	domain
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *reference*

Synopsis	IPsec domain ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ipsec domain <i>reference</i>
Tree	domain
Reference	configure redundancy multi-chassis ipsec-domain <i>number</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec domain
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ipsec domain <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-on-neighbor-failure *number*

Synopsis	Hold time on neighbor failure
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ipsec hold-on-neighbor-failure <i>number</i>

Tree	hold-on-neighbor-failure
Range	2 to 25
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keep-alive-interval *number*

Synopsis	Keepalive interval
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec keep-alive-interval <i>number</i>
Tree	keep-alive-interval
Range	5 to 500
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-group [[tunnel-group-id](#)] *reference*

Synopsis	Enter the tunnel-group list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec tunnel-group <i>reference</i>
Tree	tunnel-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tunnel-group-id] *reference*

Synopsis	Tunnel group ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec tunnel-group <i>reference</i>
Tree	tunnel-group
Reference	configure isa tunnel-group <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the peer IPsec tunnel group

Context **configure** [redundancy](#) [multi-chassis](#) [peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec](#) [tunnel-group](#) *reference* [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-group *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Peer tunnel group

Context **configure** [redundancy](#) [multi-chassis](#) [peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec](#) [tunnel-group](#) *reference* [peer-group](#) *number*

Tree [peer-group](#)

Range 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority *number*

Synopsis Tunnel group priority

Context **configure** [redundancy](#) [multi-chassis](#) [peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec](#) [tunnel-group](#) *reference* [priority](#) *number*

Tree [priority](#)

Range 0 to 255

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mc-lag

Synopsis	Enter the mc-lag context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-lag
Tree	mc-lag
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MC-LAG
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-lag admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

hold-on-neighbor-failure *number*

Synopsis	Intervals before standby node assumes that redundant neighbor node has failed
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-lag hold-on-neighbor-failure <i>number</i>
Tree	hold-on-neighbor-failure
Range	2 to 25
Default	3
Introduced	16.0.R1
Platforms	All

keep-alive-interval *number*

Synopsis	Keepalive timer value
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-lag keep-alive-interval <i>number</i>

Tree	keep-alive-interval
Range	5 to 500
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

lag [[lag-name](#)] *reference*

Synopsis	Enter the lag list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag reference
Tree	lag
Introduced	16.0.R1
Platforms	All

[lag-name] *reference*

Synopsis	LAG name
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag reference
Tree	lag
Reference	configure lag string
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

lACP-key *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key based on the remote MC-LAG
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag reference lACP-key number
Tree	lACP-key

Range	1 to 65535
Introduced	16.0.R1
Platforms	All

remote-lag *string*

Synopsis	LAG name
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag <i>reference</i> remote-lag string
Tree	remote-lag
String Length	1 to 27
Introduced	16.0.R1
Platforms	All

source-bmac-lsb (*keyword* | *bmac-lsb*)

Synopsis	MAC address value to apply to all ingress traffic
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag <i>reference</i> source-bmac-lsb (<i>keyword</i> <i>bmac-lsb</i>)
Tree	source-bmac-lsb
Options	use-lacp-key
Introduced	16.0.R1
Platforms	All

system-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ID based on the remote MC-LAG
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag <i>reference</i> system-id string
Tree	system-id
Introduced	16.0.R1
Platforms	All

system-priority *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority based on the remote MC-LAG
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag reference system-priority <i>number</i>
Tree	system-priority
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mc-ring

Synopsis	Enter the mc-ring context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring
Tree	mc-ring
Introduced	16.0.R1
Platforms	All

ring [[sync-tag](#)] *string*

Synopsis	Enter the ring list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i>
Tree	ring
Introduced	16.0.R1
Platforms	All

[[sync-tag](#)] *string*

Synopsis	Synchronization tag for this ring on this multi-chassis peer
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i>

Tree	ring
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the multi-chassis ring
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

in-band-control-path

Synopsis	Enter the in-band-control-path context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> in-band-control-path
Tree	in-band-control-path
Introduced	16.0.R1
Platforms	All

debounce *boolean*

Synopsis	Exponential back-off timer to use for delay path switching after consecutive failures
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> in-band-control-path debounce <i>boolean</i>
Tree	debounce
Default	true
Introduced	16.0.R1
Platforms	All

dst-ip string

Synopsis	IP address of the in-band control path peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring string in-band-control-path dst-ip string
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

interface string

Synopsis	Interface to verify in-band control path
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring string in-band-control-path interface string
Tree	interface
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

max-debounce-time number

Synopsis	Maximum delay after a failure when debouncing is active
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring string in-band-control-path max-debounce-time number
Tree	max-debounce-time
Range	5 to 200
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

service-name string

Synopsis	Administrative service name
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring string in-band-control-path service-name string

Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

path-b

Synopsis	Enter the path-b context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>string</i> path-b
Tree	path-b
Introduced	16.0.R1
Platforms	All

range start number end number

Synopsis	Add a list entry for range
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>string</i> path-b range start number end number
Tree	range
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the VLAN range
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>string</i> path-b range start number end number
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the VLAN range
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> path-b range start number end number
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

wildcard-saps boolean

Synopsis	Include the SAPs starting with a wildcard **
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> path-b wildcard-saps boolean
Tree	wildcard-saps
Default	false
Introduced	16.0.R4
Platforms	All

path-excl

Synopsis	Enter the path-excl context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> path-excl
Tree	path-excl
Introduced	16.0.R1
Platforms	All

range start number end number

Synopsis	Add a list entry for range
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> path-excl range start number end number
Tree	range
Introduced	16.0.R1

Platforms All

start number

Synopsis Lower bound of the VLAN range

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl](#) [range](#) [start number](#) [end number](#)

Tree [range](#)

Range 0 to 4094

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

end number

Synopsis Upper bound of the VLAN range

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl](#) [range](#) [start number](#) [end number](#)

Tree [range](#)

Range 0 to 4094

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

wildcard-saps boolean

Synopsis Include the SAPs starting with a wildcard '**'

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl](#) [wildcard-saps](#) [boolean](#)

Tree [wildcard-saps](#)

Default false

Introduced 16.0.R4

Platforms All

ring-node [*name*] *string*

Synopsis	Enter the ring-node list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i>
Tree	ring-node
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Name of the multi-chassis ring access node
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i>
Tree	ring-node
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the ring node verification
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

dst-ip *string*

Synopsis	Destination IP address for access node connection
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i> dst-ip <i>string</i>
Tree	dst-ip

Introduced 16.0.R1
Platforms All

interval *number*

Synopsis Connection verification interval
Context **configure** **redundancy** **multi-chassis** **peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **mc-ring** **ring** *string* **ring-node** *string* **interval** *number*
Tree **interval**
Range 1 to 6000
Default 5
Units minutes
Introduced 16.0.R1
Platforms All

service-name *string*

Synopsis Administrative service name
Context **configure** **redundancy** **multi-chassis** **peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **mc-ring** **ring** *string* **ring-node** *string* **service-name** *string*
Tree **service-name**
String Length 1 to 64
Introduced 16.0.R1
Platforms All

src-ip *string*

Synopsis Source IP address for access node connection
Context **configure** **redundancy** **multi-chassis** **peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **mc-ring** **ring** *string* **ring-node** *string* **src-ip** *string*
Tree **src-ip**
Introduced 16.0.R1
Platforms All

src-mac (*keyword* | *ring-node-mac-address*)

Synopsis	Source MAC address for the access node connection
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i> src-mac (<i>keyword</i> <i>ring-node-mac-address</i>)
Tree	src-mac
Default	system-mac-address
Options	system-mac-address
Introduced	16.0.R1
Platforms	All

vlan *string*

Synopsis	VLAN ID for access node connection
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i> vlan <i>string</i>
Tree	vlan
String Length	1 to 11
Introduced	16.0.R1
Platforms	All

srrp-instance [*id*] *number*

Synopsis	Add a list entry for srrp-instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> srrp-instance <i>number</i>
Tree	srrp-instance
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[*id*] *number*

Synopsis	SRRP instance ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> srrp-instance <i>number</i>

Tree	srrp-instance
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of the multi-chassis ring
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> type <i>keyword</i>
Tree	type
Options	layer-2, layer-3
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

peer-name *string*

Synopsis	Multi-chassis peer name
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) peer-name <i>string</i>
Tree	peer-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

source-address ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source address to communicate with the multi-chassis peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	16.0.R1
Platforms	All

sync

Synopsis	Enable the sync context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync
Tree	sync
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the peer synchronization
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

diameter-node

Synopsis	Enable the diameter-node context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync diameter-node
Tree	diameter-node
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

node [host-name] *reference*

Synopsis	Enter the node list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync diameter-node node <i>reference</i>
Tree	node
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[host-name] *reference*

Synopsis	Origin-Host of the node
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync diameter-node node <i>reference</i>
Tree	node
Reference	configure aaa diameter node <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

Synopsis	Sync tag to be used for synchronization
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync diameter-node node <i>reference</i> sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter-proxy *boolean*

Synopsis	Synchronize the Diameter proxy data with the multi-chassis peer
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync diameter-proxy <i>boolean</i>
Tree	diameter-proxy

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp *boolean*

Synopsis	Synchronize IGMP protocol information with the multi-chassis peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync igmp <i>boolean</i>
Tree	igmp
Default	false
Introduced	16.0.R1
Platforms	All

igmp-snooping *boolean*

Synopsis	Synchronize IGMP snooping information
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync igmp-snooping <i>boolean</i>
Tree	igmp-snooping
Default	false
Introduced	16.0.R1
Platforms	All

ipsec *boolean*

Synopsis	Synchronize IPsec information
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync ipsec <i>boolean</i>
Tree	ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2tp boolean

Synopsis	Synchronize Layer Two Tunnel Protocol (L2TP)
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync l2tp boolean
Tree	l2tp
Default	false
Introduced	16.0.R1
Platforms	All

local-dhcp-server boolean

Synopsis	Synchronize DHCP Server information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync local-dhcp-server boolean
Tree	local-dhcp-server
Default	false
Introduced	16.0.R1
Platforms	All

mc-ring boolean

Synopsis	Synchronize ring information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync mc-ring boolean
Tree	mc-ring
Default	false
Introduced	16.0.R1
Platforms	All

mld boolean

Synopsis	Synchronize MLD protocol information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync mld boolean
Tree	mld
Default	false

Introduced 16.0.R1
Platforms All

mld-snooping *boolean*

Synopsis Synchronize MLD snooping information
Context **configure** [redundancy multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync mld-snooping boolean](#)
Tree [mld-snooping](#)
Default false
Introduced 16.0.R1
Platforms All

nat

Synopsis Enable the **nat** context
Context **configure** [redundancy multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync nat](#)
Tree [nat](#)
Introduced 20.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group [*id*] *reference*

Synopsis Enter the **nat-group** list instance
Context **configure** [redundancy multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync nat nat-group reference](#)
Tree [nat-group](#)
Description Commands in this context configure multi-chassis synchronization (MCS) for a NAT group. NAT group health information is exchanged between the pair of redundant NAT nodes. The system elects one of the nodes as the active node for the NAT group and the other node becomes the standby node.
Introduced 20.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] reference

Synopsis	NAT group ID
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync nat nat-group reference
Tree	nat-group
Reference	configure isa nat-group <i>number</i>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sync-tag string**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync nat nat-group reference sync-tag <i>string</i>
Tree	sync-tag
Description	This command configures the synchronization tag for the NAT group. The tag must match the synchronization tag for the NAT group on the peering node.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim-snooping

Synopsis	Enter the pim-snooping context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync pim-snooping
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

saps *boolean*

Synopsis	Synchronize PIM snooping data with the multi-chassis peer on SDP endpoints
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync pim-snooping saps <i>boolean</i>
Tree	saps
Default	false
Introduced	16.0.R1
Platforms	All

spoke-sdps *boolean*

Synopsis	Synchronize PIM snooping data with the multi-chassis peer on SDP endpoints
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync pim-snooping spoke-sdps <i>boolean</i>
Tree	spoke-sdps
Default	false
Introduced	16.0.R1
Platforms	All

python *boolean*

Synopsis	Synchronize Python
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync python <i>boolean</i>
Tree	python
Default	false
Introduced	16.0.R1
Platforms	All

srrp *boolean*

Synopsis	Synchronize SRRP information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync srrp <i>boolean</i>
Tree	srrp
Default	false

Introduced 16.0.R1
Platforms All

sub-host-trk *boolean*

Synopsis Synchronize subscriber host tracking information
Context **configure** [redundancy](#) [multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync](#) **sub-host-trk** *boolean*
Tree [sub-host-trk](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-mgmt

Synopsis Enter the **sub-mgmt** context
Context **configure** [redundancy](#) [multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync](#) **sub-mgmt**
Tree [sub-mgmt](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe *boolean*

Synopsis Synchronize subscriber management IPoE information
Context **configure** [redundancy](#) [multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync](#) **sub-mgmt ipoe** *boolean*
Tree [ipoe](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe *boolean*

Synopsis Synchronize subscriber management PPPoE information
Context **configure** [redundancy](#) [multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync](#) **sub-mgmt pppoe** *boolean*

Tree	pppoe
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tags

Synopsis	Enter the tags context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags
Tree	tags
Introduced	16.0.R1
Platforms	All

lag [[lag-name](#)] *reference*

Synopsis	Enter the lag list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags lag <i>reference</i>
Tree	lag
Introduced	16.0.R1
Platforms	All

[[lag-name](#)] *reference*

Synopsis	LAG name
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags lag <i>reference</i>
Tree	lag
Reference	configure lag <i>string</i>
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

range *start string end string*

Synopsis	Enter the range list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags lag <i>reference</i> range start string end string
Tree	range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	First encapsulation value
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags lag <i>reference</i> range start string end string
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Last encapsulation value
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags lag <i>reference</i> range start string end string
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags lag reference range start string end string sync-tag string
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags lag reference sync-tag string
Tree	sync-tag
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

port [*id*] *reference*

Synopsis	Enter the port list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference
Tree	port
Introduced	16.0.R1
Platforms	All

[id] *reference*

Synopsis	ID of port to be synchronized with multi-chassis peer
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference

Tree	port
Reference	configure port <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

range [start](#) *string* [end](#) *string*

Synopsis	Enter the range list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference range start <i>string</i> end <i>string</i>
Tree	range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	First encapsulation value
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference range start <i>string</i> end <i>string</i>
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Last encapsulation value
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference range start <i>string</i> end <i>string</i>
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Synchronization tag

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) [port reference](#) [range start](#) [string end](#) [string](#) **sync-tag** *string*

Tree [sync-tag](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Synchronization tag

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) [port reference](#) **sync-tag** *string*

Tree [sync-tag](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

pw-port [*id*] *reference*

Synopsis Enter the **pw-port** list instance

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) **pw-port** *reference*

Tree [pw-port](#)

Introduced 16.0.R4

Platforms All

[id] *reference*

Synopsis ID of pseudowire port to be synchronized with MC peer

Context **configure** **redundancy** **multi-chassis** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **sync** **tags** **pw-port** *reference*

Tree [pw-port](#)

Reference **configure** [pw-port](#) *number*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

range *start string end string*

Synopsis Enter the **range** list instance

Context **configure** **redundancy** **multi-chassis** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **sync** **tags** **pw-port** *reference* **range** **start** *string* **end** *string*

Tree [range](#)

Introduced 16.0.R4

Platforms All

start *string*

Synopsis First encapsulation value

Context **configure** **redundancy** **multi-chassis** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **sync** **tags** **pw-port** *reference* **range** **start** *string* **end** *string*

Tree [range](#)

String Length 1 to 11

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

end *string*

Synopsis Last encapsulation value

Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags pw-port reference range start string end string
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags pw-port reference range start string end string sync-tag string
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags pw-port reference sync-tag string
Tree	sync-tag
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

sdp [id] number

Synopsis	Enter the sdp list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags sdp number
Tree	sdp
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of SDP to be synchronized with multi-chassis peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags sdp number
Tree	sdp
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

range start number end number

Synopsis	Enter the range list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags sdp number range start number end number
Tree	range
Introduced	16.0.R1
Platforms	All

start number

Synopsis	First virtual circuit ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags sdp number range start number end number
Tree	range
Range	1 to 4294967295
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

end number

Synopsis Last virtual circuit ID
Context **configure** **redundancy** **multi-chassis peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **sync tags sdp number range start number end number**
Tree **range**
Range 1 to 4294967295
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

sync-tag string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Synchronization tag
Context **configure** **redundancy** **multi-chassis peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **sync tags sdp number range start number end number sync-tag string**
Tree **sync-tag**
String Length 1 to 32
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

sync-tag string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Synchronization tag

Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags sdp <i>number</i> sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

track-srrp [**id**] *number*

Synopsis	Enter the track-srrp list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync track-srrp <i>number</i>
Tree	track-srrp
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	Tracked SRRP instance ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

I2tp-tunnel-id-range

Synopsis	Enter the I2tp-tunnel-id-range context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync track-srrp <i>number</i> I2tp-tunnel-id-range
Tree	I2tp-tunnel-id-range
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the L2TP tunnel ID range
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync track-srrp number l2tp-tunnel-id-range end number
Tree	end
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the L2TP tunnel ID range
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync track-srrp number l2tp-tunnel-id-range start number
Tree	start
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

transport-encryption

Synopsis	Enter the transport-encryption context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync transport-encryption
Tree	transport-encryption
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application [[application-id](#)] *keyword*

Synopsis	Enter the application list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync transport-encryption application keyword
Tree	application
Description	Commands in this context configure the MCS application for transport encryption. The application-id configures an application and a keychain defines the key used for the encryption.

Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[application-id] keyword

Synopsis Application using transport encryption
Context **configure** [redundancy](#) [multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync](#) [transport-encryption application](#) *keyword*
Tree [application](#)
Description This command configures an MCS application for the transport encryption method.
Options igmp, igmp-snooping, sub-mgmt-ipoe, srrp, mc-ring, mld-snooping, dhcp-server, sub-host-trk, sub-mgmt-pppoe, ipsec, mld, python, l2tp, diam-proxy, pim-snpg-sap, pim-snpg-sdp, diam-node, nat
Notes This element is part of a list key.
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keychain reference

Synopsis Keychain containing the authentication keys
Context **configure** [redundancy](#) [multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync](#) [transport-encryption application](#) *keyword* [keychain](#) *reference*
Tree [keychain](#)
Description This command specifies a keychain that contains authentication keys for the application.
Reference **configure** [system security keychains](#) [keychain](#) *string*
Notes This element is mandatory.
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-group [tunnel-group-id] number

Synopsis Enter the **tunnel-group** list instance
Context **configure** [redundancy](#) [multi-chassis peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*) [sync](#) [tunnel-group](#) *number*
Tree [tunnel-group](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tunnel-group-id] number

Synopsis Multi-active tunnel group ID

Context **configure** **redundancy** **multi-chassis peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **sync** **tunnel-group** *number*

Tree **tunnel-group**

Range 1 to 64

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sync-tag string

Synopsis Synchronization tag for this tunnel group on this multi-chassis peer

Context **configure** **redundancy** **multi-chassis peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **sync** **tunnel-group** *number* **sync-tag** *string*

Tree **sync-tag**

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rollback-sync keyword

Synopsis Parameters for redundancy rollback synchronization

Context **configure** **redundancy** **rollback-sync** *keyword*

Tree **rollback-sync**

Options *rollback-single, rollback-all*

Introduced 16.0.R1

Platforms All

srrp

Synopsis Enter the **srrp** context

Context	configure redundancy srrp
Tree	srrp
Description	Commands in this context configure system parameters for BNG CUPS inter-UPF resiliency.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-srrp-id-range

Synopsis	Enable the auto-srrp-id-range context
Context	configure redundancy srrp auto-srrp-id-range
Tree	auto-srrp-id-range
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the ID range
Context	configure redundancy srrp auto-srrp-id-range end number
Tree	end
Range	2 to 4294967295
Default	4294967295
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the ID range
Context	configure redundancy srrp auto-srrp-id-range start number
Tree	start
Range	1 to 4294967294
Default	2147483648
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

switchover-exec *string*

Synopsis	Location and name of the CLI script file executed after a redundancy switchover
Context	configure redundancy switchover-exec <i>string</i>
Tree	switchover-exec
String Length	1 to 100
Introduced	16.0.R1
Platforms	All

synchronize *keyword*

Synopsis	Parameters for redundancy synchronization
Context	configure redundancy synchronize <i>keyword</i>
Tree	synchronize
Options	config, boot-env
Introduced	16.0.R1
Platforms	All

3.39 router commands

```

configure
- router string
- aggregates
  - aggregate (ipv4-prefix | ipv6-prefix)
    - aggregator
      - address string
      - as-number number
    - apply-groups reference
    - apply-groups-exclude reference
    - as-set boolean
    - blackhole
      - generate-icmp boolean
    - community string
    - description string
    - discard-component-communities boolean
    - indirect (ipv4-address-no-zone | ipv6-address-no-zone)
    - local-preference number
    - policy reference
    - summary-only boolean
    - tunnel-group number
  - apply-groups reference
  - apply-groups-exclude reference
- allow-icmp-redirect boolean
- allow-icmp6-redirect boolean
- apply-groups reference
- apply-groups-exclude reference
- autonomous-system number
- bfd
  - seamless-bfd
    - peer (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - discriminator number
- bgp
  - add-paths
    - evpn
      - receive boolean
      - send (number | keyword)
    - ipv4
      - receive boolean
      - send (number | keyword)
    - ipv6
      - receive boolean
      - send (number | keyword)
    - label-ipv4
      - receive boolean
      - send (number | keyword)
    - label-ipv6
      - receive boolean
      - send (number | keyword)
    - mcast-vpn-ipv4
      - receive boolean
      - send number
    - mcast-vpn-ipv6
      - receive boolean
      - send number
    - mvpn-ipv4
      - receive boolean
      - send number
  
```

configure router bgp add-paths mvpn-ipv6

- **mvpn-ipv6**
 - **receive** *boolean*
 - **send** *number*
- **vpn-ipv4**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
- **vpn-ipv6**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
- **admin-state** *keyword*
- **advertise-external**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
- **advertise-inactive** *boolean*
- **advertise-ipv6-next-hops**
 - **evpn** *boolean*
 - **ipv4** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **aggregator-id-zero** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **asn-4-byte** *boolean*
- **authentication-key** *string*
- **authentication-keychain** *reference*
- **backup-path**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
- **best-path-selection**
 - **always-compare-med**
 - **med-value** *keyword*
 - **strict-as** *boolean*
- **as-path-ignore**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **l2-vpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
 - **mvpn-ipv4** *boolean*
 - **mvpn-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **compare-origin-validation-state** *boolean*
- **d-path-length-ignore** *boolean*
- **deterministic-med** *boolean*
- **ebgp-ibgp-equal**
 - **evpn** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **ignore-nh-metric** *boolean*
- **ignore-router-id**
 - **include-internal**

configure router bgp best-path-selection ignore-router-id include-internal mvpn-ipv4

```

    - mvpn-ipv4 boolean
    - mvpn-ipv6 boolean
  - origin-invalid-unusable boolean
- bfd-liveness boolean
- bgp-tunnel-metric
  - prefer-aigp boolean
  - value number
- bgp-tunnel-preference number
- block-prefix-sid boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- convergence
  - family keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - max-wait-to-advertise number
  - min-wait-to-advertise number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-recv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- description string
- dynamic-neighbor-limit number
- ebgp-default-reject-policy
  - export boolean
  - import boolean
- egress-peer-engineering
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- enforce-first-as boolean
- error-handling
  - update-fault-tolerance boolean
- export
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- extended-nh-encoding
  - ipv4 boolean
  - label-ipv4 boolean
  - vpn-ipv4 boolean
- family
  - bgp-ls boolean
  - evpn boolean
  - flow-ipv4 boolean
  - flow-ipv6 boolean
  - flow-vpn-ipv4 boolean
  - flow-vpn-ipv6 boolean
  - ipv4 boolean
  - ipv6 boolean

```

configure router bgp family l2-vpn

```

- l2-vpn boolean
- label-ipv4 boolean
- label-ipv6 boolean
- mcast-ipv4 boolean
- mcast-ipv6 boolean
- mcast-vpn-ipv4 boolean
- mcast-vpn-ipv6 boolean
- mdt-safi boolean
- ms-pw boolean
- mvpn-ipv4 boolean
- mvpn-ipv6 boolean
- route-target boolean
- sr-policy-ipv4 boolean
- sr-policy-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- fast-external-failover boolean
- flowspec
- validate-dest-prefix boolean
- validate-redirect-ip boolean
- graceful-restart
- gr-notification boolean
- long-lived
- advertise-stale-to-all-neighbors boolean
- advertised-stale-time number
- family keyword
- advertised-stale-time number
- apply-groups reference
- apply-groups-exclude reference
- helper-override-stale-time number
- forwarding-bits-set keyword
- helper-override-restart-time number
- helper-override-stale-time number
- without-no-export boolean
- restart-time number
- stale-routes-time number
- group string
- add-paths
- evpn
- receive boolean
- send (number | keyword)
- ipv4
- receive boolean
- send (number | keyword)
- ipv6
- receive boolean
- send (number | keyword)
- label-ipv4
- receive boolean
- send (number | keyword)
- label-ipv6
- receive boolean
- send (number | keyword)
- mcast-vpn-ipv4
- receive boolean
- send number
- mcast-vpn-ipv6
- receive boolean
- send number
- mvpn-ipv4
- receive boolean
- send number
- mvpn-ipv6
- receive boolean

```

configure router bgp group add-paths mvpn-ipv6 send

```

- send number
- vpn-ipv4
  - receive boolean
  - send (number | keyword)
- vpn-ipv6
  - receive boolean
  - send (number | keyword)
- admin-state keyword
- advertise-inactive boolean
- advertise-ipv6-next-hops
  - evpn boolean
  - ipv4 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- aggregator-id-zero boolean
- aigp boolean
- apply-groups reference
- apply-groups-exclude reference
- as-override boolean
- asn-4-byte boolean
- authentication-key string
- authentication-keychain reference
- bfd-liveness boolean
- block-prefix-sid boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-recv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- default-route-target boolean
- description string
- dynamic-neighbor
  - interface string
    - allowed-peer-as string
    - apply-groups reference
    - apply-groups-exclude reference
    - max-sessions number
  - match
    - prefix (ipv4-prefix | ipv6-prefix)
    - allowed-peer-as string
    - apply-groups reference
    - apply-groups-exclude reference
- dynamic-neighbor-limit number
- ebgp-default-reject-policy
  - export boolean
  - import boolean

```

configure router bgp group egress-engineering

- **egress-engineering**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **egress-peer-engineering-label-unicast** *boolean*
- **enforce-first-as** *boolean*
- **error-handling**
 - **update-fault-tolerance** *boolean*
- **export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
 - **ipv4** *boolean*
 - **label-ipv4** *boolean*
 - **vpn-ipv4** *boolean*
- **family**
 - **bgp-ls** *boolean*
 - **evpn** *boolean*
 - **flow-ipv4** *boolean*
 - **flow-ipv6** *boolean*
 - **flow-vpn-ipv4** *boolean*
 - **flow-vpn-ipv6** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **l2-vpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
 - **mcast-vpn-ipv4** *boolean*
 - **mcast-vpn-ipv6** *boolean*
 - **mdt-safi** *boolean*
 - **ms-pw** *boolean*
 - **mvpn-ipv4** *boolean*
 - **mvpn-ipv6** *boolean*
 - **route-target** *boolean*
 - **sr-policy-ipv4** *boolean*
 - **sr-policy-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
 - **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*
 - **restart-time** *number*
 - **stale-routes-time** *number*
- **hold-time**
 - **minimum-hold-time** *number*
 - **seconds** *number*
- **import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure router bgp group import policy

```

- policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
  - accept-from-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - add-to-received-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - aggregate-used-paths
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - send-to-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
  - admin-state keyword
  - all-stations boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - route-monitoring
    - post-policy boolean
    - pre-policy boolean
  - station reference
- multihop number
- multipath-eligible boolean
- next-hop-self boolean
- next-hop-unchanged
  - evpn boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- origin-validation
  - ipv4 boolean
  - ipv6 boolean

```

configure router bgp group origin-validation label-ipv4

```

- label-ipv4 boolean
- label-ipv6 boolean
- outbound-route-filtering
- extended-community
  - accept-orf boolean
  - send-orf
    - route-target string
- passive boolean
- path-mtu-discovery boolean
- peer-as number
- peer-ip-tracking boolean
- preference number
- prefix-limit keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - idle-timeout number
  - log-only boolean
  - maximum number
  - post-import boolean
  - threshold number
- remove-private
  - limited boolean
  - replace boolean
  - skip-peer-as boolean
- segment-routing-v6
  - route-advertisement
    - drop-routes-with-srv6-tlvs boolean
    - family keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - strip-srv6-tlvs boolean
- selective-label-ipv4-install boolean
- send-communities
  - extended boolean
  - large boolean
  - standard boolean
- send-default
  - export-policy reference
  - ipv4 boolean
  - ipv6 boolean
- split-horizon boolean
- static-group boolean
- tcp-mss (number | keyword)
- third-party-next-hop boolean
- ttl-security number
- type keyword
- vpn-apply-export boolean
- vpn-apply-import boolean
- hold-time
  - minimum-hold-time number
  - seconds number
- ibgp-multipath boolean
- import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- inter-as-vpn boolean
- keepalive number
- label-allocation
  - label-ipv6
    - explicit-null boolean
- label-preference number
- link-state-route-export boolean

```


configure router bgp link-state-route-import

- **link-state-route-import** *boolean*
- **local-as**
 - **as-number** *number*
 - **prepend-global-as** *boolean*
 - **private** *boolean*
- **local-preference** *number*
- **loop-detect** *keyword*
- **loop-detect-threshold** *number*
- **med-out** (*number* | *keyword*)
- **min-route-advertisement** *number*
- **monitor**
 - **admin-state** *keyword*
 - **all-stations** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-monitoring**
 - **post-policy** *boolean*
 - **pre-policy** *boolean*
 - **station** *reference*
- **mp-bgp-keep** *boolean*
- **multihop** *number*
- **multipath**
 - **ebgp** *number*
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ebgp** *number*
 - **ibgp** *number*
 - **max-paths** *number*
 - **restrict** *keyword*
 - **unequal-cost** *boolean*
 - **ibgp** *number*
 - **max-paths** *number*
 - **restrict** *keyword*
 - **unequal-cost** *boolean*
- **mvpn-vrf-import-subtype-new** *boolean*
- **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
 - **add-paths**
 - **evpn**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **ipv4**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **ipv6**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **label-ipv4**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **label-ipv6**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **mcast-vpn-ipv4**
 - **receive** *boolean*
 - **send** *number*
 - **mcast-vpn-ipv6**
 - **receive** *boolean*
 - **send** *number*
 - **mvpn-ipv4**
 - **receive** *boolean*
 - **send** *number*
 - **mvpn-ipv6**
 - **receive** *boolean*

configure router bgp neighbor add-paths mvpn-ipv6 send

```

- send number
- vpn-ipv4
  - receive boolean
  - send (number | keyword)
- vpn-ipv6
  - receive boolean
  - send (number | keyword)
- admin-state keyword
- advertise-inactive boolean
- advertise-ipv6-next-hops
  - evpn boolean
  - ipv4 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- advertise-ldp-prefix boolean
- aggregator-id-zero boolean
- aigp boolean
- apply-groups reference
- apply-groups-exclude reference
- as-override boolean
- asn-4-byte boolean
- authentication-key string
- authentication-keychain reference
- bfd-liveness boolean
- block-prefix-sid boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-rcv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- default-route-target boolean
- description string
- ebgp-default-reject-policy
  - export boolean
  - import boolean
- egress-engineering
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- egress-peer-engineering-label-unicast boolean
- enforce-first-as boolean
- error-handling
  - update-fault-tolerance boolean
- export
  - apply-groups reference
  - apply-groups-exclude reference

```

configure router bgp neighbor export policy

- **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
 - **ipv4** *boolean*
 - **label-ipv4** *boolean*
 - **vpn-ipv4** *boolean*
- **family**
 - **bgp-ls** *boolean*
 - **evpn** *boolean*
 - **flow-ipv4** *boolean*
 - **flow-ipv6** *boolean*
 - **flow-vpn-ipv4** *boolean*
 - **flow-vpn-ipv6** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **l2-vpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
 - **mcast-vpn-ipv4** *boolean*
 - **mcast-vpn-ipv6** *boolean*
 - **mdt-safi** *boolean*
 - **ms-pw** *boolean*
 - **mvpn-ipv4** *boolean*
 - **mvpn-ipv6** *boolean*
 - **route-target** *boolean*
 - **sr-policy-ipv4** *boolean*
 - **sr-policy-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
 - **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*
 - **restart-time** *number*
 - **stale-routes-time** *number*
- **group** *reference*
- **hold-time**
 - **minimum-hold-time** *number*
 - **seconds** *number*
- **import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **initial-send-delay-zero** *boolean*
- **keepalive** *number*
- **l2vpn-cisco-interop** *boolean*
- **label-preference** *number*
- **link-bandwidth**
 - **accept-from-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*

configure router bgp neighbor link-bandwidth accept-from-ebgp label-ipv6

- **label-ipv6** *boolean*
- **vpn-ipv4** *boolean*
- **vpn-ipv6** *boolean*
- **add-to-received-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **aggregate-used-paths**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **send-to-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **local-address** (*ipv4-address-no-zone | ipv6-address-no-zone | interface-name*)
- **local-as**
 - **as-number** *number*
 - **prepend-global-as** *boolean*
 - **private** *boolean*
- **local-preference** *number*
- **loop-detect** *keyword*
- **loop-detect-threshold** *number*
- **med-out** (*number | keyword*)
- **min-route-advertisement** *number*
- **monitor**
 - **admin-state** *keyword*
 - **all-stations** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-monitoring**
 - **post-policy** *boolean*
 - **pre-policy** *boolean*
 - **station** *reference*
- **multihop** *number*
- **multipath-eligible** *boolean*
- **next-hop-self** *boolean*
- **next-hop-unchanged**
 - **evpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **origin-validation**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
- **outbound-route-filtering**
 - **extended-community**
 - **accept-orf** *boolean*
 - **send-orf**
 - **route-target** *string*
- **passive** *boolean*
- **path-mtu-discovery** *boolean*

configure router bgp next-hop-resolution labeled-routes transport-tunnel family resolution-filter sr-te

- **sr-te** *boolean*
 - **udp** *boolean*
- **use-bgp-routes**
 - **label-ipv6-explicit-null** *boolean*
- **policy** *reference*
- **shortcut-tunnel**
- **family** *keyword*
 - **allow-flex-algo-fallback** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **disallow-igp** *boolean*
 - **enforce-strict-tunnel-tagging** *boolean*
 - **resolution** *keyword*
 - **resolution-filter**
 - **bgp** *boolean*
 - **ldp** *boolean*
 - **mpls-fwd-policy** *boolean*
 - **rib-api** *boolean*
 - **rsvp** *boolean*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*
 - **sr-ospf3** *boolean*
 - **sr-policy** *boolean*
 - **sr-te** *boolean*
- **use-bgp-routes** *boolean*
- **vpn-family-policy** *reference*
- **weighted-ecmp** *boolean*
- **optimal-route-reflection**
 - **location** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **primary-ip-address** *string*
 - **primary-ipv6-address** *string*
 - **secondary-ip-address** *string*
 - **secondary-ipv6-address** *string*
 - **tertiary-ip-address** *string*
 - **tertiary-ipv6-address** *string*
 - **spf-wait**
 - **initial-wait** *number*
 - **max-wait** *number*
 - **second-wait** *number*
- **outbound-route-filtering**
 - **extended-community**
 - **accept-orf** *boolean*
 - **send-orf**
 - **route-target** *string*
- **override-tunnel-elc** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-ip-tracking** *boolean*
- **peer-tracking-policy** *reference*
- **preference** *number*
- **purge-timer** *number*
- **rapid-update**
 - **evpn** *boolean*
 - **l2-vpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **mcast-vpn-ipv4** *boolean*
 - **mcast-vpn-ipv6** *boolean*
 - **mdt-safi** *boolean*
 - **mvpn-ipv4** *boolean*
 - **mvpn-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*

configure router bgp rapid-withdrawal

- **rapid-withdrawal** *boolean*
- **remove-private**
 - **limited** *boolean*
 - **replace** *boolean*
 - **skip-peer-as** *boolean*
- **rib-management**
 - **ipv4**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
 - **ipv6**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
 - **label-ipv4**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
 - **label-ipv6**
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
- **route-table-install** *boolean*
- **route-target-list** *string*
- **router-id** *string*
- **rr-vpn-forwarding** *boolean*
- **segment-routing**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **prefix-sid-range**
 - **global**
 - **max-index** *number*
 - **start-label** *number*
- **segment-routing-v6**
 - **family** *keyword*
 - **add-srv6-tlvs**
 - **locator-name** *reference*
 - **micro-segment-locator-name** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-received-srv6-tlvs** *boolean*
 - **resolution** *keyword*
 - **source-address** *string*
- **selective-label-ip** *keyword*
- **selective-label-ip-prioritization** *boolean*
- **selective-label-ipv4-install** *boolean*
- **send-communities**

configure router bgp send-communities extended

- **extended** *boolean*
- **large** *boolean*
- **standard** *boolean*
- **send-default**
 - **export-policy** *reference*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **split-horizon** *boolean*
- **sr-policy-import** *boolean*
- **subconfed-vpn-forwarding** *boolean*
- **tcp-mss** *number*
- **third-party-nexthop** *boolean*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **bier**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *keyword*
 - **fast-reroute** *boolean*
 - **template** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sub-domain** *number end number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfr-id** *number*
 - **multi-topology** *keyword*
 - **prefix** *string*
- **class-forwarding** *boolean*
- **confederation**
 - **confed-as-num** *number*
 - **members** *number*
- **description** *string*
- **dhcp-server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcpv4** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*
- **force-renews** *boolean*
- **lease-hold**
 - **additional-scenarios**
 - **internal-lease-ipsec** *boolean*
 - **solicited-release** *boolean*
 - **time** *number*
- **pool** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure router dhcp-server dhcpv4 pool description

```

- description string
- failover
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ignore-mclt-on-takeover boolean
  - maximum-client-lead-time number
  - partner-down-delay number
  - peer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
  - startup-wait-time number
- max-lease-time number
- min-lease-time number
- minimum-free
  - absolute number
  - event-when-depleted boolean
  - percent number
- nak-non-matching-subnet boolean
- offer-time number
- options
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
- subnet string
  - address-range string end string
  - apply-groups reference
  - apply-groups-exclude reference
  - failover-control-type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - drain boolean
  - exclude-addresses string end string
  - maximum-declined number
  - minimum-free
    - absolute number
    - event-when-depleted boolean
    - percent number
  - options
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - duration number
      - empty
      - hex-string string
      - ipv4-address string
      - netbios-node-type keyword
- pool-selection
  - use-gi-address
    - scope keyword
  - use-pool-from-client
    - delimiter string
- user-db reference
- user-identification keyword
- dhcpv6 string
- admin-state keyword

```

configure router dhcp-server dhcpv6 apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **auto-provisioned** *boolean*
- **defaults**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **options**
 - **option** (*number | keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string*
 - **domain-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *string*
 - **ipv6-address** *string*
 - **preferred-lifetime** *number*
 - **rebind-time** *number*
 - **renew-time** *number*
 - **valid-lifetime** *number*
 - **description** *string*
- **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*
- **ignore-rapid-commit** *boolean*
- **interface-id-mapping** *boolean*
- **lease-hold**
 - **additional-scenarios**
 - **internal-lease-ipsec** *boolean*
 - **solicited-release** *boolean*
 - **time** *number*
- **lease-query** *boolean*
- **pool** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **delegated-prefix**
 - **length** *number*
 - **maximum** *number*
 - **minimum** *number*
 - **description** *string*
 - **exclude-prefix** *string*
 - **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*
 - **options**
 - **option** (*number | keyword*)

configure router dhcp-server dhcpv6 pool options option apply-groups

```

    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - domain-string string
    - duration number
    - empty
    - hex-string string
    - ipv6-address string
- prefix string
    - apply-groups reference
    - apply-groups-exclude reference
    - drain boolean
    - failover-control-type keyword
    - options
        - option (number | keyword)
            - apply-groups reference
            - apply-groups-exclude reference
            - ascii-string string
            - domain-string string
            - duration number
            - empty
            - hex-string string
            - ipv6-address string
        - preferred-lifetime number
        - prefix-length-threshold number
            - absolute number
            - apply-groups reference
            - apply-groups-exclude reference
            - event-when-depleted boolean
            - percent number
        - prefix-type
            - pd boolean
            - wan-host boolean
        - rebind-time number
        - renew-time number
        - valid-lifetime number
    - prefix-length-threshold number
        - apply-groups reference
        - apply-groups-exclude reference
        - event-when-depleted boolean
        - minimum-free-percent number
- pool-selection
    - use-link-address
        - scope keyword
    - use-pool-from-client
        - delimiter string
- server-id
    - apply-groups reference
    - apply-groups-exclude reference
    - duid-enterprise
        - ascii-string string
        - hex-string string
    - duid-link-local
- user-identification keyword
- dns
    - redirect-vprn
        - service reference
            - apply-groups reference
            - apply-groups-exclude reference
            - preference number
- ecmp number
- entropy-label boolean
- fib-priority keyword
- fib-telemetry boolean

```

configure router firewall

- **firewall**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **domain** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcpv6-server**
 - **name** *string*
 - **router-instance** *string*
 - **nat-group** *reference*
 - **prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **wlan-gw-group** *reference*
 - **flowspec**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **filter-cam-type** *keyword*
 - **ip-filter-max-size** *number*
 - **ipv6-filter-max-size** *number*
 - **gtm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mvpn** *boolean*
 - **provider-tunnel**
 - **inclusive**
 - **rsvp**
 - **admin-state** *keyword*
 - **lsp-template** *reference*
 - **selective**
 - **data-delay-interval** *number*
 - **data-threshold**
 - **group-prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **pe-threshold-add** *number*
 - **pe-threshold-delete** *number*
 - **threshold** *number*
 - **maximum-p2mp-spmsi** *number*
 - **rsvp**
 - **admin-state** *keyword*
 - **lsp-template** *reference*
- **gtp**
 - **s11**
 - **interface** *reference*
 - **apn-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **peer-profile-map**
 - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **peer-profile** *reference*
 - **upf-data-endpoint**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fpe** *reference*
 - **interface** *reference*
 - **uplink**
 - **apn** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure router gtp uplink pdn-type

```

    - pdn-type keyword
    - peer-profile-map
      - prefix (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - peer-profile reference
    - icmp-tunneling boolean
    - igmp
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - forwarding-group-interface forwarding-service string group-interface-
name reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - import-policy reference
      - maximum-number-group-sources number
      - maximum-number-groups number
      - maximum-number-sources number
      - mcac
        - bandwidth
          - mandatory (number | keyword)
          - total (number | keyword)
        - interface-policy reference
        - policy reference
      - query-interval number
      - query-last-member-interval number
      - query-response-interval number
      - query-source-address string
      - router-alert-check boolean
      - sub-hosts-only boolean
      - subnet-check boolean
      - version keyword
    - group-if-query-source-address string
    - group-interface reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - import-policy reference
      - maximum-number-group-sources number
      - maximum-number-groups number
      - maximum-number-sources number
      - mcac
        - bandwidth
          - mandatory (number | keyword)
          - total (number | keyword)
        - interface-policy reference
        - policy reference
      - query-interval number
      - query-last-member-interval number
      - query-response-interval number
      - query-source-address string
      - router-alert-check boolean
      - sub-hosts-only boolean
      - subnet-check boolean
      - version keyword
    - interface string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - import-policy reference
      - maximum-number-group-sources number
      - maximum-number-groups number

```

configure router igmp interface maximum-number-sources

- **maximum-number-sources** *number*
- **mcac**
 - **bandwidth**
 - **mandatory** (*number* | *keyword*)
 - **total** (*number* | *keyword*)
 - **interface-policy** *reference*
 - **mc-constraints**
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **number-down** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **use-lag-port-weight** *boolean*
 - **policy** *reference*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **redundant-mcast** *boolean*
- **router-alert-check** *boolean*
- **ssm-translate**
 - **group-range start** *string* **end** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
- **static**
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
 - **group-range start** *string* **end** *string* **step** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
- **subnet-check** *boolean*
- **version** *keyword*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **ssm-translate**
 - **group-range start** *string* **end** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
- **tunnel-interface**
 - **ldp-p2mp-root** *reference* **sender-address** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **static**
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
 - **rsvp-p2mp-root** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure router igmp tunnel-interface rsvp-p2mp-root static

- **static**
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
- **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cflowd-parameters**
 - **sampling** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **direction** *keyword*
 - **sample-profile** (*keyword* | *number*)
 - **type** *keyword*
 - **cpu-protection** *reference*
 - **description** *string*
 - **dist-cpu-protection** *reference*
 - **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **eth-cfm**
 - **mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **ccm-padding-size** *number*
 - **ccm-tlv-ignore** *keyword*
 - **collect-lmm-fc-stats**
 - **fc** *keyword*
 - **fc-in-profile** *keyword*
 - **collect-lmm-stats** *boolean*
 - **description** *string*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
 - **facility-fault** *boolean*
 - **grace**
 - **eth-ed**
 - **max-rx-defect-window** *number*
 - **priority** *number*
 - **rx-eth-ed** *boolean*
 - **tx-eth-ed** *boolean*
 - **eth-vsm-grace**
 - **rx-eth-vsm-grace** *boolean*
 - **tx-eth-vsm-grace** *boolean*
 - **lbm-svc-act-responder** *boolean*
 - **low-priority-defect** *keyword*
 - **mac-address** *string*
 - **one-way-delay-threshold** *number*
 - **flavor** *keyword*
 - **gre-termination** *boolean*
 - **hold-time**
 - **ipv4**

configure router interface hold-time ipv4 down

```

- down
  - init-only boolean
  - seconds number
- up
  - seconds number
- ipv6
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- if-attribute
- admin-group reference
- delay
  - delay-selection keyword
  - dynamic
    - measurement-template reference
    - twamp-light
      - ipv4
        - admin-state keyword
        - destination string
        - source string
      - ipv6
        - admin-state keyword
        - destination string
        - source string
    - static number
  - srlg-group reference
- ingress
  - destination-class-lookup boolean
  - filter
    - ip reference
    - ipv6 reference
  - policy-accounting reference
- ingress-stats boolean
- ip-mtu number
- ip-tunnel
  - remote-ip string
- ipsec
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-exception reference
  - ipsec-tunnel string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip string
      - interface string
      - service-name string
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description string
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big

```


configure router interface ipsec ipsec-tunnel icmp6-generation packet-too-big admin-state

```

    - admin-state keyword
    - interval number
    - message-count number
- ip-mtu number
- key-exchange
  - dynamic
    - auto-establish boolean
    - cert
      - cert-profile reference
      - status-verify
        - default-result keyword
        - primary keyword
        - secondary keyword
      - trust-anchor-profile reference
    - id
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
    - ike-policy reference
    - ipsec-transform reference
    - pre-shared-key string
  - manual
    - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - encryption-key string
      - ipsec-transform reference
      - spi number
    - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-zone)
  - max-history-key-records
    - esp number
    - ike number
  - pmtu-discovery-aging number
  - private-sap number
  - private-service string
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - replay-window number
  - security-policy
    - id number
    - strict-match boolean
  - ipv6-exception reference
  - public-sap number
  - tunnel-group reference
- ipv4
  - allow-directed-broadcasts boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - gi-address string
    - option-82

```

configure router interface ipv4 dhcp option-82 action

```
- action keyword
- circuit-id
  - ascii-tuple
  - if-name
  - ifindex
  - none
  - port-id
  - vlan-ascii-tuple
- remote-id
  - ascii-string string
  - mac
  - none
- vendor-specific-option
  - client-mac-address boolean
  - pool-name boolean
  - port-id boolean
  - service-id boolean
  - string string
  - system-id boolean
- python-policy reference
- relay-plain-bootp boolean
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
  - unreachables
    - admin-state keyword
    - number number
    - seconds number
- ip-helper-address string
- local-dhcp-server reference
- neighbor-discovery
  - learn-unsolicited boolean
  - limit
    - log-only boolean
    - max-entries number
    - threshold number
  - local-proxy-arp boolean
  - proactive-refresh boolean
  - proxy-arp-policy reference
  - remote-proxy-arp boolean
  - retry-timer number
  - static-neighbor string
    - apply-groups reference
    - apply-groups-exclude reference
    - mac-address string
  - static-neighbor-unnumbered
    - mac-address string
  - timeout number
- primary
```

configure router interface ipv4 primary address

- **address** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **broadcast** *keyword*
- **gre-termination** *boolean*
- **prefix-length** *number*
- **track-srrp** *number*
- **qos-route-lookup** *keyword*
- **secondary** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast** *keyword*
 - **igp-inhibit** *boolean*
 - **prefix-length** *number*
 - **track-srrp** *number*
- **tcp-mss** *number*
- **unnumbered**
 - **ip-address** *string*
 - **ip-int-name** *string*
 - **system**
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **backup** *string*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** *string*
 - **interface-name** *string*
 - **service-name** *string*
 - **init-delay** *number*
 - **mac** *string*
 - **master-int-inherit** *boolean*
 - **message-interval** *number*
 - **monitor-oper-group** *reference*
 - **ntp-reply** *boolean*
 - **oper-group** *reference*
 - **owner** *boolean*
 - **passive** *boolean*
 - **ping-reply** *boolean*
 - **policy** *reference*
 - **preempt** *boolean*
 - **priority** *number*
 - **ssh-reply** *boolean*
 - **standby-forwarding** *boolean*
 - **telnet-reply** *boolean*
 - **traceroute-reply** *boolean*
- **ipv6**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duplicate-address-detection** *boolean*
 - **eui-64** *boolean*
 - **prefix-length** *number*
 - **primary-preference** *number*
 - **track-srrp** *number*
- **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*

configure router interface ipv6 bfd multiplier

- **multiplier** *number*
- **receive** *number*
- **transmit-interval** *number*
- **type** *keyword*
- **duplicate-address-detection** *boolean*
- **forward-ipv4-packets** *boolean*
- **icmp6**
 - **packet-too-big**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **time-exceeded**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **link-local-address**
 - **address** *string*
 - **duplicate-address-detection** *boolean*
- **local-dhcp-server** *reference*
- **neighbor-discovery**
 - **learn-unsolicited** *keyword*
 - **limit**
 - **log-only** *boolean*
 - **max-entries** *number*
 - **threshold** *number*
 - **local-proxy-nd** *boolean*
 - **proactive-refresh** *keyword*
 - **proxy-nd-policy** *reference*
 - **reachable-time** *number*
 - **secure-nd**
 - **admin-state** *keyword*
 - **allow-unsecured-msgs** *boolean*
 - **public-key-min-bits** *number*
 - **security-parameter** *number*
 - **stale-time** *number*
 - **static-neighbor** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *string*
- **qos-route-lookup** *keyword*
- **tcp-mss** *number*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup** *string*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure router interface ipv6 vrrp bfd-liveness dest-ip

```

    - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - interface-name string
    - service-name string
  - init-delay number
  - mac string
  - master-int-inherit boolean
  - message-interval number
  - monitor-oper-group reference
  - ntp-reply boolean
  - oper-group reference
  - owner boolean
  - passive boolean
  - ping-reply boolean
  - policy reference
  - preempt boolean
  - priority number
  - standby-forwarding boolean
  - telnet-reply boolean
  - traceroute-reply boolean
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- ldp-sync-timer
  - end-of-lib boolean
  - seconds number
- load-balancing
  - flow-label-load-balancing boolean
  - ip-load-balancing keyword
  - lsr-load-balancing keyword
  - spi-load-balancing boolean
  - teid-load-balancing boolean
- loopback
- mac string
- mac-accounting boolean
- network-domains
  - network-domain reference
- port (port-and-encap | keyword)
- ptp-hw-assist
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- qos
  - apply-groups reference
  - apply-groups-exclude reference
  - egress-instance number
  - egress-port-redirect-group reference
  - ingress-fp-redirect-group reference
  - ingress-instance number
  - network-policy reference
- strip-label boolean
- tos-marking-state keyword
- untrusted
  - default-forwarding keyword
- urpf-selected-vprns boolean
- vas-if-type keyword
- ipsec
  - multi-chassis-shunt-interface string
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - multi-chassis-shunting-profile string

```

configure router ipsec multi-chassis-shunting-profile apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **multi-chassis-shunt-interface** *reference*
- **security-policy** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-ip**
 - **address** *string*
 - **any** *boolean*
 - **local-ipv6**
 - **address** *string*
 - **any** *boolean*
 - **remote-ip**
 - **address** *string*
 - **any** *boolean*
 - **remote-ipv6**
 - **address** *string*
 - **any** *boolean*
- **ipv6**
 - **neighbor-discovery**
 - **reachable-time** *number*
 - **stale-time** *number*
 - **router-advertisement**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dns-options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rdnss-lifetime** (*keyword | number*)
 - **server** *string*
 - **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **current-hop-limit** *number*
 - **dns-options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **include-rdnss** *boolean*
 - **rdnss-lifetime** (*number | keyword*)
 - **server** *string*
 - **managed-configuration** *boolean*
 - **max-advertisement-interval** *number*
 - **min-advertisement-interval** *number*
 - **mtu** *number*
 - **other-stateful-configuration** *boolean*
 - **prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **autonomous** *boolean*
 - **on-link** *boolean*
 - **preferred-lifetime** (*keyword | number*)
 - **valid-lifetime** (*keyword | number*)
 - **reachable-time** *number*
 - **retransmit-time** *number*
 - **router-lifetime** *number*
 - **use-virtual-mac** *boolean*
 - **ipv6-te-router-id**

configure router ipv6-te-router-id interface

```

- interface reference
- isa-service-chaining
- apply-groups reference
- apply-groups-exclude reference
- nat-group number
- vxlan-vtep-range
  - end (ipv4-address-no-zone | ipv6-address-no-zone)
  - start (ipv4-address-no-zone | ipv6-address-no-zone)
- isis number
  - admin-state keyword
  - advertise-passive-only boolean
  - advertise-router-capability keyword
  - advertise-tunnel-link boolean
  - all-llisis string
  - all-l2isis string
  - apply-groups reference
  - apply-groups-exclude reference
  - area-address string
  - authentication-check boolean
  - authentication-key string
  - authentication-keychain reference
  - authentication-type keyword
  - csnp-authentication boolean
  - database-export
    - bgp-ls-identifier
      - value number
    - igp-identifier number
  - default-route-tag number
  - entropy-label
    - override-tunnel-elc boolean
  - export-limit
    - log-percent number
    - number number
  - export-policy reference
  - flexible-algorithms
    - admin-state keyword
    - flex-algo number
      - advertise reference
      - apply-groups reference
      - apply-groups-exclude reference
      - loopfree-alternate
      - micro-loop-avoidance
      - participate boolean
  - graceful-restart
    - helper-mode boolean
  - hello-authentication boolean
  - hello-padding keyword
  - ignore-attached-bit boolean
  - ignore-lsp-errors boolean
  - ignore-narrow-metric boolean
  - igp-shortcut
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - tunnel-next-hop
      - family keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - resolution keyword
        - resolution-filter
          - rsvp boolean
          - sr-te boolean
  - iid-tlv boolean
  - import-policy reference

```

configure router isis interface

- **interface** *string*
- **adjacency-set** *reference*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bfd-liveness**
 - **ipv4**
 - **include-bfd-tlv** *boolean*
 - **ipv6**
 - **include-bfd-tlv** *boolean*
- **csnp-interval** *number*
- **default-instance** *boolean*
- **flex-algo** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **ipv4-node-sid**
 - **index** *number*
 - **label** *number*
- **ipv6-node-sid**
 - **index** *number*
 - **label** *number*
- **hello-authentication** *boolean*
- **hello-authentication-key** *string*
- **hello-authentication-keychain** *reference*
- **hello-authentication-type** *keyword*
- **hello-padding** *keyword*
- **interface-type** *keyword*
- **ipv4-adjacency-sid**
 - **label** *number*
- **ipv4-multicast** *boolean*
- **ipv4-node-sid**
 - **clear-n-flag** *boolean*
 - **index** *number*
 - **label** *number*
- **ipv6-adjacency-sid**
 - **label** *number*
- **ipv6-multicast** *boolean*
- **ipv6-node-sid**
 - **clear-n-flag** *boolean*
 - **index** *number*
 - **label** *number*
- **ipv6-unicast** *boolean*
- **level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hello-authentication-key** *string*
 - **hello-authentication-keychain** *reference*
 - **hello-authentication-type** *keyword*
 - **hello-interval** *number*
 - **hello-multiplier** *number*
 - **hello-padding** *keyword*
 - **ipv4-multicast-metric** *number*
 - **ipv6-multicast-metric** *number*
 - **ipv6-unicast-metric** *number*
 - **metric** *number*
 - **passive** *boolean*
 - **priority** *number*
 - **sd-offset** *number*
 - **sf-offset** *number*
- **level-capability** *keyword*
- **load-balancing-weight** *number*
- **loopfree-alternate**
 - **exclude** *boolean*
- **policy-map**

configure router isis interface loopfree-alternate policy-map route-nh-template

```

    - route-nh-template reference
  - lsp-pacing-interval number
  - mesh-group
    - blocked
    - value number
  - passive boolean
  - retransmit-interval number
  - sid-protection boolean
  - tag number
  - ipv4-multicast-routing keyword
  - ipv4-routing boolean
  - ipv6-multicast-routing keyword
  - ipv6-routing keyword
  - ldp-over-rsvp boolean
  - ldp-sync boolean
  - level keyword
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - authentication-keychain reference
    - authentication-type keyword
    - bier
      - admin-state keyword
      - template reference
    - csnp-authentication boolean
    - database-export-exclude boolean
    - default-ipv4-multicast-metric number
    - default-ipv6-multicast-metric number
    - default-ipv6-unicast-metric number
    - default-metric number
    - external-preference number
    - hello-authentication boolean
    - hello-padding keyword
    - loopfree-alternate-exclude boolean
    - lsp-mtu-size number
    - preference number
    - psnp-authentication boolean
    - wide-metrics-only boolean
  - level-capability keyword
  - link-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - level keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - ipv4-multicast-metric-offset number
      - ipv4-unicast-metric-offset number
      - ipv6-multicast-metric-offset number
      - ipv6-unicast-metric-offset number
      - member reference
      - oper-members number
      - revert-members number
  - loopfree-alternate
    - augment-route-table boolean
    - exclude
      - prefix-policy reference
  - multi-homed-prefix
    - preference keyword
  - remote-lfa
    - max-pq-cost number
    - node-protect
      - max-pq-nodes number

```

configure router isis loopfree-alternate ti-lfa

```

- ti-lfa
  - max-sr-frr-labels number
  - max-srv6-frr-sids number
  - node-protect
- lsp-lifetime number
- lsp-minimum-remaining-lifetime number
- lsp-mtu-size number
- lsp-refresh
  - half-lifetime boolean
  - interval number
- mru-mismatch-detection boolean
- multi-topology
  - ipv4-multicast boolean
  - ipv6-multicast boolean
  - ipv6-unicast boolean
- multicast-import
  - ipv4 boolean
  - ipv6 boolean
- overload
  - max-metric boolean
- overload-export-external boolean
- overload-export-interlevel boolean
- overload-on-boot
  - max-metric boolean
  - timeout number
- poi-tlv boolean
- prefix-attributes-tlv boolean
- prefix-limit
  - limit number
  - log-only boolean
  - overload-timeout (number | keyword)
  - warning-threshold number
- psnp-authentication boolean
- reference-bandwidth number
- rib-priority
  - high
    - prefix-list reference
    - tag number
- router-id string
- segment-routing
  - adj-sid-hold (number | keyword)
  - adjacency-set number
    - advertise boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - family keyword
    - parallel boolean
    - sid
      - label number
  - adjacency-sid
    - allocate-dual-sids boolean
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - class-forwarding boolean
  - egress-statistics
    - adj-set boolean
    - adj-sid boolean
    - node-sid boolean
  - entropy-label boolean
  - export-tunnel-table keyword
  - ingress-statistics
    - adj-set boolean
    - adj-sid boolean

```

configure router isis segment-routing ingress-statistics node-sid

- **node-sid** *boolean*
- **mapping-server**
 - **admin-state** *keyword*
 - **node-sid-map** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-n-flag** *boolean*
 - **ip-prefix** *string*
 - **level-capability** *keyword*
 - **range** *number*
 - **set-flags**
 - **bit-s** *boolean*
- **maximum-sid-depth**
 - **override-bmi** *number*
 - **override-erld** *number*
- **micro-loop-avoidance**
 - **fib-delay** *number*
- **prefix-sid-range**
 - **global**
 - **max-index** *number*
 - **start-label** *number*
- **srlb** *reference*
- **tunnel-mtu** *number*
- **tunnel-table-pref** *number*
- **segment-routing-v6**
 - **adj-sid-hold** (*number* | *keyword*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **metric** *number*
 - **level-capability** *keyword*
 - **multi-topology**
 - **mt0** *boolean*
 - **mt2** *boolean*
 - **tag** *number*
 - **micro-segment-locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **metric** *number*
 - **level-capability** *keyword*
 - **multi-topology**
 - **mt0** *boolean*
 - **mt2** *boolean*
 - **tag** *number*
 - **standard-multi-instance** *boolean*
 - **strict-adjacency-check** *boolean*
 - **summary-address** (*ipv4-prefix* | *ipv6-prefix*)
 - **algorithm** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level-capability** *keyword*
 - **route-tag** *number*
 - **suppress-attached-bit** *boolean*
 - **system-id** *string*
 - **timers**

configure router isis timers lsp-wait

```

- lsp-wait
  - lsp-initial-wait number
  - lsp-max-wait number
  - lsp-second-wait number
- spf-wait
  - spf-initial-wait number
  - spf-max-wait number
  - spf-second-wait number
- traffic-engineering boolean
- traffic-engineering-options
  - advertise-delay boolean
  - application-link-attributes
    - legacy boolean
  - ipv6 boolean
- unicast-import
  - ipv4 boolean
  - ipv6 boolean
- l2tp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - avp-hiding keyword
  - challenge boolean
  - destruct-timeout number
  - ethernet-tunnel
    - reconnect-timeout (number | keyword)
  - exclude-avps
    - calling-number boolean
    - initial-rx-lcp-conf-req boolean
  - failover
    - recovery-max-session-lifetime number
    - recovery-method keyword
    - recovery-time number
  - track-srrp reference
    - apply-groups reference
    - apply-groups-exclude reference
    - peer reference
    - sync-tag string
- group string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - avp-hiding keyword
  - challenge keyword
  - description string
  - destruct-timeout number
  - ethernet-tunnel
    - reconnect-timeout (number | keyword)
  - failover
    - recovery-method keyword
    - recovery-time number
  - hello-interval (number | keyword)
  - idle-timeout (number | keyword)
- l2tpv3
  - cookie-length (number | keyword)
  - digest-type keyword
  - nonce-length number
  - password string
  - private-tcp-mss-adjust (number | keyword)
  - public-tcp-mss-adjust (number | keyword)
  - pw-cap-list
    - ethernet boolean
    - ethernet-vlan boolean
  - rem-router-id string

```

configure router l2tp group l2tpv3 track-password-change

```

- track-password-change boolean
- lac
- df-bit keyword
- lns
- lns-group reference
- load-balance-method keyword
- mlppp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- endpoint
- ip (ipv4-address | keyword)
- mac (mac-address | keyword)
- interleave boolean
- max-fragment-delay (number | keyword)
- max-links number
- reassembly-timeout number
- short-sequence-numbers boolean
- ppp
- authentication keyword
- authentication-policy string
- chap-challenge-length
- end number
- start number
- default-group-interface
- interface string
- service-name string
- ipcp-subnet-negotiation boolean
- keepalive
- interval number
- multiplier number
- lcp-force-ack-accm boolean
- lcp-ignore-magic-numbers boolean
- mtu number
- proxy-authentication boolean
- proxy-lcp boolean
- reject-disabled-ncp boolean
- user-db string
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- password string
- protocol keyword
- radius-accounting-policy reference
- receive-window-size number
- session-assign-method keyword
- session-limit (number | keyword)
- tunnel string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- auto-establish boolean
- avp-hiding keyword
- challenge keyword
- description string
- destruct-timeout number
- failover
- recovery-method keyword
- recovery-time number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)
- l2tpv3
- private-tcp-mss-adjust (number | keyword)

```

configure router l2tp group tunnel l2tpv3 public-tcp-mss-adjust

```

- public-tcp-mss-adjust (number | keyword)
- lac
- df-bit keyword
- lns
- lns-group reference
- load-balance-method keyword
- mlppp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- endpoint
- ip (ipv4-address | keyword)
- mac (mac-address | keyword)
- interleave keyword
- max-fragment-delay number
- max-links number
- reassembly-timeout number
- short-sequence-numbers keyword
- ppp
- authentication keyword
- authentication-policy string
- chap-challenge-length
- end number
- start number
- default-group-interface
- interface string
- service-name string
- ipcp-subnet-negotiation keyword
- keepalive
- interval number
- multiplier number
- lcp-force-ack-accm keyword
- lcp-ignore-magic-numbers keyword
- mtu number
- proxy-authentication keyword
- proxy-lcp keyword
- reject-disabled-ncp keyword
- user-db string
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- password string
- peer string
- preference number
- radius-accounting-policy reference
- receive-window-size number
- remote-name string
- session-limit (number | keyword)
- group-session-limit number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)
- ignore-avps
- sequencing-required boolean
- l2tpv3
- cookie-length number
- digest-type keyword
- nonce-length number
- password string
- private-tcp-mss-adjust number
- public-tcp-mss-adjust number
- transport-type
- ip boolean
- lac

```

configure router l2tp lac calling-number-format

```

- calling-number-format string
- cisco-nas-port
  - ethernet string
- df-bit boolean
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- next-attempt keyword
- password string
- peer-address-change-policy keyword
- radius-accounting-policy reference
- receive-window-size number
- replace-result-code
  - cdn-invalid-dst boolean
  - cdn-permanent-no-facilities boolean
  - cdn-temporary-no-facilities boolean
- rtm-debounce-time (number | keyword)
- session-assign-method keyword
- session-limit number
- tunnel-selection-blacklist
  - add-tunnel-on
    - address-change-timeout boolean
    - cdn-err-code boolean
    - cdn-invalid-dst boolean
    - cdn-permanent-no-facilities boolean
    - cdn-temporary-no-facilities boolean
    - stop-ccn-err-code boolean
    - stop-ccn-other boolean
    - tx-cdn-not-established-in-time boolean
  - max-list-length (number | keyword)
  - max-time number
  - timeout-action keyword
- tunnel-session-limit number
- ldp
  - admin-state keyword
  - aggregate-prefix-match
    - admin-state keyword
    - prefix-exclude reference
  - apply-groups reference
  - apply-groups-exclude reference
  - class-forwarding keyword
  - consider-system-ip-in-gep boolean
  - egress-statistics
    - fec-prefix (ipv4-prefix | ipv6-prefix)
      - accounting-policy reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - collect-stats boolean
    - entropy-label-capability boolean
  - export-policy reference
  - export-tunnel-table reference
  - fast-reroute
    - backup-sr-tunnel boolean
  - fec-originate (ipv4-prefix | ipv6-prefix)
    - advertised-label number
    - apply-groups reference
    - apply-groups-exclude reference
    - interface string
    - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
    - pop boolean
    - swap-label number
  - generate-basic-fec-only boolean

```

configure router ldp graceful-restart

- **graceful-restart**
 - **helper-mode** *boolean*
 - **maximum-recovery-time** *number*
 - **neighbor-liveness-time** *number*
- **implicit-null-label** *boolean*
- **import-mcast-policy** *reference*
- **import-pmsi-routes**
 - **mvpn** *boolean*
 - **mvpn-no-export-community** *boolean*
- **import-policy** *reference*
- **import-tunnel-table** *reference*
- **interface-parameters**
 - **interface** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **ipv4**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fec-type-capability**
 - **p2mp-ipv4** *boolean*
 - **p2mp-ipv6** *boolean*
 - **prefix-ipv4** *boolean*
 - **prefix-ipv6** *boolean*
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
 - **local-lsr-id**
 - **interface-name** *reference*
 - **transport-address** *keyword*
 - **ipv6**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fec-type-capability**
 - **p2mp-ipv4** *boolean*
 - **p2mp-ipv6** *boolean*
 - **prefix-ipv4** *boolean*
 - **prefix-ipv6** *boolean*
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
 - **local-lsr-id**
 - **format-32bit** *boolean*
 - **interface-name** *reference*
 - **transport-address** *keyword*
 - **load-balancing-weight** *number*
 - **ipv4**
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*

configure router ldp interface-parameters ipv4 transport-address

```

- transport-address keyword
- ipv6
- hello
  - factor number
  - timeout number
- keepalive
  - factor number
  - timeout number
- transport-address keyword
- label-withdrawal-delay number
- ldp-shortcut
  - ipv4 boolean
  - ipv6 boolean
- legacy-ipv4-lsr-interop boolean
- lsp-bfd reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - bfd-template reference
  - failure-action keyword
  - lsp-ping-interval (number | keyword)
  - priority number
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- max-ecmp-routes number
- mcast-upstream-asbr-frr boolean
- mcast-upstream-frr boolean
- mp-mbb-time number
- prefer-mcast-tunnel-in-tunnel boolean
- prefer-protocol-stitching boolean
- prefer-tunnel-in-tunnel boolean
- resolve-root-using keyword
- session-parameters
  - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - adv-adj-addr-only boolean
    - adv-local-lsr-id boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - community string
    - dod-label-distribution boolean
    - export-addresses reference
    - export-prefixes reference
    - fec-limit
      - limit number
      - log-only boolean
      - threshold number
    - fec-type-capability
      - p2mp boolean
      - prefix-ipv4 boolean
      - prefix-ipv6 boolean
      - fec129-cisco-interop boolean
      - import-prefixes reference
      - pe-id-mac-flush-interop boolean
  - shortcut-local-ttl-propagate boolean
  - shortcut-transit-ttl-propagate boolean
- targeted-session
  - auto-rx
    - ipv4
      - admin-state keyword
      - tunneling boolean
  - auto-tx
    - ipv4
      - admin-state keyword
      - tunneling boolean
- export-prefixes reference

```

configure router ldp targeted-session import-prefixes

- **import-prefixes** *reference*
- **ipv4**
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **hello-reduction**
 - **admin-state** *keyword*
 - **factor** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
- **ipv6**
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **hello-reduction**
 - **admin-state** *keyword*
 - **factor** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
- **peer** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **hello-reduction**
 - **admin-state** *keyword*
 - **factor** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
 - **local-lsr-id**
 - **format-32bit** *boolean*
 - **interface-name** *reference*
 - **mcast-tunneling**
 - **lsp** *string*
 - **tunneling**
 - **lsp** *string*
 - **peer-template** *string*
 - **admin-state** *keyword*
 - **adv-local-lsr-id** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **community** *string*
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **hello-reduction**
 - **admin-state** *keyword*
 - **factor** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
 - **local-lsr-id**
 - **interface-name** *reference*
 - **mcast-tunneling** *boolean*
 - **tunneling** *boolean*
 - **peer-template-map** *reference*
 - **apply-groups** *reference*

configure router ldp targeted-session peer-template-map apply-groups-exclude

```

    - apply-groups-exclude reference
    - policy-map reference
    - resolve-v6-prefix-over-shortcut boolean
    - sdp-auto-targeted-session boolean
  - tcp-session-parameters
    - authentication-key string
    - authentication-keychain reference
    - peer-transport (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - authentication-keychain reference
      - path-mtu-discovery boolean
      - ttl-security number
    - tunnel-down-damp-time number
    - tunnel-table-pref number
    - weighted-ecmp boolean
  - leak-export
    - leak-export-limit number
    - policy-name (policy-expr-string | string)
  - lsp-bfd
    - bfd-sessions number
    - tail-end
      - apply-groups reference
      - apply-groups-exclude reference
      - multiplier number
      - receive-interval number
      - transmit-interval number
  - mc-maximum-routes
    - log-only boolean
    - threshold number
    - value number
  - mld
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - forwarding-group-interface forwarding-service string group-interface-
name reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - import-policy reference
      - maximum-number-group-sources number
      - maximum-number-groups number
      - maximum-number-sources number
      - mcac
        - bandwidth
          - mandatory (number | keyword)
          - total (number | keyword)
        - interface-policy reference
        - policy reference
      - query-interval number
      - query-last-member-interval number
      - query-response-interval number
      - query-source-address string
      - router-alert-check boolean
      - sub-hosts-only boolean
      - subnet-check boolean
      - version keyword
    - group-if-query-source-address string
  - group-interface reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference

```

configure router mld group-interface import-policy

- **import-policy** *reference*
- **maximum-number-group-sources** *number*
- **maximum-number-groups** *number*
- **maximum-number-sources** *number*
- **mcac**
 - **bandwidth**
 - **mandatory** (*number | keyword*)
 - **total** (*number | keyword*)
 - **interface-policy** *reference*
 - **policy** *reference*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **query-source-address** *string*
- **router-alert-check** *boolean*
- **sub-hosts-only** *boolean*
- **subnet-check** *boolean*
- **version** *keyword*
- **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **import-policy** *reference*
 - **maximum-number-group-sources** *number*
 - **maximum-number-groups** *number*
 - **maximum-number-sources** *number*
 - **mcac**
 - **bandwidth**
 - **mandatory** (*number | keyword*)
 - **total** (*number | keyword*)
 - **interface-policy** *reference*
 - **mc-constraints**
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **number-down** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **use-lag-port-weight** *boolean*
 - **policy** *reference*
 - **query-interval** *number*
 - **query-last-member-interval** *number*
 - **query-response-interval** *number*
 - **router-alert-check** *boolean*
 - **ssm-translate**
 - **group-range start** *string end* *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **static**
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
 - **group-range start** *string end* *string step* *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
 - **version** *keyword*
 - **query-interval** *number*

configure router mld query-last-member-interval

- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **ssm-translate**
 - **group-range** *start string end string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
- **mpls**
 - **admin-group-frr** *boolean*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-bandwidth-multipliers**
 - **adjust-multiplier** *number*
 - **sample-multiplier** *number*
 - **auto-lsp** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **one-hop** *boolean*
 - **policy** *reference*
 - **aux-stats**
 - **sr** *boolean*
 - **bypass-resignal-timer** *number*
 - **class-forwarding-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-set** *number*
 - **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **forwarding-set** *number*
 - **cspf-on-loose-hop** *boolean*
 - **dynamic-bypass** *boolean*
 - **entropy-label**
 - **rsvp-te** *boolean*
 - **sr-te** *boolean*
 - **exponential-backoff-retry** *boolean*
 - **forwarding-policies**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **forwarding-policy** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **binding-label** *number*
 - **egress-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **ingress-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **metric** *number*
 - **next-hop-group** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-next-hop**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure router mpls forwarding-policies forwarding-policy next-hop-group backup-next-hop next-hop

```

    - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
    - pushed-labels number
      - apply-groups reference
      - apply-groups-exclude reference
      - label number
    - load-balancing-weight number
    - primary-next-hop
      - apply-groups reference
      - apply-groups-exclude reference
      - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - pushed-labels number
        - apply-groups reference
        - apply-groups-exclude reference
        - label number
    - resolution-type keyword
    - preference number
    - revert-timer number
    - tunnel-table-pref number
  - reserved-label-block reference
- frr-object boolean
- hold-timer number
- ingress-statistics
  - lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) lsp-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - stat-mode keyword
  - p2mp-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-
session-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - max-stats number
    - stat-mode keyword
  - p2p-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-
session-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - max-stats number
    - stat-mode keyword
- interface reference
  - admin-group reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - label-map number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - pop
  - swap
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop string
    - out-label (number | keyword)
- srlg-group reference
- te-metric number

```

configure router mpls least-fill-min-thd

```

- least-fill-min-thd number
- least-fill-reoptim-thd number
- logger-event-bundling boolean
- lsp string
  - adaptive boolean
  - admin-state keyword
  - admin-tag reference
  - adspec boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-bandwidth
    - adjust-down
      - bw number
      - percent number
    - adjust-up
      - bw number
      - percent number
    - apply-groups reference
    - apply-groups-exclude reference
    - fc keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - sampling-weight number
    - max-bandwidth number
    - min-bandwidth number
    - monitor-bandwidth boolean
    - multipliers
      - adjust-multiplier number
      - sample-multiplier number
    - overflow-limit
      - bw number
      - number number
      - threshold number
    - underflow-limit
      - bw number
      - number number
      - threshold number
    - use-last-adj-bw
      - secondary-retry-limit (number | keyword)
  - bfd
    - bfd-liveness boolean
    - bfd-template reference
    - failure-action keyword
    - lsp-ping-interval (number | keyword)
    - return-path-label number
    - wait-for-up-timer number
  - bgp-shortcut boolean
  - bgp-transport-tunnel boolean
  - binding-sid number
  - class-forwarding
    - forwarding-set
      - policy reference
      - set number
  - class-type number
  - egress-statistics
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - stat-mode keyword
  - entropy-label keyword
  - exclude-admin-group reference
  - exclude-node (ipv4-address-no-zone | ipv6-address-no-zone)

```

configure router mpls lsp fallback-path-computation-method

- **fallback-path-computation-method** *keyword*
- **fast-reroute**
 - **frr-method** *keyword*
 - **hop-limit** *number*
 - **node-protect** *boolean*
 - **propagate-admin-group** *boolean*
- **from** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **hop-limit** *number*
- **igp-shortcut**
 - **admin-state** *keyword*
 - **lfa-type** *keyword*
 - **relative-metric** *number*
- **include-admin-group** *reference*
- **label-stack-reduction** *boolean*
- **ldp-over-rsvp** *boolean*
- **least-fill** *boolean*
- **load-balancing-weight** *number*
- **local-sr-protection** *keyword*
- **lsp-self-ping** *keyword*
- **main-ct-retry-limit** *number*
- **max-sr-labels**
 - **additional-frr-labels** *number*
 - **label-stack-size** *number*
- **metric** *number*
- **metric-type** *keyword*
- **override-tunnel-elc** *boolean*
- **p2mp-id** *number*
- **path-computation-method** *keyword*
- **path-profile** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **path-group** *number*
- **pce-associations**
 - **diversity** *reference*
 - **policy** *reference*
- **pce-control** *boolean*
- **pce-report** *keyword*
- **primary** *reference*
 - **adaptive** *boolean*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-class-type** *number*
 - **bandwidth** *number*
 - **bfd**
 - **bfd-liveness** *boolean*
 - **bfd-template** *reference*
 - **lsp-ping-interval** (*number* | *keyword*)
 - **return-path-label** *number*
 - **wait-for-up-timer** *number*
- **class-type** *number*
- **exclude-admin-group**
 - **group** *reference*
- **hop-limit** *number*
- **include-admin-group**
 - **group** *reference*
- **priority**
 - **hold-priority** *number*
 - **setup-priority** *number*
- **record** *boolean*
- **record-label** *boolean*
- **primary-p2mp-instance** *string*
 - **adaptive** *boolean*
 - **admin-state** *keyword*

configure router mpls lsp primary-p2mp-instance apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bandwidth** *number*
- **exclude-admin-group**
 - **group** *reference*
- **hop-limit** *number*
- **include-admin-group**
 - **group** *reference*
- **priority**
 - **hold-priority** *number*
 - **setup-priority** *number*
- **record** *boolean*
- **record-label** *boolean*
- **s2l-path** *reference to (ipv4-address-no-zone | ipv6-address-no-zone)*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **propagate-admin-group** *boolean*
- **retry-limit** *number*
- **retry-timer** *number*
- **revert-timer** *number*
- **rsvp-resv-style** *keyword*
- **secondary** *reference*
 - **adaptive** *boolean*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **bfd**
 - **bfd-liveness** *boolean*
 - **bfd-template** *reference*
 - **lsp-ping-interval** (*number | keyword*)
 - **return-path-label** *number*
 - **wait-for-up-timer** *number*
- **class-type** *number*
- **exclude-admin-group**
 - **group** *reference*
- **hop-limit** *number*
- **include-admin-group**
 - **group** *reference*
- **path-preference** *number*
- **priority**
 - **hold-priority** *number*
 - **setup-priority** *number*
- **record** *boolean*
- **record-label** *boolean*
- **srlg** *boolean*
- **standby** *boolean*
- **soft-preemption** *boolean*
- **to** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **type** *keyword*
- **vprn-auto-bind** *boolean*
- **lsp-bsid-block** *reference*
- **lsp-history**
 - **admin-state** *keyword*
- **lsp-init-retry-timeout** *number*
- **lsp-self-ping**
 - **interval** *number*
 - **rsvp-te** *boolean*
 - **timeout** *number*
 - **timeout-action** *keyword*
- **lsp-template** *string*
 - **adaptive** *boolean*
 - **admin-state** *keyword*

configure router mpls lsp-template admin-tag

- **admin-tag** *reference*
- **adspec** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **auto-bandwidth**
 - **adjust-down**
 - **bw** *number*
 - **percent** *number*
 - **adjust-up**
 - **bw** *number*
 - **percent** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sampling-weight** *number*
- **max-bandwidth** *number*
- **min-bandwidth** *number*
- **monitor-bandwidth** *boolean*
- **multipliers**
 - **adjust-multiplier** *number*
 - **sample-multiplier** *number*
- **overflow-limit**
 - **bw** *number*
 - **number** *number*
 - **threshold** *number*
- **underflow-limit**
 - **bw** *number*
 - **number** *number*
 - **threshold** *number*
- **backup-class-type** *number*
- **bandwidth** *number*
- **bfd**
 - **bfd-liveness** *boolean*
 - **bfd-template** *reference*
 - **failure-action** *keyword*
 - **lsp-ping-interval** (*number* | *keyword*)
 - **return-path-label** *number*
 - **wait-for-up-timer** *number*
- **bgp-shortcut** *boolean*
- **bgp-transport-tunnel** *boolean*
- **binding-sid** *boolean*
- **class-forwarding**
 - **forwarding-set**
 - **policy** *reference*
 - **set** *number*
- **class-type** *number*
- **default-path** *reference*
- **egress-statistics**
 - **accounting-policy** *reference*
 - **collect-stats** *boolean*
 - **stat-mode** *keyword*
- **entropy-label** *keyword*
- **exclude-admin-group** *reference*
- **fallback-path-computation-method** *keyword*
- **family** *keyword*
- **fast-reroute**
 - **frr-method** *keyword*
 - **hop-limit** *number*
 - **node-protect** *boolean*
 - **propagate-admin-group** *boolean*
- **from** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **hop-limit** *number*

configure router mpls lsp-template igp-shortcut

- **igp-shortcut**
 - **admin-state** *keyword*
 - **lfa-type** *keyword*
 - **relative-metric** *number*
 - **include-admin-group** *reference*
 - **label-stack-reduction** *boolean*
 - **ldp-over-rsvp** *boolean*
 - **least-fill** *boolean*
 - **load-balancing-weight** *number*
 - **local-sr-protection** *keyword*
 - **lsp-self-ping** *keyword*
 - **main-ct-retry-limit** *number*
 - **max-sr-labels**
 - **additional-frr-labels** *number*
 - **label-stack-size** *number*
 - **metric** *number*
 - **metric-type** *keyword*
 - **override-tunnel-elc** *boolean*
 - **path-computation-method** *keyword*
 - **path-profile** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **path-group** *number*
 - **pce-associations**
 - **diversity** *reference*
 - **policy** *reference*
 - **pce-control** *boolean*
 - **pce-report** *keyword*
 - **priority**
 - **hold-priority** *number*
 - **setup-priority** *number*
 - **propagate-admin-group** *boolean*
 - **record** *boolean*
 - **record-label** *boolean*
 - **retry-limit** *number*
 - **retry-timer** *number*
 - **soft-preemption** *boolean*
 - **template-id** (*number* | *keyword*)
 - **type** *keyword*
 - **vprn-auto-bind** *boolean*
- **max-bypass-associations** *number*
 - **max-bypass-plr-associations** *number*
 - **mbb-prefer-current-hops** *boolean*
 - **p2mp-resignal-timer** *number*
 - **p2mp-s2l-fast-retry** *number*
 - **p2p-active-path-fast-retry** *number*
 - **path** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hop** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **sid-label** *number*
 - **type** *keyword*
 - **pce-init-lsp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sr-te**
 - **admin-state** *keyword*
 - **pce-report**
 - **rsvp-te** *boolean*
 - **sr-te** *boolean*

configure router mpls resignal-on-igp-overload

- **resignal-on-igp-overload** *boolean*
- **resignal-timer** *number*
- **retry-on-igp-overload** *boolean*
- **secondary-fast-retry-timer** *number*
- **shortcut-local-ttl-propagate** *boolean*
- **shortcut-transit-ttl-propagate** *boolean*
- **sr-te-resignal**
 - **resignal-on-igp-event** *boolean*
 - **resignal-timer** *number*
- **srlg-database**
 - **router-id** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface** *string* **srlg-group** *reference*
- **srlg-frr** *keyword*
- **static-lsp** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **metric** *number*
 - **push**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **next-hop** *string*
 - **out-label** (*number* | *keyword*)
 - **to** *string*
 - **static-lsp-fast-retry** *number*
 - **strict-ero-nhop-direct-resolution** *boolean*
 - **tunnel-table-pref**
 - **rsvp-te** *number*
 - **sr-te** *number*
 - **user-srlg-db** *boolean*
- **mpls-labels**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bgp-labels-hold-timer** *number*
 - **reserved-label-block** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end-label** *number*
 - **start-label** *number*
 - **sr-labels**
 - **end** *number*
 - **start** *number*
 - **static-label-range** *number*
- **msdp**
 - **active-source-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **data-encapsulation** *boolean*
 - **export-policy** *reference*
 - **group** *string*
 - **active-source-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **local-address** *string*
 - **mode** *keyword*
 - **peer** *string*
 - **active-source-limit** *number*

configure router msdp group peer admin-state

```

    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - default-peer boolean
    - export-policy reference
    - import-policy reference
    - local-address string
    - receive-message-rate
      - rate number
      - threshold number
      - time number
    - receive-message-rate
      - rate number
      - threshold number
      - time number
    - import-policy reference
    - local-address string
    - peer string
      - active-source-limit number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - default-peer boolean
      - export-policy reference
      - import-policy reference
      - local-address string
      - receive-message-rate
        - rate number
        - threshold number
        - time number
    - receive-message-rate
      - rate number
      - threshold number
      - time number
    - rpf-table keyword
    - source string
      - active-source-limit number
      - apply-groups reference
      - apply-groups-exclude reference
    - source-active-cache-lifetime number
    - mss-adjust
      - apply-groups reference
      - apply-groups-exclude reference
      - nat-group number
      - segment-size number
    - mtrace2
      - admin-state keyword
      - udp-port number
    - multicast-info-policy reference
    - nat
      - apply-groups reference
      - apply-groups-exclude reference
      - inside
        - l2-aware
          - subscribers string
        - large-scale
          - dnat-only
            - source-prefix-list reference
        - dual-stack-lite
          - admin-state keyword
          - deterministic
            - policy-map string

```

configure router nat inside large-scale dual-stack-lite deterministic policy-map admin-state

```

- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- map string to string
  - apply-groups reference
  - apply-groups-exclude reference
  - first-outside-address string
- nat-policy reference
- prefix-map string nat-policy reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - map string to string
    - apply-groups reference
    - apply-groups-exclude reference
    - first-outside-address string
- endpoint string
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-fragmentation keyword
  - min-first-fragment-size-rx number
  - reassembly boolean
  - tunnel-mtu number
- max-subscriber-limit number
- subscriber-prefix-length number
- nat-policy reference
- nat44
  - destination-prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - nat-policy reference
- deterministic
  - policy-map string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - map string to string
      - apply-groups reference
      - apply-groups-exclude reference
      - first-outside-address string
    - nat-policy reference
  - prefix-map string nat-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - map string to string
      - apply-groups reference
      - apply-groups-exclude reference
      - first-outside-address string
  - max-subscriber-limit number
  - nat-import reference
- nat64
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - drop-zero-ipv4-checksum boolean
  - insert-ipv6-fragment-header boolean
  - ip-fragmentation keyword
  - ipv6-mtu number
  - prefix string
  - subscriber-prefix-length number
- tos
  - downstream
    - use-ipv4 boolean

```

configure router nat inside large-scale nat64 tos upstream

```

    - upstream
      - set-tos (keyword | number)
- redundancy
- peer string
- peer6 string
- steering-route string
- subscriber-identification
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - attribute
    - type keyword
    - vendor keyword
  - description string
  - drop-unidentified-traffic boolean
  - radius-proxy-server
  - router-instance string
  - server string
- map
- map-domain reference
- outside
- dnat-only
  - route-limit number
- filters
  - downstream
    - ipv4 reference
    - ipv6 reference
  - upstream
    - ipv4 reference
    - ipv6 reference
- mtu number
- pool string
  - address-range string end string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - drain boolean
  - admin-state keyword
  - applications
    - agnostic boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - icmp-echo-reply boolean
  - l2-aware
    - default-host
      - inside-router-instance string
      - ip-address string
      - rate-limit number
    - external-assignment boolean
  - port-block-extension
  - ports number
  - subscriber
    - watermarks
      - high number
      - low number
    - subscriber-limit number
  - watermarks
    - high number
    - low number
- large-scale
  - default-host
    - inside-router-instance string
    - ip-address string

```

configure router nat outside pool large-scale default-host rate-limit

```

    - rate-limit number
    - deterministic
    - port-reservation number
    - watermarks
      - high number
      - low number
    - redundancy
      - admin-state keyword
      - export-route string
      - follow
        - name string
        - router-instance string
      - monitor-route string
    - subscriber-limit number
  - mode keyword
  - nat-group reference
  - port-forwarding
    - dynamic-block-reservation boolean
    - range-end number
    - range-start number
  - port-reservation
    - port-blocks number
    - ports number
  - type keyword
  - watermarks
    - high number
    - low number
    - wlan-gw-group reference
- network-domains
  - network-domain string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
- origin-validation
  - apply-groups reference
  - apply-groups-exclude reference
  - rpki-session (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - connect-retry number
    - description string
    - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - port number
    - refresh-time
      - hold-time number
      - value number
    - stale-time number
  - static-entry (ipv4-prefix | ipv6-prefix) upto number origin-as number
    - apply-groups reference
    - apply-groups-exclude reference
    - valid boolean
- ospf number
  - admin-state keyword
  - advertise-router-capability keyword
  - advertise-tunnel-link boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - area-range string
      - advertise boolean

```


configure router ospf area area-range apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bier**
 - **admin-state** *keyword*
 - **template** *reference*
- **blackhole-aggregate** *boolean*
- **database-export-exclude** *boolean*
- **export-policy** *reference*
- **import-policy** *reference*
- **interface** *string*
 - **adjacency-set** *reference*
 - **adjacency-sid**
 - **label** *number*
 - **admin-state** *keyword*
 - **advertise-router-capability** *boolean*
 - **advertise-subnet** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **bfd-liveness**
 - **remain-down-on-failure** *boolean*
 - **dead-interval** *number*
 - **flex-algo** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **node-sid**
 - **index** *number*
 - **label** *number*
 - **hello-interval** *number*
 - **interface-type** *keyword*
 - **load-balancing-weight** *number*
 - **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
 - **lsa-filter-out** *keyword*
 - **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *string*
 - **metric** *number*
 - **mtu** *number*
 - **neighbor** *string*
 - **node-sid**
 - **clear-n-flag** *boolean*
 - **index** *number*
 - **label** *number*
 - **passive** *boolean*
 - **poll-interval** *number*
 - **priority** *number*
 - **retransmit-interval** *number*
 - **rib-priority** *keyword*
 - **sid-protection** *boolean*
 - **transit-delay** *number*
- **loopfree-alternate-exclude** *boolean*
- **nssa**
 - **area-range** *string*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **originate-default-route**
 - **adjacency-check** *boolean*

configure router ospf area nssa originate-default-route type-nssa

- **type-nssa** *boolean*
- **redistribute-external** *boolean*
- **summaries** *boolean*
- **stub**
 - **default-metric** *number*
 - **summaries** *boolean*
- **virtual-link** *string* **transit-area** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *string*
 - **retransmit-interval** *number*
 - **transit-delay** *number*
- **asbr**
 - **trace-path** (*number* | *keyword*)
- **compatible-rfc1583** *boolean*
- **database-export**
 - **bgp-ls-identifier**
 - **value** *number*
 - **igp-identifier** *number*
- **entropy-label**
 - **override-tunnel-elc** *boolean*
- **export-limit**
 - **log-percent** *number*
 - **number** *number*
- **export-policy** *reference*
- **external-db-overflow**
 - **interval** *number*
 - **limit** *number*
- **external-preference** *number*
- **flexible-algorithms**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **flex-algo** *number*
 - **advertise** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **loopfree-alternate**
 - **participate** *boolean*
- **graceful-restart**
 - **helper-mode** *boolean*
 - **strict-lsa-checking** *boolean*
- **igp-shortcut**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tunnel-next-hop**
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **resolution** *keyword*
 - **resolution-filter**
 - **rsvp** *boolean*
 - **sr-te** *boolean*
- **import-policy** *reference*

configure router ospf ldp-over-rsvp

- **ldp-over-rsvp** *boolean*
- **ldp-sync** *boolean*
- **loopfree-alternate**
 - **augment-route-table** *boolean*
 - **exclude**
 - **prefix-policy** *reference*
- **multi-homed-prefix**
 - **preference** *keyword*
- **remote-lfa**
 - **max-pq-cost** *number*
 - **node-protect**
 - **max-pq-nodes** *number*
- **ti-lfa**
 - **max-sr-frr-labels** *number*
 - **node-protect**
- **multi-instance** *boolean*
- **multicast-import** *boolean*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
 - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
 - **high**
 - **prefix-list** *reference*
- **router-id** *string*
- **rtr-adv-lsa-limit**
 - **log-only** *boolean*
 - **max-lsa-count** *number*
 - **overload-timeout** (*number* | *keyword*)
 - **warning-threshold** *number*
- **segment-routing**
 - **adj-sid-hold** (*number* | *keyword*)
 - **adjacency-set** *number*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parallel** *boolean*
 - **sid**
 - **label** *number*
 - **adjacency-sid**
 - **allocate-dual-sids** *boolean*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-node-sid**
 - **index** *number*
 - **ip-prefix** *string*
 - **label** *number*
 - **class-forwarding** *boolean*
 - **egress-statistics**
 - **adj-set** *boolean*
 - **adj-sid** *boolean*
 - **node-sid** *boolean*
 - **entropy-label** *boolean*
 - **export-tunnel-table** *keyword*
 - **ingress-statistics**
 - **adj-set** *boolean*
 - **adj-sid** *boolean*
 - **node-sid** *boolean*
 - **mapping-server**

configure router ospf segment-routing mapping-server admin-state

- **admin-state** *keyword*
- **node-sid-map** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-prefix** *string*
 - **range** *number*
 - **scope**
 - **area** *reference*
 - **as**
- **maximum-sid-depth**
 - **override-bmi** *number*
 - **override-erld** *number*
- **prefix-sid-range**
 - **global**
 - **max-index** *number*
 - **start-label** *number*
- **srlb** *reference*
- **tunnel-mtu** *number*
- **tunnel-table-pref** *number*
- **timers**
 - **incremental-spf-wait** *number*
 - **lsa-accumulate** *number*
 - **lsa-arrival** *number*
 - **lsa-generate**
 - **lsa-initial-wait** *number*
 - **lsa-second-wait** *number*
 - **max-lsa-wait** *number*
 - **redistribute-delay** *number*
 - **spf-wait**
 - **spf-initial-wait** *number*
 - **spf-max-wait** *number*
 - **spf-second-wait** *number*
- **traffic-engineering** *boolean*
- **traffic-engineering-options**
 - **advertise-delay** *boolean*
 - **sr-te** *keyword*
- **unicast-import** *boolean*
- **ospf3** *number*
 - **admin-state** *keyword*
 - **advertise-router-capability** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area** *string*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area-range** (*ipv4-prefix* | *ipv6-prefix*)
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **blackhole-aggregate** *boolean*
 - **database-export-exclude** *boolean*
 - **export-policy** *reference*
 - **extended-lsa** *keyword*
 - **import-policy** *reference*
 - **interface** *string*
 - **admin-state** *keyword*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication**
 - **inbound** *reference*
 - **outbound** *reference*
 - **bfd-liveness**

configure router ospf3 area interface bfd-liveness remain-down-on-failure

```

- remain-down-on-failure boolean
- dead-interval number
- hello-interval number
- interface-type keyword
- load-balancing-weight number
- loopfree-alternate
- exclude boolean
- policy-map
- route-nh-template reference
- lsa-filter-out keyword
- metric number
- mtu number
- neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
- node-sid
- clear-n-flag boolean
- index number
- label number
- passive boolean
- poll-interval number
- priority number
- retransmit-interval number
- rib-priority keyword
- sid-protection boolean
- transit-delay number
- key-rollover-interval number
- loopfree-alternate-exclude boolean
- nssa
- area-range (ipv4-prefix | ipv6-prefix)
- advertise boolean
- apply-groups reference
- apply-groups-exclude reference
- originate-default-route
- adjacency-check boolean
- type-nssa boolean
- redistribute-external boolean
- summaries boolean
- stub
- default-metric number
- summaries boolean
- virtual-link string transit-area reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication
- inbound reference
- outbound reference
- dead-interval number
- hello-interval number
- retransmit-interval number
- transit-delay number
- asbr
- database-export
- bgp-ls-identifier
- value number
- igp-identifier number
- export-limit
- log-percent number
- number number
- export-policy reference
- extended-lsa keyword
- external-db-overflow
- interval number
- limit number
- external-preference number

```

configure router ospf3 graceful-restart

- **graceful-restart**
 - **helper-mode** *boolean*
 - **strict-lsa-checking** *boolean*
- **igp-shortcut**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tunnel-next-hop**
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **resolution** *keyword*
 - **resolution-filter**
 - **rsvp** *boolean*
 - **sr-te** *boolean*
- **import-policy** *reference*
- **ldp-sync** *boolean*
- **loopfree-alternate**
 - **exclude**
 - **prefix-policy** *reference*
- **remote-lfa**
 - **max-pq-cost** *number*
 - **node-protect**
 - **max-pq-nodes** *number*
- **ti-lfa**
 - **max-sr-frr-labels** *number*
 - **node-protect**
- **multicast-import** *boolean*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
 - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
 - **high**
 - **prefix-list** *reference*
- **router-id** *string*
- **rtr-adv-lsa-limit**
 - **log-only** *boolean*
 - **max-lsa-count** *number*
 - **overload-timeout** (*number* | *keyword*)
 - **warning-threshold** *number*
- **segment-routing**
 - **adj-sid-hold** (*number* | *keyword*)
 - **adjacency-sid**
 - **allocate-dual-sids** *boolean*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress-statistics**
 - **adj-sid** *boolean*
 - **node-sid** *boolean*
 - **ingress-statistics**
 - **adj-sid** *boolean*
 - **node-sid** *boolean*
 - **prefix-sid-range**
 - **global**
 - **max-index** *number*
 - **start-label** *number*
 - **tunnel-mtu** *number*
 - **tunnel-table-pref** *number*

configure router ospf3 timers

- **timers**
 - **incremental-spf-wait** *number*
 - **lsa-accumulate** *number*
 - **lsa-arrival** *number*
 - **lsa-generate**
 - **lsa-initial-wait** *number*
 - **lsa-second-wait** *number*
 - **max-lsa-wait** *number*
 - **redistribute-delay** *number*
 - **spf-wait**
 - **spf-initial-wait** *number*
 - **spf-max-wait** *number*
 - **spf-second-wait** *number*
- **unicast-import** *boolean*
- **p2mp-sr-tree**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *keyword*
 - **p2mp-policy** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **candidate-path** *string*
 - **active-instance** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **path-instances** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **instance-id** *number*
 - **preference** *number*
 - **root-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **tree-id** *number*
 - **replication-segment** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **downstream-nodes** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **label**
 - **sid-list** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **replication-sid** *number*
 - **next-hop-address** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
 - **next-hop-interface-name** *string*
 - **protect-nexthop-id** *reference*
 - **instance-id** *number*
 - **replication-sid** *number*
 - **root-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **sid-action** *keyword*
 - **tree-id** *number*
 - **reserved-label-block** *reference*
- **pcep**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **pcc**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure router pcep pcc dead-timer

```

- dead-timer number
- keepalive number
- local-address string
- local-address-ipv6 string
- max-srte-pce-init-lsps number
- pce-associations
  - diversity string
    - apply-groups reference
    - apply-groups-exclude reference
    - association-id number
    - association-source (ipv4-address-no-zone | ipv6-address-no-zone)
    - disjointness-reference boolean
    - disjointness-type keyword
    - diversity-type keyword
  - policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - association-id number
    - association-source (ipv4-address-no-zone | ipv6-address-no-zone)
- peer (ipv4-address-no-zone | ipv6-address-no-zone)
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preference number
  - route-preference keyword
  - tls-client-profile reference
  - tls-wait-timer number
- relegation-timer number
- report-path-constraints boolean
- state-timer
  - timer number
  - timer-action keyword
  - unknown-message-rate number
- pcp
  - server string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - dual-stack-lite-address string
    - fwd-inside-router string
    - interface reference
    - policy reference
- pim
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - apply-to keyword
  - import
    - join-policy reference
    - register-policy reference
  - interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - assert-period number
    - bfd-liveness
      - ipv4 boolean
      - ipv6 boolean
    - bier-signaling-type
      - ipv4 boolean
      - ipv6 boolean
    - bsm-check-rtr-alert boolean
    - hello-interval number

```


configure router pim interface hello-multiplier

- **hello-multiplier** *number*
 - **improved-assert** *boolean*
 - **instant-prune-echo** *boolean*
 - **ipv4**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **monitor-oper-group**
 - **name** *reference*
 - **operation** *keyword*
 - **priority-delta** *number*
 - **multicast** *boolean*
 - **ipv6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **monitor-oper-group**
 - **name** *reference*
 - **operation** *keyword*
 - **priority-delta** *number*
 - **multicast** *boolean*
 - **max-groups** *number*
 - **mcac**
 - **bandwidth**
 - **mandatory** (*number* | *keyword*)
 - **total** (*number* | *keyword*)
 - **interface-policy** *reference*
 - **mc-constraints**
 - **admin-state** *keyword*
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **number-down** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **use-lag-port-weight** *boolean*
 - **policy** *reference*
 - **multicast-senders** *keyword*
 - **p2mp-ldp-tree-join**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **priority** *number*
 - **sticky-dr**
 - **priority** *number*
 - **three-way-hello** *boolean*
 - **tracking-support** *boolean*
- **ipv4**
 - **admin-state** *keyword*
 - **gtm**
 - **auto-discovery** *keyword*
 - **multicast-fast-failover** *boolean*
 - **rpf-table** *keyword*
 - **ssm-assert-compatible-mode** *boolean*
 - **ssm-default-range** *boolean*
- **ipv6**
 - **admin-state** *keyword*
 - **multicast-fast-failover** *boolean*
 - **rpf-table** *keyword*
 - **ssm-default-range** *boolean*
- **lag-usage-optimization** *boolean*
- **mc-ecmp-balance** *boolean*
- **mc-ecmp-balance-hold** *number*
- **mc-ecmp-hashing**
 - **rebalance** *boolean*

configure router pim mdt-spt

```

- mdt-spt boolean
- non-dr-attract-traffic boolean
- pim-ssm-scaling boolean
- rp
  - bootstrap
    - export reference
    - import reference
  - ipv4
    - anycast string rp-set-peer string
    - auto-rp-discovery boolean
    - bsr-candidate
      - address string
      - admin-state keyword
      - hash-mask-len number
      - priority number
    - candidate boolean
    - mapping-agent boolean
    - rp-candidate
      - address string
      - admin-state keyword
      - group-range string
      - holdtime number
      - priority number
    - static
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - group-prefix string
      - override boolean
  - ipv6
    - anycast string rp-set-peer string
    - bsr-candidate
      - address string
      - admin-state keyword
      - hash-mask-len number
      - priority number
    - embedded-rp
      - admin-state keyword
      - group-range string
    - rp-candidate
      - address string
      - admin-state keyword
      - group-range string
      - holdtime number
      - priority number
    - static
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - group-prefix string
      - override boolean
- rpfv
  - core boolean
  - mvpn boolean
- spt-switchover (ipv4-prefix | ipv6-prefix)
  - apply-groups reference
  - apply-groups-exclude reference
  - threshold (number | keyword)
- ssm-groups
  - group-range (ipv4-prefix | ipv6-prefix)
- radius
  - apply-groups reference
  - apply-groups-exclude reference
  - proxy string

```

configure router radius proxy admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **attribute-matching**
 - **entry** *number*
 - **accounting-server-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-server-policy** *string*
 - **prefix-string** *string*
 - **suffix-string** *string*
 - **type** *number*
 - **vendor** (*number* | *keyword*)
- **cache**
 - **admin-state** *keyword*
 - **key**
 - **attribute-type** *number*
 - **packet-type** *keyword*
 - **vendor** (*number* | *keyword*)
 - **timeout** *number*
 - **track-accounting**
 - **accounting-off** *boolean*
 - **accounting-on** *boolean*
 - **interim-update** *boolean*
 - **start** *boolean*
 - **stop** *boolean*
 - **track-authentication**
 - **accept** *boolean*
 - **track-delete-hold-time** *number*
- **defaults**
 - **accounting-server-policy** *string*
 - **authentication-server-policy** *string*
- **description** *string*
- **interface** *string*
- **load-balance-key**
 - **attribute-1**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-2**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-3**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-4**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-5**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
- **source-ip-udp**
- **purpose** *keyword*
- **python-policy** *reference*
- **secret** *string*
- **send-accounting-response** *boolean*
- **wlan-gw**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv6-address** *string*
- **wlan-gw-group** *reference*
- **server** *string*
 - **accept-coa** *boolean*
 - **acct-port** *number*

configure router radius server address

```

- address (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- auth-port number
- description string
- pending-requests-limit number
- python-policy reference
- secret string
- reassembly
- apply-groups reference
- apply-groups-exclude reference
- nat-group number
- to-base-network boolean
- rib-api
- apply-groups reference
- apply-groups-exclude reference
- mpls
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- label-name reference
- rip
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- authentication-type keyword
- bfd-liveness boolean
- check-zero boolean
- description string
- export-limit
- log-percent number
- number number
- export-policy reference
- group string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- authentication-type keyword
- bfd-liveness boolean
- check-zero boolean
- description string
- export-policy reference
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- neighbor string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- authentication-type keyword
- bfd-liveness boolean
- check-zero boolean
- description string
- export-policy reference
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- receive keyword

```

configure router rip group neighbor send

```
    - send keyword
    - split-horizon boolean
    - timers
      - flush number
      - timeout number
      - update number
    - unicast-address string
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - import-policy reference
  - message-size number
  - metric-in number
  - metric-out number
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
- ripng
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - check-zero boolean
  - description string
  - export-limit
    - log-percent number
    - number number
  - export-policy reference
  - group string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness boolean
    - check-zero boolean
    - description string
    - export-policy reference
    - import-policy reference
    - message-size number
    - metric-in number
    - metric-out number
    - neighbor string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-liveness boolean
      - check-zero boolean
      - description string
      - export-policy reference
      - import-policy reference
      - message-size number
      - metric-in number
      - metric-out number
      - preference number
      - receive keyword
```

configure router ripng group neighbor send

```

    - send keyword
    - split-horizon boolean
    - timers
      - flush number
      - timeout number
      - update number
    - unicast-address string
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - import-policy reference
  - message-size number
  - metric-in number
  - metric-out number
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
- router-id string
- rsvp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-over-bypass boolean
  - dbw-accounting
    - dbw-multiplier number
    - down-threshold
      - bw number
      - percent number
    - sample-interval number
    - sample-multiplier number
    - up-threshold
      - bw number
      - percent number
  - diffserv-te
    - admission-control-model keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - class-type-bw
      - ct0 number
      - ct1 number
      - ct2 number
      - ct3 number
      - ct4 number
      - ct5 number
      - ct6 number
      - ct7 number
    - fc keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - class-type number
  - te-class number
    - apply-groups reference
    - apply-groups-exclude reference
    - class-type number

```

configure router rsvp diffserv-te te-class priority

- **priority** *number*
- **entropy-label-capability** *boolean*
- **graceful-restart**
 - **max-recovery** *number*
 - **max-restart** *number*
- **graceful-shutdown** *boolean*
- **implicit-null-label** *boolean*
- **include-node-id-in-rro** *boolean*
- **interface** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **bfd-liveness** *boolean*
 - **class-type-bw**
 - **ct0** *number*
 - **ct1** *number*
 - **ct2** *number*
 - **ct3** *number*
 - **ct4** *number*
 - **ct5** *number*
 - **ct6** *number*
 - **ct7** *number*
 - **dbw-down-threshold**
 - **bw** *number*
 - **percent** *number*
 - **dbw-multiplier** *number*
 - **dbw-up-threshold**
 - **bw** *number*
 - **percent** *number*
 - **graceful-restart-helper-mode** *boolean*
 - **graceful-shutdown** *boolean*
 - **hello-interval** *number*
 - **implicit-null-label** *boolean*
 - **refresh-reduction**
 - **reliable-delivery** *boolean*
 - **subscription** *number*
 - **te-down-threshold**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** *number*
 - **te-up-threshold**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** *number*
- **keep-multiplier** *number*
- **msg-pacing**
 - **max-burst** *number*
 - **period** *number*
- **p2mp-merge-point-abort-timer** *number*
- **p2p-merge-point-abort-timer** *number*
- **preemption-timer** *number*
- **rapid-retransmit-time** *number*
- **rapid-retry-limit** *number*
- **refresh-reduction-over-bypass** *boolean*
- **refresh-time** *number*
- **te-down-threshold** *number*
- **te-threshold-update**
 - **on-cac-failure** *boolean*
 - **update-timer** *number*
- **te-up-threshold** *number*
- **segment-routing**
 - **apply-groups** *reference*

configure router segment-routing apply-groups-exclude

- **apply-groups-exclude** *reference*
- **maintenance-policy** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **bfd-template** *reference*
 - **hold-down-timer** *number*
 - **mode** *keyword*
 - **return-path-label** *number*
 - **revert-timer** *number*
 - **threshold** *number*
- **segment-routing-v6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **base-routing-instance**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **end** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **srh-mode** *keyword*
 - **end-dt4**
 - **value** *number*
 - **end-dt46**
 - **value** *number*
 - **end-dt6**
 - **value** *number*
 - **end-x** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-name** *reference*
 - **protection** *keyword*
 - **srh-mode** *keyword*
 - **end-x-auto-allocate** *keyword* **protection** *keyword*
 - **micro-segment-locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **ua** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-name** *reference*
 - **protection** *keyword*
 - **srh-mode** *keyword*
 - **ua-auto-allocate** *keyword* **protection** *keyword*
 - **udt4**
 - **value** *number*
 - **udt46**
 - **value** *number*
 - **udt6**
 - **value** *number*
 - **locator** *string*
 - **admin-state** *keyword*
 - **algorithm** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block-length** *number*
 - **function-length** *number*
 - **label-block** *reference*

configure router segment-routing segment-routing-v6 locator prefix

- **prefix**
 - **ip-prefix** *string*
 - **static-function**
 - **label-block** *reference*
 - **max-entries** *number*
 - **termination-fpe** *reference*
- **micro-segment**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **label-block** *reference*
 - **prefix**
 - **ip-prefix** *string*
 - **static-function**
 - **max-entries** *number*
 - **termination-fpe** *reference*
 - **block-length** *number*
 - **global-sid-entries** *number*
 - **sid-length** *number*
 - **micro-segment-locator** *string*
 - **admin-state** *keyword*
 - **algorithm** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block** *reference*
 - **un**
 - **srh-mode** *keyword*
 - **value** *number*
 - **origination-fpe** *reference*
 - **source-address** *string*
- **sr-mpls**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **prefix-sids** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4-sid**
 - **index** *number*
 - **label** *number*
 - **ipv6-sid**
 - **index** *number*
 - **label** *number*
 - **node-sid** *boolean*
- **sr-policies**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ingress-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **reserved-label-block** *reference*
 - **static-policy** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **binding-sid** *number*

configure router segment-routing sr-policies static-policy color

- **color** *number*
- **distinguisher** *number*
- **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **head-end** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*)
- **maintenance-policy** *reference*
- **preference** *number*
- **segment-list** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **segment** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mpls-label** *number*
 - **srv6-sid** *string*
 - **weight** *number*
- **segment-routing-v6**
 - **binding-sid** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-address** *string*
 - **locator**
 - **function** *keyword*
 - **function-value** *number*
 - **locator-name** *reference*
 - **type** *keyword*
- **selective-fib** *boolean*
- **sfm-overload**
 - **holdoff-time** *number*
- **sgt-qos**
 - **dot1p**
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dot1p** (*keyword* | *number*)
 - **dscp**
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dscp** (*keyword* | *number*)
 - **dscp-map** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
- **static-routes**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hold-down**
 - **initial** *number*
 - **max-value** *number*
 - **multiplier** *number*
 - **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-tag** *number*
 - **blackhole**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *string*
 - **description** *string*
 - **dynamic-bgp** *boolean*
 - **generate-icmp** *boolean*
 - **metric** *number*

configure router static-routes route blackhole preference

```

- preference number
- prefix-list
  - flag keyword
  - name reference
- tag number
- community string
- indirect (ipv4-address-no-zone | ipv6-address-no-zone)
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - community string
  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - drop-count number
    - interval number
    - log boolean
    - padding-size number
  - description string
  - destination-class number
  - metric number
  - preference number
  - prefix-list
    - flag keyword
    - name reference
  - qos
    - forwarding-class keyword
    - priority keyword
  - source-class number
  - tag number
  - tunnel-next-hop
    - disallow-igp boolean
    - flex-algo number
    - resolution keyword
    - resolution-filter
      - ldp boolean
      - mpls-fwd-policy boolean
      - rib-api boolean
      - rsvp-te
        - lsp string
      - sr-isis boolean
      - sr-ospf boolean
      - sr-ospf3 boolean
      - sr-te
        - lsp string
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - community string
  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - drop-count number
    - interval number
    - log boolean
    - padding-size number
  - description string
  - destination-class number
  - load-balancing-weight number
  - metric number
  - preference number
  - prefix-list
    - flag keyword

```

configure router static-routes route interface prefix-list name

```

- name reference
- qos
  - forwarding-class keyword
  - priority keyword
- source-class number
- tag number
- ipsec-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - community string
  - description string
  - metric number
  - preference number
  - tag number
- next-hop (ipv4-address-with-zone | ipv6-address-with-zone)
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-next-hop
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - bfd-liveness boolean
  - community string
  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - drop-count number
    - interval number
    - log boolean
    - padding-size number
  - description string
  - destination-class number
  - ldp-sync boolean
  - load-balancing-weight number
  - metric number
  - preference number
  - prefix-list
    - flag keyword
    - name reference
  - qos
    - forwarding-class keyword
    - priority keyword
    - source-class number
    - tag number
  - validate-next-hop boolean
  - tag number
- triggered-policy boolean
- ttl-propagate
  - apply-groups reference
  - apply-groups-exclude reference
  - label-route-local keyword
  - label-route-transit keyword
  - lsr-label-route keyword
  - vprn-local keyword
  - vprn-transit keyword
- tunnel-interface
  - ldp-p2mp-leaf number sender-address string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - ldp-p2mp-root number sender-address string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string

```

configure router tunnel-interface rsvp-p2mp-leaf

```

- rsvp-p2mp-leaf string sender-address string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
- rsvp-p2mp-root string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
- twamp-light
  - apply-groups reference
  - apply-groups-exclude reference
  - reflector
    - admin-state keyword
    - allow-ipv6-udp-checksum-zero boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - prefix (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
    - type keyword
    - udp-port number
- vrgw
  - lanext
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - vlan-port number
    - vlan-vtep-range
      - end (ipv4-address-no-zone | ipv6-address-no-zone)
      - start (ipv4-address-no-zone | ipv6-address-no-zone)
    - wlan-gw-group reference
- weighted-ecmp keyword
- wlan-gw
  - apply-groups reference
  - apply-groups-exclude reference
  - distributed-subscriber-mgmt
    - apply-groups reference
    - apply-groups-exclude reference
    - ipv6-tcp-mss-adjust number
  - mobility-triggered-accounting
    - admin-state keyword
    - hold-down number
    - include-counters boolean
  - xconnect
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - tunnel-source-ip string
    - wlan-gw-group reference
- wpp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - portal string
    - ack-auth-retry-count number
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ntf-logout-retry-count number
    - port-format keyword
    - retry-interval number

```

configure router wpp portal secret

- **secret** *string*
- **version** *number*

3.39.1 router command descriptions

router [**router-name**] *string*

Synopsis	Enter the router list instance
Context	configure router <i>string</i>
Tree	router
Description	Commands in this context configure a router instance that represents a virtual router in the system. There will always be at least two instances in the system. The Base or transport router and the management router are created when the system is initialized and cannot be deleted.
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[router-name] *string*

Synopsis	Administrative router name
Context	configure router <i>string</i>
Tree	router
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

aggregates

Synopsis	Enter the aggregates context
Context	configure router <i>string</i> aggregates
Tree	aggregates
Introduced	16.0.R1
Platforms	All

aggregate [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the aggregate list instance
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	aggregate
Description	<p>Commands in this context add aggregate routes to the routing table when there are one or more component routes. A component route is any route installed in the forwarding table that is a more-specific match of the aggregate.</p> <p>The use of aggregate routes can lead to smaller routing table sizes by reducing the number of routes that need to be advertised to neighbor routes.</p>
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP address prefix of the aggregate route
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	aggregate
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aggregator

Synopsis	Enter the aggregator context
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator
Tree	aggregator
Description	Commands in this context configure the BGP AGGREGATOR path attribute for the aggregate route.
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Aggregator IP address
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator address <i>string</i>

Tree	address
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Aggregator AS number
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

as-set *boolean*

Synopsis	Use AS_SET path segment type for the aggregate route
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) as-set <i>boolean</i>
Tree	as-set
Description	<p>When configured to true, the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes.</p> <p>When configured to false, the AS_PATH attribute contains no AS_SET and will be originated by the ESR.</p>
Default	false
Introduced	16.0.R1
Platforms	All

blackhole

Synopsis	Enable the blackhole context
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) blackhole
Tree	blackhole
Notes	The following elements are part of a choice: blackhole or indirect .
Introduced	16.0.R1
Platforms	All

generate-icmp *boolean*

Synopsis	Send ICMP unreachable messages for aggregate routes
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) blackhole generate-icmp <i>boolean</i>
Tree	generate-icmp
Description	When configured to true , ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop. When configured to false , ICMP unreachable messages are not generated.
Default	false
Introduced	16.0.R2
Platforms	All

community *string*

Synopsis	Community name that is added to the aggregate route
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) community <i>string</i>
Tree	community
Description	This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route.
String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

discard-component-communities *boolean*

Synopsis	Advertise aggregate with aggregate route community set
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) discard-component-communities <i>boolean</i>
Tree	discard-component-communities
Default	false
Introduced	19.7.R1
Platforms	All

indirect (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Address of the indirect next hop
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	indirect
Description	This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded.
Notes	The following elements are part of a choice: blackhole or indirect .
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Local preference used when aggregate route is exported
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) local-preference <i>number</i>
Tree	local-preference
Description	This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes.
Range	0 to 4294967295
Introduced	16.0.R1

Platforms All

policy reference

Synopsis Policy name for the aggregated route

Context **configure router** *string* **aggregates aggregate** (*ipv4-prefix* | *ipv6-prefix*) **policy reference**

Tree **policy**

Description This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub-tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes.

If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.

Reference **configure policy-options policy-statement** *string*

Introduced 20.10.R1

Platforms All

summary-only boolean

Synopsis Advertise the aggregate route only

Context **configure router** *string* **aggregates aggregate** (*ipv4-prefix* | *ipv6-prefix*) **summary-only boolean**

Tree **summary-only**

Description When configured to **true**, the router suppresses the advertisement of more specific component routes for the aggregate.

When configured to **false**, the router advertises both the aggregate route and its contributing routes.

Default false

Introduced 16.0.R1

Platforms All

tunnel-group number

Synopsis Tunnel group from which to associate the MC IPSec state

Context **configure router** *string* **aggregates aggregate** (*ipv4-prefix* | *ipv6-prefix*) **tunnel-group number**

Tree **tunnel-group**

Description	This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route.
Range	1 to 64
Introduced	20.7.R1
Platforms	All

allow-icmp-redirect *boolean*

Synopsis	Allow ICMP redirects on the management interface
Context	configure <i>router</i> <i>string</i> allow-icmp-redirect <i>boolean</i>
Tree	allow-icmp-redirect
Description	When configured to true , ICMP redirect messages can be received on the management interface. When configured to false , all received ICMP redirect messages are dropped. This command cannot be configured on a non-management interface.
Default	false
Introduced	16.0.R1
Platforms	All

allow-icmp6-redirect *boolean*

Synopsis	Allow IPv6 ICMP redirects on the management interface
Context	configure <i>router</i> <i>string</i> allow-icmp6-redirect <i>boolean</i>
Tree	allow-icmp6-redirect
Description	When configured to true , IPv6 ICMP redirect messages can be received on the management interface. When configured to false , all received IPv6 ICMP redirect messages are dropped. This command cannot be configured on a non-management interface.
Default	false
Introduced	16.0.R1
Platforms	All

autonomous-system *number*

Synopsis	AS number advertised to peers for this router
Context	configure <i>router</i> <i>string</i> autonomous-system <i>number</i>

Tree	autonomous-system
Description	This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated. If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure router <i>string</i> bfd
Tree	bfd
Introduced	19.7.R1
Platforms	All

seamless-bfd

Synopsis	Enter the seamless-bfd context
Context	configure router <i>string</i> bfd seamless-bfd
Tree	seamless-bfd
Introduced	19.7.R1
Platforms	All

peer [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
Context	configure router <i>string</i> bfd seamless-bfd peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Max. Instances	8000
Introduced	19.7.R1
Platforms	All

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Address of the remote node
Context	configure router <i>string</i> bfd seamless-bfd peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

discriminator *number*

Synopsis	Discriminator of the remote node
Context	configure router <i>string</i> bfd seamless-bfd peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) discriminator <i>number</i>
Tree	discriminator
Range	1 to 4294967295
Introduced	19.7.R1
Platforms	All

bgp

Synopsis	Enable the bgp context
Context	configure router <i>string</i> bgp
Tree	bgp
Introduced	16.0.R1
Platforms	All

add-paths

Synopsis	Enable the add-paths context
Context	configure router <i>string</i> bgp add-paths
Tree	add-paths
Description	Commands in this context configure add-paths support for the specified address families of the BGP instance. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.
Introduced	16.0.R1

Platforms All

evpn

Synopsis Enter the **evpn** context

Context **configure router string bgp add-paths evpn**

Tree **evpn**

Description Commands in this context configure the Add-Paths capability for EVPN routes. By default, Add-Paths is not enabled for EVPN routes.

Introduced 21.10.R1

Platforms All

receive *boolean*

Synopsis Receive multiple EVPN paths per prefix from a peer

Context **configure router string bgp add-paths evpn receive *boolean***

Tree **receive**

Default false

Introduced 21.10.R1

Platforms All

send (*number* | *keyword*)

Synopsis Maximum number of EVPN paths to send

Context **configure router string bgp add-paths evpn send (*number* | *keyword*)**

Tree **send**

Range 1 to 16

Options multipaths

Introduced 21.10.R1

Platforms All

ipv4

Synopsis Enter the **ipv4** context

Context **configure router string bgp add-paths ipv4**

Tree	ipv4
Description	Commands in this context configure add-paths support for the IPv4 unicast address family.
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple routes per unlabeled IPv4 prefix
Context	configure router <i>string</i> bgp add-paths ipv4 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple unlabeled IPv4 unicast routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (number | keyword)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	configure router <i>string</i> bgp add-paths ipv4 send (number keyword)
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
----------	-------------------------------

Context	configure router string <code>bgp add-paths ipv6</code>
Tree	<code>ipv6</code>
Description	Commands in this context configure add-paths support for the IPv6 unicast address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per unlabeled IPv6 prefix
Context	configure router string <code>bgp add-paths ipv6 receive boolean</code>
Tree	<code>receive</code>
Description	When configured to true , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	configure router string <code>bgp add-paths ipv6 send (number keyword)</code>
Tree	<code>send</code>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per unlabeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for unlabeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure router <i>string</i> bgp add-paths label-ipv4
Tree	label-ipv4
Description	Commands in this context configure add-paths support for the labeled IPv4 unicast address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure router <i>string</i> bgp add-paths label-ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Max paths advertised per labeled IPv4 unicast prefix
Context	configure router <i>string</i> bgp add-paths label-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for labeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure router string bgp add-paths label-ipv6
Tree	label-ipv6
Description	Commands in this context configure add-paths support for the labeled IPv6 unicast address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	configure router string bgp add-paths label-ipv6 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Max paths advertised per labeled IPv6 unicast prefix
Context	configure router string bgp add-paths label-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1

Platforms All

mcast-vpn-ipv4

Synopsis Enter the **mcast-vpn-ipv4** context

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv4**

Tree **mcast-vpn-ipv4**

Description Commands in this context configure add-paths support for the multicast IPv4 VPN address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple multicast routes per IPv4 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv4 receive** *boolean*

Tree **receive**

Description When configured to **true**, this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send *number*

Synopsis Maximum paths advertised per multicast IPv4 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv4 send** *number*

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, add-paths send capability is not enabled for multicast IPv4 VPN routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

mcast-vpn-ipv6

Synopsis Enter the **mcast-vpn-ipv6** context

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv6**

Tree **mcast-vpn-ipv6**

Description Commands in this context configure add-paths support for the multicast IPv6 VPN address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple multicast routes per IPv6 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv6 receive *boolean***

Tree **receive**

Description When configured to **true**, this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send *number*

Synopsis Maximum paths advertised per multicast IPv6 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv6 send *number***

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, add-paths send capability is not enabled for multicast IPv6 VPN routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

mvpn-ipv4

Synopsis Enter the **mvpn-ipv4** context

Context **configure router string** `bgp add-paths mvpn-ipv4`

Tree `mvpn-ipv4`

Description Commands in this context configure add-paths support for the multicast VPN IPv4 address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple routes per multicast VPN IPv4 NRLI

Context **configure router string** `bgp add-paths mvpn-ipv4 receive boolean`

Tree `receive`

Description When configured to **true**, this command allows multiple routes per multicast VPN IPv4 NRLI to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send *number*

Synopsis Maximum paths advertised per multicast VPN IPv4 NRLI

Context **configure router string** `bgp add-paths mvpn-ipv4 send number`

Tree `send`

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 NRLI. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, add-paths send capability is not enabled for multicast VPN IPv4 routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

mvpn-ipv6

Synopsis Enter the **mvpn-ipv6** context

Context **configure router string** `bgp add-paths mvpn-ipv6`

Tree `mvpn-ipv6`

Description Commands in this context configure add-paths support for the multicast VPN IPv6 address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple routes per multicast VPN IPv6 NRLI

Context **configure router string** `bgp add-paths mvpn-ipv6 receive boolean`

Tree `receive`

Description When configured to **true**, this command allows multiple routes per multicast VPN IPv6 NRLI to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send *number*

Synopsis Maximum paths advertised per multicast VPN IPv6 NRLI

Context **configure router string** `bgp add-paths mvpn-ipv6 send number`

Tree `send`

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 NRLI. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, add-paths send capability is not enabled for multicast VPN IPv6 routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

vpn-ipv4

Synopsis Enter the **vpn-ipv4** context

Context **configure router string bgp add-paths vpn-ipv4**

Tree **vpn-ipv4**

Description Commands in this context configure add-paths support for the VPN-IPv4 address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple routes per VPN-IPv4 prefix

Context **configure router string bgp add-paths vpn-ipv4 receive boolean**

Tree **receive**

Description When configured to **true**, this command allows multiple routes per VPN-IPv4 prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send (*number* | *keyword*)

Synopsis Maximum paths advertised per VPN-IPv4 prefix

Context **configure router string bgp add-paths vpn-ipv4 send (*number* | *keyword*)**

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, add-paths send capability is not enabled for VPN-IPv4 routes.

Range 1 to 16

Options multipaths

Introduced 16.0.R1

Platforms All

vpn-ipv6

Synopsis Enter the **vpn-ipv6** context

Context **configure router string** `bgp add-paths vpn-ipv6`

Tree `vpn-ipv6`

Description Commands in this context configure add-paths support for the VPN-IPv6 address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple routes per VPN-IPv6 prefix

Context **configure router string** `bgp add-paths vpn-ipv6 receive boolean`

Tree `receive`

Description When configured to **true**, this command allows multiple routes per VPN-IPv6 prefix to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send (*number* | *keyword*)

Synopsis Maximum paths advertised per VPN-IPv6 prefix

Context **configure router string** `bgp add-paths vpn-ipv6 send (number | keyword)`

Tree `send`

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, add-paths send capability is not enabled for VPN-IPv6 routes.

Range 1 to 16

Options multipaths

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the BGP instance
Context **configure** *router string bgp admin-state keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

advertise-external

Synopsis Enter the **advertise-external** context
Context **configure** *router string bgp advertise-external*
Tree [advertise-external](#)
Description Commands in this context allow BGP to advertise its best external route to a destination for specified address families even when its best overall route is an internal route.
Introduced 16.0.R1
Platforms All

ipv4 *boolean*

Synopsis Enable support for unlabeled unicast IPv4 routes
Context **configure** *router string bgp advertise-external ipv4 boolean*
Tree [ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

ipv6 *boolean*

Synopsis Enable support for unlabeled unicast IPv6 routes
Context **configure** *router string bgp advertise-external ipv6 boolean*

Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure router <i>string</i> bgp advertise-external label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	configure router <i>string</i> bgp advertise-external label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise inactive BGP routes to peers
Context	configure router <i>string</i> bgp advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	When configured to true , this command allows any inactive BGP route to be advertised, even though it is not the used route. When configured to false , the advertisement of inactive BGP routes to other BGP peers is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enter the advertise-ipv6-next-hops context
Context	configure router <i>string</i> bgp advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops
Description	<p>Commands in this context allow specified BGP address family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied.</p> <p>This command context has no effect on routes advertised to IPv4 peers.</p>
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	configure router <i>string</i> bgp advertise-ipv6-next-hops evpn <i>boolean</i>
Tree	evpn
Description	<p>When configured to true, EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.</p>
Default	false
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	configure router <i>string</i> bgp advertise-ipv6-next-hops ipv4 <i>boolean</i>
Tree	ipv4
Description	<p>When configured to true, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability</p>

was not received by the remote peer, the route is handled as though it was rejected by the policy entry.

Default	false
Introduced	19.5.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	configure <i>router</i> <i>string</i> bgp advertise-ipv6-next-hops label-ipv4 <i>boolean</i>
Tree	label-ipv4
Description	<p>When configured to true, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	configure <i>router</i> <i>string</i> bgp advertise-ipv6-next-hops label-ipv6 <i>boolean</i>
Tree	label-ipv6
Description	<p>When configured to true, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	configure router <i>string</i> bgp advertise-ipv6-next-hops vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Description	<p>When configured to true, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	configure router <i>string</i> bgp advertise-ipv6-next-hops vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Description	<p>When configured to true, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to 0
Context	configure router <i>string</i> bgp aggregator-id-zero <i>boolean</i>
Tree	aggregator-id-zero
Description	When configured to true , the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes.

When configured to **false**, the AS number and router ID are added to the AGGREGATOR path attribute.

Default	false
Introduced	16.0.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise support for 4-byte ASNs
Context	configure <i>router string</i> bgp asn-4-byte <i>boolean</i>
Tree	asn-4-byte
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	BGP authentication key for all peers
Context	configure <i>router string</i> bgp authentication-key <i>string</i>
Tree	authentication-key
Description	This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the configure system security hash-control management-interface md-cli hash-algorithm setting.
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure <i>router string</i> bgp authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	configure <i>system security keychains</i> keychain <i>string</i>
Introduced	16.0.R3

Platforms All

backup-path

Synopsis Enter the **backup-path** context

Context **configure router string bgp backup-path**

Tree **backup-path**

Description Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes.

By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.

Introduced 16.0.R1

Platforms All

ipv4 boolean

Synopsis Enable support for unlabeled unicast IPv4 routes

Context **configure router string bgp backup-path ipv4 boolean**

Tree **ipv4**

Default false

Introduced 16.0.R1

Platforms All

ipv6 boolean

Synopsis Enable support for unlabeled unicast IPv6 routes

Context **configure router string bgp backup-path ipv6 boolean**

Tree **ipv6**

Default false

Introduced 16.0.R1

Platforms All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure router <i>string</i> bgp backup-path label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	configure router <i>string</i> bgp backup-path label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

best-path-selection

Synopsis	Enter the best-path-selection context
Context	configure router <i>string</i> bgp best-path-selection
Tree	best-path-selection
Introduced	16.0.R1
Platforms	All

always-compare-med

Synopsis	Enter the always-compare-med context
Context	configure router <i>string</i> bgp best-path-selection always-compare-med
Tree	always-compare-med
Description	Commands in this context determine how the BGP decision process is affected by the MED path attribute.
Introduced	16.0.R1
Platforms	All

med-value *keyword*

Synopsis	Action for a missing MED attribute
Context	configure <i>router</i> <i>string</i> bgp best-path-selection always-compare-med med-value <i>keyword</i>
Tree	med-value
Default	off
Options	off, missing-med-zero, missing-med-infinity, on
Introduced	16.0.R1
Platforms	All

strict-as *boolean*

Synopsis	Compare MED only for routes from same neighbor AS
Context	configure <i>router</i> <i>string</i> bgp best-path-selection always-compare-med strict-as <i>boolean</i>
Tree	strict-as
Description	When configured to true , the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS. When configured to false , the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs.
Default	true
Introduced	16.0.R1
Platforms	All

as-path-ignore

Synopsis	Enter the as-path-ignore context
Context	configure <i>router</i> <i>string</i> bgp best-path-selection as-path-ignore
Tree	as-path-ignore
Description	Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families.
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv4 routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv6 routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Ignore AS path length for L2-VPN routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore l2-vpn <i>boolean</i>
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Ignore AS path length for labeled-unicast IPv4 routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Ignore AS path length for labeled-unicast IPv6 routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Ignore AS path length for IPv4 multicast routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Ignore AS path length for IPv6 multicast routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Ignore AS path length for IPv4 MVPN routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore mvpn-ipv4 <i>boolean</i>
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Ignore AS path length for IPv6 MVPN routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore mvpn-ipv6 <i>boolean</i>
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Ignore AS path length for VPN IPv4 (SAFI 128) routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Ignore AS path length for VPN IPv6 (SAFI 128) routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

compare-origin-validation-state *boolean*

Synopsis	Compare RPKI origin validation state of usable routes
Context	configure router <i>string</i> bgp best-path-selection compare-origin-validation-state <i>boolean</i>
Tree	compare-origin-validation-state
Description	When configured to true , the RPKI origin validation state is compared between BGP routes, where a Valid state is preferred over a Not-Found state, and a Not-Found state is preferred over an Invalid state.

When configured to **false**, the RPKI origin validate state comparison is not performed as part of the BGP route selection process.

Default	false
Introduced	16.0.R1
Platforms	All

d-path-length-ignore *boolean*

Synopsis Enable D-PATH length ignore

Context **configure** *router string* [bgp best-path-selection d-path-length-ignore](#) *boolean*

Tree [d-path-length-ignore](#)

Description When configured to **true**, this command, enables the router to ignore the D-PATH domain segment length during best-path selection.

At the base router level (or VPRN BGP level for PE-CE routers), this command allows BGP to ignore the D-PATH domain segment length for best-path selection purposes. BGP ignores the D-PATH length when comparing two VPN routes or two IFL routes within the same RD. However, these VPN/IFL routes are processed in the main-BGP instance.

At the VPRN router level, this command allows the VPRN RTM to ignore the D-PATH domain segment length for best-path selection purposes (for routes in VPRN). The user can control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.

Best-path selection for EVPN-IFF routes against other owners (for example, EVPN-IFL or IPVPN) still relies on RTM preference. When EVPN-IFF RTM preference matches the RTM preference of another BGP owner, the existing RTM selection applies and D-PATH is not considered, irrespective of the **d-path-length-ignore** configuration.

When configured to **false**, this command disables the ability to ignore the D-PATH domain segment length.

Default	false
Introduced	21.10.R1
Platforms	All

deterministic-med *boolean*

Synopsis Group paths based on AS before MED attribute comparison

Context **configure** *router string* [bgp best-path-selection deterministic-med](#) *boolean*

Tree [deterministic-med](#)

Description When configured to **true**, BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to

select the overall best path. This process ensures that the best-path selection process is deterministic in all cases.

When configured to **false**, paths are not grouped and the overall best-path selection can depend on the order of route arrival.

Default	false
Introduced	16.0.R1
Platforms	All

ebgp-ibgp-equal

Synopsis	Enter the ebgp-ibgp-equal context
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal
Tree	ebgp-ibgp-equal
Description	<p>Commands in this context allow BGP to ignore the difference between EBGP and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families.</p> <p>By default, the BGP decision process prefers an EBGP learned route over an IBGP learned route.</p>
Introduced	16.0.R1
Platforms	All

evpn boolean

Synopsis	Consider EBGP and IBGP EVPN routes equal
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal evpn boolean
Tree	evpn
Default	false
Introduced	22.7.R1
Platforms	All

ipv4 boolean

Synopsis	Consider EBGP and IBGP IPv4 routes equal
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal ipv4 boolean
Tree	ipv4

Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Consider EBGP and IBGP IPv6 routes equal
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Consider EBGP and IBGP label-IPv4 routes equal
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Consider EBGP and IBGP label-IPv6 routes equal
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Consider EBGP and IBGP VPN-IPv4 routes equal
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal vpn-ipv4 <i>boolean</i>

Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Consider EBGP and IBGP VPN-IPv6 routes equal
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

ignore-nh-metric *boolean*

Synopsis	Ignore next-hop distance in best path selection
Context	configure router <i>string</i> bgp best-path-selection ignore-nh-metric <i>boolean</i>
Tree	ignore-nh-metric
Description	When configured to true , BGP ignores the resolved distance to the BGP next hop in its route selection process. When configured to false , BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router BGP peers (in the router context) or IP prefix learned from VPRN BGP peers (in the vprn context).
Default	false
Introduced	16.0.R1
Platforms	All

ignore-router-id

Synopsis	Enable the ignore-router-id context
Context	configure router <i>string</i> bgp best-path-selection ignore-router-id
Tree	ignore-router-id
Description	Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGP paths from different EBGP peers when determining the best path for the specified address families.

By default, BGP selects the path with the lower router ID when it compares two paths from EBGP peers.

Introduced 16.0.R1
Platforms All

include-internal

Synopsis Enter the **include-internal** context
Context **configure** [router](#) *string* [bgp](#) [best-path-selection](#) [ignore-router-id](#) [include-internal](#)
Tree [include-internal](#)
Description Commands in this context specify the internal address families for which the router ID values are ignored, even when comparing two IBGP paths or an EBGP and an IBGP path.
Introduced 16.0.R1
Platforms All

mvpn-ipv4 *boolean*

Synopsis Ignore the router IDs of MVPN-IPv4 routes
Context **configure** [router](#) *string* [bgp](#) [best-path-selection](#) [ignore-router-id](#) [include-internal](#) [mvpn-ipv4](#) *boolean*
Tree [mvpn-ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

mvpn-ipv6 *boolean*

Synopsis Ignore the router IDs of MVPN-IPv6 routes
Context **configure** [router](#) *string* [bgp](#) [best-path-selection](#) [ignore-router-id](#) [include-internal](#) [mvpn-ipv6](#) *boolean*
Tree [mvpn-ipv6](#)
Default false
Introduced 16.0.R1
Platforms All

origin-invalid-unusable *boolean*

Synopsis	Deem invalid routes unusable for best-path selection
Context	configure <i>router string</i> <i>bgp best-path-selection origin-invalid-unusable</i> <i>boolean</i>
Tree	origin-invalid-unusable
Description	<p>When configured to true, routes that have an RPKI origin validation state of Invalid are considered unusable by the best-path selection algorithm. These routes cannot be used for forwarding and cannot be advertised to BGP peers.</p> <p>When configured to false, routes with an RPKI origin validation state of Invalid are compared to other usable routes for the same prefix according to the BGP decision process.</p>
Default	false
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure <i>router string</i> <i>bgp bfd-liveness</i> <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations.</p> <p>When configured to false, BFD is not enabled globally for all BGP sessions.</p>
Default	false
Introduced	16.0.R1
Platforms	All

bgp-tunnel-metric

Synopsis	Enter the bgp-tunnel-metric context
Context	configure <i>router string</i> <i>bgp bgp-tunnel-metric</i>
Tree	bgp-tunnel-metric
Description	Commands in this context control the tunnel table metrics associated with BGP label unicast routes.
Introduced	20.5.R1
Platforms	All

prefer-aigp *boolean*

Synopsis	Use the AIGP attribute as tunnel metric when present
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>bgp-tunnel-metric</i> <i>prefer-aigp</i> <i>boolean</i>
Tree	<i>prefer-aigp</i>
Description	<p>When configured to true, the TTM metric is based on the AIGP metric if the route has the path attribute. When the BGP-LU route is selected for installation in TTM and it is not matched by a BGP import policy entry that overrides the BGP tunnel metric action, the TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the resolved cost to the BGP next-hop of the route; otherwise, the metric is set to the value in the value setting.</p> <p>When configured to false, the AIGP attribute is ignored for purposes to TTM metric derivation.</p>
Default	false
Introduced	20.5.R1
Platforms	All

value *number*

Synopsis	BGP tunnel metric value
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>bgp-tunnel-metric</i> <i>value</i> <i>number</i>
Tree	<i>value</i>
Description	<p>This command configures a BGP tunnel metric for label IPv4 routes that do not have their metric set by more specific means.</p> <p>If a BGP-LU route is selected for installation in the TTM and there is no tunnel metric policy action that applies to the route, the TTM metric of the associated tunnel is set to this value if either:</p> <ul style="list-style-type: none"> • prefer-aigp is set to false • prefer-aigp is set to true but the BGP-LU route does not have an AIGP attribute
Range	0 to 4294967295
Default	1000
Introduced	20.5.R1
Platforms	All

bgp-tunnel-preference *number*

Synopsis	BGP tunnel table preference
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>bgp-tunnel-preference</i> <i>number</i>

Tree	bgp-tunnel-preference
Description	<p>This command configures the tunnel table preference for BGP-LU tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p>
Range	1 to 255
Default	12
Introduced	21.10.R1
Platforms	All

block-prefix-sid *boolean*

Synopsis	Block the prefix SID attribute
Context	configure router <i>string</i> bgp block-prefix-sid <i>boolean</i>
Tree	block-prefix-sid
Description	<p>When configured to true, all prefix SID attributes are removed from label IPv4 and label IPv6 routes when they are exchanged with EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.</p> <p>When configured to false, all prefix SID attributes associated with label IPv4 and label IPv6 routes are propagated without restriction.</p> <p>A change of this configuration causes the affected BGP sessions to flap.</p>
Default	false
Introduced	19.10.R1
Platforms	All

client-reflect *boolean*

Synopsis	Allow client reflection of routes by route reflector
Context	configure router <i>string</i> bgp client-reflect <i>boolean</i>
Tree	client-reflect
Description	<p>When configured to true, routes received from neighbors considered to be RR clients are reflected to other peers as expected.</p> <p>When configured to false, routes received from neighbors considered to be RR clients are not reflected to other clients.</p>
Default	true

Introduced	16.0.R1
Platforms	All

cluster

Synopsis	Enter the cluster context
Context	configure router <i>string</i> bgp cluster
Tree	cluster
Introduced	16.0.R1
Platforms	All

allow-local-fallback *boolean*

Synopsis	Allow fallback to RR topology location for ORR
Context	configure router <i>string</i> bgp cluster allow-local-fallback <i>boolean</i>
Tree	allow-local-fallback
Description	When configured to true , this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to true . When configured to false , no route is advertised to the clients when there are no reachable routes from the client's ORR location.
Default	false
Introduced	16.0.R1
Platforms	All

cluster-id *string*

Synopsis	Route reflector cluster ID
Context	configure router <i>string</i> bgp cluster cluster-id <i>string</i>
Tree	cluster-id
Description	The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients.
Introduced	16.0.R1
Platforms	All

orr-location *number*

Synopsis	Optimal route reflection location for the cluster
Context	configure router <i>string</i> bgp cluster orr-location <i>number</i>
Tree	orr-location
Description	<p>This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location.</p> <p>With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure router <i>string</i> bgp connect-retry <i>number</i>
Tree	connect-retry
Description	This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer.
Range	1 to 65535
Default	120
Introduced	16.0.R1
Platforms	All

convergence

Synopsis	Enter the convergence context
Context	configure router <i>string</i> bgp convergence
Tree	convergence
Introduced	19.7.R1
Platforms	All

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> bgp convergence family <i>keyword</i>
Tree	family
Introduced	19.7.R1
Platforms	All

[family-type] *keyword*

Synopsis	Address family for which convergence selection applies
Context	configure router <i>string</i> bgp convergence family <i>keyword</i>
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

max-wait-to-advertise *number*

Synopsis	Maximum wait time before advertising routes
Context	configure router <i>string</i> bgp convergence family <i>keyword</i> max-wait-to-advertise <i>number</i>
Tree	max-wait-to-advertise
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

min-wait-to-advertise *number*

Synopsis	Minimum wait time before advertising routes
Context	configure router <i>string</i> bgp convergence min-wait-to-advertise <i>number</i>
Tree	min-wait-to-advertise
Range	0 to 3600
Default	0
Introduced	19.7.R1

Platforms All

damp-peer-oscillations

Synopsis Enable the **damp-peer-oscillations** context

Context **configure** *router string* **bgp damp-peer-oscillations**

Tree **damp-peer-oscillations**

Description Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.

Introduced 16.0.R1

Platforms All

error-interval *number*

Synopsis Time after a reset that the session must be error-free

Context **configure** *router string* **bgp damp-peer-oscillations error-interval** *number*

Tree **error-interval**

Description This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.

Range 0 to 2048

Default 30

Introduced 16.0.R1

Platforms All

idle-hold-time

Synopsis Enter the **idle-hold-time** context

Context **configure** *router string* **bgp damp-peer-oscillations idle-hold-time**

Tree **idle-hold-time**

Introduced 16.0.R1

Platforms All

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	configure router <i>string</i> bgp damp-peer-oscillations idle-hold-time initial-wait <i>number</i>
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	configure router <i>string</i> bgp damp-peer-oscillations idle-hold-time max-wait <i>number</i>
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each session failure
Context	configure router <i>string</i> bgp damp-peer-oscillations idle-hold-time second-wait <i>number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure router <i>string</i> bgp damping <i>boolean</i>

Tree	damping
Description	<p>When configured to true, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes.</p> <p>Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters:</p> <ul style="list-style-type: none"> • Half-life: 15 minutes • Max-suppress: 60 minutes • Suppress-threshold: 3000 • Reuse-threshold: 750 <p>When configured to false, BGP route damping for learned routes is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	configure <i>router</i> <i>string</i> bgp def-recv-evpn-encap <i>keyword</i>
Tree	def-recv-evpn-encap
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.
Default	mpls
Options	mpls, vxlan
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure <i>router</i> <i>string</i> bgp default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGp
Context	configure router <i>string</i> bgp default-label-preference ebgp number
Tree	ebgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure router <i>string</i> bgp default-label-preference ibgp number
Tree	ibgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the default-preference context
Context	configure router <i>string</i> bgp default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGp
Context	configure router <i>string</i> bgp default-preference ebgp number
Tree	ebgp
Range	0 to 255
Default	0
Introduced	19.5.R1

Platforms All

ibgp number

Synopsis Default preference for IBGP
Context **configure** [router string bgp default-preference ibgp number](#)
Tree [ibgp](#)
Range 0 to 255
Default 0
Introduced 19.5.R1
Platforms All

description string

Synopsis Text description
Context **configure** [router string bgp description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

dynamic-neighbor-limit number

Synopsis Max dynamic BGP sessions to accept from remote peers
Context **configure** [router string bgp dynamic-neighbor-limit number](#)
Tree [dynamic-neighbor-limit](#)
Description This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.
Range 1 to 8192
Introduced 16.0.R1
Platforms All

ebgp-default-reject-policy

Synopsis	Enter the ebgp-default-reject-policy context
Context	configure router <i>string</i> bgp ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	19.5.R1
Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure router <i>string</i> bgp ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	configure router <i>string</i> bgp ebgp-default-reject-policy import <i>boolean</i>
Tree	import
Default	true
Introduced	19.5.R1
Platforms	All

egress-peer-engineering

Synopsis	Enable the egress-peer-engineering context
Context	configure router <i>string</i> bgp egress-peer-engineering
Tree	egress-peer-engineering
Introduced	21.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	configure <i>router</i> <i>string</i> <i>bgp egress-peer-engineering admin-state keyword</i>
Tree	admin-state
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure <i>router</i> <i>string</i> <i>bgp enforce-first-as boolean</i>
Tree	enforce-first-as
Description	<p>When configured to true for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the update-fault-tolerance command in the error-handling context is set to false) or the session is left up but the route is treated as withdrawn (if update-fault-tolerance is set to true).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When configured to false, received routes are not checked for compliance with the rule.</p>
Default	false
Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the error-handling context
Context	configure <i>router</i> <i>string</i> <i>bgp error-handling</i>
Tree	error-handling
Introduced	16.0.R1
Platforms	All

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure router <i>string</i> bgp error-handling update-fault-tolerance <i>boolean</i>
Tree	update-fault-tolerance
Description	When configured to true , non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset. When configured to false , most errors trigger a session reset.
Default	false
Introduced	16.0.R1
Platforms	All

export

Synopsis	Enable the export context
Context	configure router <i>string</i> bgp export
Tree	export
Description	Commands in this context specify route policies that control the handling of outbound routes transmitted to all peers. Route policies are configured in the configure policy-options context. When no export policies are specified in this context, BGP-learned routes are advertised by default and non-BGP routes are not advertised.
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	List of export policy names
Context	configure router <i>string</i> bgp export policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies route policies that control the handling of outbound routes transmitted to certain peers. Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.

Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

When no export policies are specified, BGP-learned routes are advertised by default and non-BGP routes are not advertised.

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enter the extended-nh-encoding context
Context	configure <i>router string</i> bgp extended-nh-encoding
Tree	extended-nh-encoding
Description	Commands in this context specify the IPv4-related address families that can receive IPv6 next hops from peers. The peers should not send such routes unless the peers receive notification of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise encoding capability for IPv4 routes
Context	configure <i>router string</i> bgp extended-nh-encoding ipv4 boolean
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	configure router <i>string</i> bgp extended-nh-encoding label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	configure router <i>string</i> bgp extended-nh-encoding vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enter the family context
Context	configure router <i>string</i> bgp family
Tree	family
Description	Commands in this context specify the BGP address families supported by the base router BGP sessions.
Introduced	16.0.R1
Platforms	All

bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	configure router <i>string</i> bgp family bgp-ls <i>boolean</i>
Tree	bgp-ls
Default	false
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>evpn</i> <i>boolean</i>
Tree	evpn
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv4 *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>flow-ipv4</i> <i>boolean</i>
Tree	flow-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv6 *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>flow-ipv6</i> <i>boolean</i>
Tree	flow-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

flow-vpn-ipv4 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>flow-vpn-ipv4</i> <i>boolean</i>
Tree	flow-vpn-ipv4
Default	false
Introduced	22.7.R1
Platforms	All

flow-vpn-ipv6 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>flow-vpn-ipv6</i> <i>boolean</i>
Tree	flow-vpn-ipv6
Default	false
Introduced	22.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>ipv4</i> <i>boolean</i>
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>ipv6</i> <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>l2-vpn</i> <i>boolean</i>
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	configure router <i>string</i> bgp family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	configure router <i>string</i> bgp family label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure router <i>string</i> bgp family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	configure router <i>string</i> bgp family mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	configure <i>router string bgp family mcast-vpn-ipv4 boolean</i>
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	configure <i>router string bgp family mcast-vpn-ipv6 boolean</i>
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mdt-safi *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	configure <i>router string bgp family mdt-safi boolean</i>
Tree	mdt-safi
Default	false
Introduced	16.0.R1
Platforms	All

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	configure <i>router string bgp family ms-pw boolean</i>
Tree	ms-pw
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>mvpn-ipv4</i> <i>boolean</i>
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>mvpn-ipv6</i> <i>boolean</i>
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>route-target</i> <i>boolean</i>
Tree	route-target
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>sr-policy-ipv4</i> <i>boolean</i>
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false

Introduced 16.0.R1
Platforms All

sr-policy-ipv6 *boolean*

Synopsis Advertise MP-BGP support for the SR-policy-IPv6 family
Context **configure** *router* *string* *bgp* *family* *sr-policy-ipv6* *boolean*
Tree [sr-policy-ipv6](#)
Description This command allows the router to advertise the capability for AFI2/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default false
Introduced 19.10.R1
Platforms All

vpn-ipv4 *boolean*

Synopsis Advertise MP-BGP support for IPv4 VPN address family
Context **configure** *router* *string* *bgp* *family* *vpn-ipv4* *boolean*
Tree [vpn-ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

vpn-ipv6 *boolean*

Synopsis Advertise MP-BGP support for IPv6 VPN address family
Context **configure** *router* *string* *bgp* *family* *vpn-ipv6* *boolean*
Tree [vpn-ipv6](#)
Default false
Introduced 16.0.R1
Platforms All

fast-external-failover *boolean*

Synopsis Drop external BGP session immediately when link fails

Context	configure router <i>string</i> bgp fast-external-failover <i>boolean</i>
Tree	fast-external-failover
Description	When configured to true , the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down. When configured to false , the BGP session remains up until the hold time expires.
Default	true
Introduced	16.0.R1
Platforms	All

flowspec

Synopsis	Enter the flowspec context
Context	configure router <i>string</i> bgp flowspec
Tree	flowspec
Introduced	16.0.R1
Platforms	All

validate-dest-prefix *boolean*

Synopsis	Validate destination prefix in FlowSpec-IPv4/IPv6 route
Context	configure router <i>string</i> bgp flowspec validate-dest-prefix <i>boolean</i>
Tree	validate-dest-prefix
Description	When configured to true , this command enables validation of received IPv4 and IPv6 FlowSpec routes that contain a destination-prefix subcomponent. A FlowSpec route with a destination-prefix subcomponent is considered invalid if both of the following are true: <ul style="list-style-type: none">• it was originated outside the local AS of the receiving BGP router• the neighbor AS of the FlowSpec route does not match the neighbor AS of the best match BGP (unicast) route for the destination prefix or the neighbor AS of any longer match BGP (unicast) route for the destination prefix An invalid route is retained in the BGP but it is not used for filtering traffic or propagated to other BGP routers. When configured to false , destination-prefix validation is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

validate-redirect-ip *boolean*

Synopsis	Validate the redirect-to-IPv4 action in FlowSpec route
Context	configure router <i>string</i> bgp flowspec validate-redirect-ip <i>boolean</i>
Tree	validate-redirect-ip
Description	<p>When configured to true, this command enables procedures to validate the redirect-to-IPv4 action attached to FlowSpec-IPv4 routes that are received by the BGP instance.</p> <p>A FlowSpec-IPv4 route is considered invalid and is not installed as a filter rule if the FlowSpec-IPv4 route is deemed to have originated from a different AS than the IP route that resolves the redirection IPv4 address. The originating AS of a FlowSpec route is determined from its AS path.</p> <p>When configured to false, the validation check is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure router <i>string</i> bgp graceful-restart
Tree	graceful-restart
Description	Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform Graceful Restart procedures
Context	configure router <i>string</i> bgp graceful-restart gr-notification <i>boolean</i>
Tree	gr-notification
Description	<p>When configured to true, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to false, NOTIFICATION messages are not supported.</p>
Default	false

Introduced	16.0.R1
Platforms	All

long-lived

Synopsis	Enable the long-lived context
Context	configure router <i>string</i> bgp graceful-restart long-lived
Tree	long-lived
Description	<p>Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.</p> <p>LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.</p> <p>The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.</p>
Introduced	16.0.R1
Platforms	All

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	configure router <i>string</i> bgp graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i>
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time
Context	configure router <i>string</i> bgp graceful-restart long-lived advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1

Platforms All

family [family-type] keyword

Synopsis Enter the **family** list instance
Context **configure** router string **bgp graceful-restart long-lived family** keyword
Tree **family**
Introduced 16.0.R1
Platforms All

[family-type] keyword

Synopsis Family type for family-specific LLGR configuration
Context **configure** router string **bgp graceful-restart long-lived family** keyword
Tree **family**
Options ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

advertised-stale-time number

Synopsis LLGR stale routes time for family override
Context **configure** router string **bgp graceful-restart long-lived family** keyword **advertised-stale-time** number
Tree **advertised-stale-time**
Range 0 to 16777215
Default 86400
Introduced 16.0.R1
Platforms All

helper-override-stale-time number

Synopsis Locally-configured stale routes override time

Context	configure <i>router string</i> bgp graceful-restart long-lived family keyword helper-override-stale-time number
Tree	helper-override-stale-time
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure <i>router string</i> bgp graceful-restart long-lived forwarding-bits-set keyword
Tree	forwarding-bits-set
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Default	none
Options	none, all, non-fwd
Introduced	16.0.R1
Platforms	All

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure <i>router string</i> bgp graceful-restart long-lived helper-override-restart-time number
Tree	helper-override-restart-time
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	16.0.R1

Platforms All

helper-override-stale-time *number*

Synopsis Locally-configured stale routes override time

Context **configure** *router string* **bgp graceful-restart long-lived helper-override-stale-time** *number*

Tree [helper-override-stale-time](#)

Description This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.
This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.

Range 0 to 16777215

Introduced 16.0.R1

Platforms All

without-no-export *boolean*

Synopsis Advertise LLGR stale routes to non-LLGR peers

Context **configure** *router string* **bgp graceful-restart long-lived without-no-export** *boolean*

Tree [without-no-export](#)

Description When configured to **true**, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.
When configured to **false**, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.

Default false

Introduced 16.0.R1

Platforms All

restart-time *number*

Synopsis Restart time advertised by GR capability

Context **configure** *router string* **bgp graceful-restart restart-time** *number*

Tree [restart-time](#)

Range	0 to 4095
Default	120
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure router <i>string</i> bgp graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

group [**group-name**] *string*

Synopsis	Enter the group list instance
Context	configure router <i>string</i> bgp group <i>string</i>
Tree	group
Description	Commands in this context define BGP peer groups and their group-specific command options. The options in this context are identical to the global BGP options. Any options that are not overridden by the group-specific commands inherit the configuration settings from the BGP global level.
Introduced	16.0.R1
Platforms	All

[**group-name**] *string*

Synopsis	BGP peer group name
Context	configure router <i>string</i> bgp group <i>string</i>
Tree	group
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

add-paths

Synopsis	Enable the add-paths context
Context	configure <i>router string</i> <i>bgp group string</i> add-paths
Tree	add-paths
Description	<p>Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.</p> <p>When unconfigured, command settings are inherited from a higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the evpn context
Context	configure <i>router string</i> <i>bgp group string</i> add-paths evpn
Tree	evpn
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	21.10.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	configure <i>router string</i> <i>bgp group string</i> add-paths evpn receive <i>boolean</i>
Tree	receive
Default	false
Introduced	21.10.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per EVPN prefix to Add-Path peers
Context	configure <i>router string</i> <i>bgp group string</i> add-paths evpn send (<i>number</i> <i>keyword</i>)

Tree	send
Range	1 to 16
Options	multipaths
Introduced	21.10.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> add-paths ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> add-paths ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> add-paths ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.

Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths ipv6</i>
Tree	<i>ipv6</i>
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per IPv6 prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths ipv6 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to true , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths ipv6 send (number keyword)</i>
Tree	<i>send</i>
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.

Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths</i> label-ipv4
Tree	label-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths</i> label-ipv4 <i>receive</i> <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv4 unicast prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths</i> label-ipv4 <i>send</i> (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.

Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths</i> label-ipv6
Tree	label-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths</i> label-ipv6 <i>receive boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv6 unicast prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths</i> label-ipv6 <i>send (number keyword)</i>
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.

Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4

Synopsis	Enter the mcast-vpn-ipv4 context
Context	configure <i>router string bgp group string add-paths mcast-vpn-ipv4</i>
Tree	mcast-vpn-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	configure <i>router string bgp group string add-paths mcast-vpn-ipv4 receive boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast IPv4 VPN prefix
Context	configure <i>router string bgp group string add-paths mcast-vpn-ipv4 send number</i>
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for multicast IPv4 VPN routes.

Range	1 to 16
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6

Synopsis	Enter the mcast-vpn-ipv6 context
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths</i> mcast-vpn-ipv6
Tree	mcast-vpn-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths</i> mcast-vpn-ipv6 <i>receive boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast IPv6 VPN prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths</i> mcast-vpn-ipv6 <i>send number</i>
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv6 VPN routes.

Range	1 to 16
Introduced	16.0.R1
Platforms	All

mvpn-ipv4

Synopsis	Enter the mvpn-ipv4 context
Context	configure <i>router string bgp group string add-paths mvpn-ipv4</i>
Tree	<i>mvpn-ipv4</i>
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple multicast VPN routes per IPv4 prefix
Context	configure <i>router string bgp group string add-paths mvpn-ipv4 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to true , this command allows multiple multicast VPN routes per IPv4 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send number

Synopsis	Maximum paths per multicast VPN IPv4 prefix
Context	configure <i>router string bgp group string add-paths mvpn-ipv4 send number</i>
Tree	<i>send</i>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16

Introduced	16.0.R1
Platforms	All

mvpn-ipv6

Synopsis	Enter the mvpn-ipv6 context
Context	configure router <i>string</i> bgp group <i>string</i> add-paths mvpn-ipv6
Tree	mvpn-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast VPN routes per IPv6 prefix
Context	configure router <i>string</i> bgp group <i>string</i> add-paths mvpn-ipv6 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple multicast VPN routes per IPv6 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast VPN IPv6 prefix
Context	configure router <i>string</i> bgp group <i>string</i> add-paths mvpn-ipv6 send <i>number</i>
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1

Platforms All

vpn-ipv4

Synopsis Enter the **vpn-ipv4** context

Context **configure** *router string bgp group string add-paths vpn-ipv4*

Tree [vpn-ipv4](#)

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple routes per VPN-IPv4 prefix

Context **configure** *router string bgp group string add-paths vpn-ipv4 receive boolean*

Tree [receive](#)

Description When configured to **true**, this command allows multiple VPN-IPv4 routes per prefix to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send (*number* | *keyword*)

Synopsis Maximum paths per VPN-IPv4 prefix

Context **configure** *router string bgp group string add-paths vpn-ipv4 send (number | keyword)*

Tree [send](#)

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.

Range 1 to 16

Options multipaths

Introduced 16.0.R1

Platforms All

vpn-ipv6

Synopsis	Enter the vpn-ipv6 context
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths vpn-ipv6</i>
Tree	<i>vpn-ipv6</i>
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths vpn-ipv6 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to true , this command allows multiple VPN-IPv6 routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv6 prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths vpn-ipv6 send (number keyword)</i>
Tree	<i>send</i>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BGP group
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	<p>When configured to true, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none">• If the active route for the IP prefix is a BGP route, that route is advertised.• If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.• If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session. <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the advertisement of inactive BGP routes to other BGP peers is disabled.</p>
Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enable the advertise-ipv6-next-hops context
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops

Description	Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied. When unconfigured, command settings are inherited from a higher level BGP configuration.
Introduced	16.0.R1
Platforms	All

evpn boolean

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	configure <i>router string bgp group string advertise-ipv6-next-hops evpn boolean</i>
Tree	evpn
Description	When configured to true , EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to false , EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.
Default	false
Introduced	19.5.R1
Platforms	All

ipv4 boolean

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	configure <i>router string bgp group string advertise-ipv6-next-hops ipv4 boolean</i>
Tree	ipv4
Description	When configured to true , IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to false , IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	19.5.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	configure <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>label-ipv4 boolean</i>
Tree	label-ipv4
Description	<p>When configured to true, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	configure <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>label-ipv6 boolean</i>
Tree	label-ipv6
Description	<p>When configured to true, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	configure <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>vpn-ipv4 boolean</i>
Tree	vpn-ipv4

Description	<p>When configured to true, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> advertise-ipv6-next-hops vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Description	<p>When configured to true, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> aggregator-id-zero <i>boolean</i>
Tree	aggregator-id-zero
Introduced	16.0.R1
Platforms	All

aigp *boolean*

Synopsis	Add AIGP attribute to advertised routes
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Context	configure <i>router string</i> <i>bgp group string</i> <i>aigp boolean</i>
Tree	<i>aigp</i>
Description	When configured to true , this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance. When configured to false , the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.
Default	false
Introduced	16.0.R1
Platforms	All

as-override *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	configure <i>router string</i> <i>bgp group string</i> <i>as-override boolean</i>
Tree	<i>as-override</i>
Description	When configured to true , the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute. This command should be used with caution, as it breaks BGP's loop detection mechanism. When configured to false , no AS override is performed.
Default	false
Introduced	19.7.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	configure <i>router string</i> <i>bgp group string</i> <i>asn-4-byte boolean</i>
Tree	<i>asn-4-byte</i>
Description	When this command inherits a value of true , the use of 4-byte ASNs is supported. When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true . When configured to false , this command disables the use of 4-byte ASNs.
Introduced	16.0.R1
Platforms	All

authentication-key string

Synopsis	BGP authentication key for peers in the group
Context	configure router string bgp group string authentication-key string
Tree	authentication-key
Description	This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the configure system security hash-control management-interface md-cli hash-algorithm setting.
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

authentication-keychain reference

Synopsis	TCP authentication keychain for the session
Context	configure router string bgp group string authentication-keychain reference
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	configure system security keychains keychain string
Introduced	16.0.R3
Platforms	All

bfd-liveness boolean

Synopsis	Enable BFD
Context	configure router string bgp group string bfd-liveness boolean
Tree	bfd-liveness
Description	<p>When configured to true, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BFD is removed from the associated protocol adjacency.</p>
Introduced	16.0.R1
Platforms	All

block-prefix-sid *boolean*

Synopsis	Block the prefix SID attribute
Context	configure <i>router string bgp group string block-prefix-sid boolean</i>
Tree	block-prefix-sid
Description	<p>When configured to true, all prefix SID attributes are removed from all routes exchanged between EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.</p> <p>When configured to false, all prefix SID attributes are propagated without restriction.</p> <p>A change of this configuration causes the affected BGP sessions to flap.</p>
Default	false
Introduced	19.10.R1
Platforms	All

capability-negotiation *boolean*

Synopsis	Enable capability negotiation
Context	configure <i>router string bgp group string capability-negotiation boolean</i>
Tree	capability-negotiation
Description	<p>When configured to true, this command enables the exchange of capabilities.</p> <p>When configured to false and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer.</p>
Default	true
Introduced	16.0.R1
Platforms	All

client-reflect *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
Context	configure <i>router string bgp group string client-reflect boolean</i>
Tree	client-reflect
Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When the command inherits a value of true, client reflection of routes is enabled.</p> <p>When configured to false, this command disables client reflection of routes.</p>
Introduced	16.0.R1

Platforms All

cluster

Synopsis Enter the **cluster** context
Context **configure** *router string bgp group string cluster*
Tree *cluster*
Introduced 16.0.R1
Platforms All

allow-local-fallback *boolean*

Synopsis Allow fallback to RR topology location
Context **configure** *router string bgp group string cluster allow-local-fallback boolean*
Tree *allow-local-fallback*
Description When configured to **true**, this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to **true**.
When configured to **false**, no route is advertised to the client.
Default false
Introduced 16.0.R1
Platforms All

cluster-id *string*

Synopsis Route reflector cluster ID
Context **configure** *router string bgp group string cluster cluster-id string*
Tree *cluster-id*
Introduced 16.0.R1
Platforms All

orr-location *number*

Synopsis Optimal route reflection location for the cluster
Context **configure** *router string bgp group string cluster orr-location number*
Tree *orr-location*

Description	<p>This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location.</p> <p>With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure <i>router string bgp group string connect-retry number</i>
Tree	connect-retry
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure <i>router string bgp group string damp-peer-oscillations</i>
Tree	damp-peer-oscillations
Description	<p>Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.</p> <p>When unconfigured, command settings are inherited from the global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure <i>router string bgp group string damp-peer-oscillations error-interval number</i>

Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

idle-hold-time

Synopsis	Enter the idle-hold-time context
Context	configure router <i>string</i> bgp group <i>string</i> damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	16.0.R1
Platforms	All

initial-wait number

Synopsis	Time session remains in idle state after stabilization
Context	configure router <i>string</i> bgp group <i>string</i> damp-peer-oscillations idle-hold-time initial-wait number
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait number

Synopsis	Maximum session idle time after repeated instability
Context	configure router <i>string</i> bgp group <i>string</i> damp-peer-oscillations idle-hold-time max-wait number
Tree	max-wait
Range	1 to 2048
Default	60

Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each repeated session failure
Context	configure <i>router string bgp group string damp-peer-oscillations idle-hold-time second-wait number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure <i>router string bgp group string damping boolean</i>
Tree	damping
Introduced	16.0.R1
Platforms	All

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	configure <i>router string bgp group string def-recv-evpn-encap keyword</i>
Tree	def-recv-evpn-encap
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community. When unconfigured, the setting for this command is inherited from the BGP global-level configuration.
Options	mpls, vxlan
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure <i>router string bgp group string default-label-preference</i>
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGp
Context	configure <i>router string bgp group string default-label-preference ebgp number</i>
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure <i>router string bgp group string default-label-preference ibgp number</i>
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the default-preference context
Context	configure <i>router string bgp group string default-preference</i>
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGp
Context	configure router <i>string bgp group string default-preference ebgp number</i>
Tree	<i>ebgp</i>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure router <i>string bgp group string default-preference ibgp number</i>
Tree	<i>ibgp</i>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-route-target boolean

Synopsis	Send default RTC route (zero prefix length) to peers
Context	configure router <i>string bgp group string default-route-target boolean</i>
Tree	<i>default-route-target</i>
Description	When configured to true , this command sends the default RTC route (zero prefix length) toward the selected peers. When configured to false , a default RTC route is not sent.
Default	false
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure router <i>string bgp group string description string</i>
Tree	<i>description</i>
String Length	1 to 80

Introduced	16.0.R1
Platforms	All

dynamic-neighbor

Synopsis	Enter the dynamic-neighbor context
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor
Tree	dynamic-neighbor
Description	Commands in this context configure dynamic BGP sessions for a peer group.
Introduced	16.0.R1
Platforms	All

interface [[interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor interface <i>string</i>
Tree	interface
Description	<p>Commands in this context configure an unnumbered base router network interface for dynamic neighbors.</p> <p>If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses.</p> <p>The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions.</p> <p>When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGP, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.</p>
Introduced	22.10.R1
Platforms	All

[\[interface-name\]](#) *string*

Synopsis	Name of the dynamic neighbor interface
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor interface <i>string</i>

Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor interface <i>string</i> allowed-peer-as <i>string</i>
Tree	allowed-peer-as
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i> . All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].
Max. Instances	32
Notes	This element is ordered by the user.
Introduced	22.10.R1
Platforms	All

max-sessions *number*

Synopsis	Maximum number of dynamic sessions allowed
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor interface <i>string</i> max-sessions <i>number</i>
Tree	max-sessions
Description	This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements.
Range	1 to 255
Default	1
Introduced	22.10.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor match match
Tree	match
Description	Commands in this context configure match conditions for the dynamic neighbors.
Introduced	19.5.R1
Platforms	All

prefix [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Introduced	19.5.R1
Platforms	All

[**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Dynamic peer prefix for the group
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) allowed-peer-as <i>string</i>
Tree	allowed-peer-as
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i> .

All values greater than or equal to $n1$ and less than or equal to $n2$ are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].

Max. Instances	32
Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

dynamic-neighbor-limit *number*

Synopsis	Maximum dynamic BGP sessions to accept from remote peer
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor-limit <i>number</i>
Tree	dynamic-neighbor-limit
Description	This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer. When unconfigured, the setting is inherited from the BGP global-level configuration.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enable the ebgp-default-reject-policy context
Context	configure router <i>string</i> bgp group <i>string</i> ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	19.5.R1
Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure router <i>string</i> bgp group <i>string</i> ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true

Introduced 19.5.R1
Platforms All

import *boolean*

Synopsis Enable default reject import policy for external peers
Context **configure** *router string bgp group string ebgp-default-reject-policy import boolean*
Tree [import](#)
Default true
Introduced 19.5.R1
Platforms All

egress-engineering

Synopsis Enable the **egress-engineering** context
Context **configure** *router string bgp group string egress-engineering*
Tree [egress-engineering](#)
Introduced 21.7.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of BGP egress engineering
Context **configure** *router string bgp group string egress-engineering admin-state keyword*
Tree [admin-state](#)
Description This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Default disable
Options enable, disable
Introduced 21.7.R1
Platforms All

egress-peer-engineering-label-unicast *boolean*

Synopsis Generate EPE label-unicast routes for group

Context	configure router <i>string</i> bgp group <i>string</i> egress-peer-engineering-label-unicast <i>boolean</i>
Tree	egress-peer-engineering-label-unicast
Description	When configured to true , BGP generates a label-unicast route for each /32 or /128 prefix that corresponds to the BGP group address in the scope of the command. These routes can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. They support the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	22.2.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure router <i>string</i> bgp group <i>string</i> enforce-first-as <i>boolean</i>
Tree	enforce-first-as
Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the error-handling context
Context	configure router <i>string</i> bgp group <i>string</i> error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure router <i>string</i> bgp group <i>string</i> error-handling update-fault-tolerance <i>boolean</i>
Tree	update-fault-tolerance
Description	When configured to true , non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset. When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false .

When this command inherits a value of **false**, all errors trigger a session reset.

Introduced	16.0.R1
Platforms	All

export

Synopsis	Enable the export context
Context	configure <i>router string bgp group string export</i>
Tree	<i>export</i>
Description	Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the configure policy-options context. When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	BGP export policy name
Context	configure <i>router string bgp group string export policy (policy-expr-string string)</i>
Tree	<i>policy</i>
Description	This command specifies route policies that control the handling of outbound routes transmitted to certain peers. Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route. Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.

Introduced 16.0.R1
Platforms All

extended-nh-encoding

Synopsis Enable the **extended-nh-encoding** context

Context **configure** *router string* *bgp group string* *extended-nh-encoding*

Tree *extended-nh-encoding*

Description Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.

When the context is unconfigured, command settings are inherited from the higher level BGP configuration.

Introduced 16.0.R1
Platforms All

ipv4 *boolean*

Synopsis Advertise encoding capability for IPv4 routes

Context **configure** *router string* *bgp group string* *extended-nh-encoding* *ipv4 boolean*

Tree *ipv4*

Default false

Introduced 19.5.R1
Platforms All

label-ipv4 *boolean*

Synopsis Advertise encoding capability for label-IPv4 routes

Context **configure** *router string* *bgp group string* *extended-nh-encoding* *label-ipv4 boolean*

Tree *label-ipv4*

Default false

Introduced 16.0.R1
Platforms All

vpn-ipv4 *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	configure <i>router string bgp group string extended-nh-encoding vpn-ipv4 boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enable the family context
Context	configure <i>router string bgp group string family</i>
Tree	family
Introduced	16.0.R1
Platforms	All

bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	configure <i>router string bgp group string family bgp-ls boolean</i>
Tree	bgp-ls
Default	false
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	configure <i>router string bgp group string family evpn boolean</i>
Tree	evpn
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv4 *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	configure <i>router string bgp group string family flow-ipv4 boolean</i>
Tree	flow-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv6 *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	configure <i>router string bgp group string family flow-ipv6 boolean</i>
Tree	flow-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

flow-vpn-ipv4 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	configure <i>router string bgp group string family flow-vpn-ipv4 boolean</i>
Tree	flow-vpn-ipv4
Default	false
Introduced	22.7.R1
Platforms	All

flow-vpn-ipv6 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	configure <i>router string bgp group string family flow-vpn-ipv6 boolean</i>
Tree	flow-vpn-ipv6
Default	false
Introduced	22.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Add support for the IPv4 address family
Context	configure <i>router string</i> <i>bgp group string</i> <i>family ipv4 boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure <i>router string</i> <i>bgp group string</i> <i>family ipv6 boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	configure <i>router string</i> <i>bgp group string</i> <i>family l2-vpn boolean</i>
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	configure <i>router string</i> <i>bgp group string</i> <i>family label-ipv4 boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	configure router <i>string</i> bgp group <i>string</i> family label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure router <i>string</i> bgp group <i>string</i> family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	configure router <i>string</i> bgp group <i>string</i> family mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	configure router <i>string</i> bgp group <i>string</i> family mcast-vpn-ipv4 <i>boolean</i>
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	configure <i>router string bgp group string family mcast-vpn-ipv6 boolean</i>
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mdt-safi *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	configure <i>router string bgp group string family mdt-safi boolean</i>
Tree	mdt-safi
Default	false
Introduced	16.0.R1
Platforms	All

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	configure <i>router string bgp group string family ms-pw boolean</i>
Tree	ms-pw
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	configure <i>router string bgp group string family mvpn-ipv4 boolean</i>
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	configure router <i>string</i> bgp group <i>string</i> family mvpn-ipv6 <i>boolean</i>
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	configure router <i>string</i> bgp group <i>string</i> family route-target <i>boolean</i>
Tree	route-target
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	configure router <i>string</i> bgp group <i>string</i> family sr-policy-ipv4 <i>boolean</i>
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	configure router <i>string</i> bgp group <i>string</i> family sr-policy-ipv6 <i>boolean</i>
Tree	sr-policy-ipv6

Description	This command allows the router to advertise the capability for AF12/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	configure <i>router string bgp group string family vpn-ipv4 boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	configure <i>router string bgp group string family vpn-ipv6 boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure <i>router string bgp group string fast-external-failover boolean</i>
Tree	fast-external-failover
Description	<p>When this command inherits a value of true, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When configured to false, the BGP session remains up until the hold time expires.</p>
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure <i>router string</i> <i>bgp group string</i> graceful-restart
Tree	graceful-restart
Description	<p>Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.</p> <p>When the context is unconfigured, the command settings are inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	configure <i>router string</i> <i>bgp group string</i> graceful-restart gr-notification <i>boolean</i>
Tree	gr-notification
Description	<p>When configured to true, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to false, NOTIFICATION messages are not supported.</p>
Default	false
Introduced	16.0.R1
Platforms	All

long-lived

Synopsis	Enable the long-lived context
Context	configure <i>router string</i> <i>bgp group string</i> graceful-restart long-lived
Tree	long-lived
Description	<p>Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.</p> <p>LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.</p>

The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.

Introduced 16.0.R1
Platforms All

advertise-stale-to-all-neighbors *boolean*

Synopsis Advertise stale routes to all BGP peers
Context **configure** *router string bgp group string graceful-restart long-lived advertise-stale-to-all-neighbors boolean*
Tree [advertise-stale-to-all-neighbors](#)
Default false
Introduced 16.0.R1
Platforms All

advertised-stale-time *number*

Synopsis Advertised long-lived stale time for LLGR routes
Context **configure** *router string bgp group string graceful-restart long-lived advertised-stale-time number*
Tree [advertised-stale-time](#)
Range 0 to 16777215
Default 86400
Introduced 16.0.R1
Platforms All

family [[family-type](#)] *keyword*

Synopsis Enter the **family** list instance
Context **configure** *router string bgp group string graceful-restart long-lived family keyword*
Tree [family](#)
Introduced 16.0.R1
Platforms All

[family-type] keyword

Synopsis	Family type for family-specific LLGR configuration
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i>
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-stale-time number

Synopsis	LLGR stale routes time for family override
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i> advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time number

Synopsis	Locally-configured stale routes override time
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1

Platforms All

forwarding-bits-set *keyword*

Synopsis BGP LLGR forwarding-bit behavior for address family

Context **configure** *router string* *bgp group string* *graceful-restart long-lived forwarding-bits-set keyword*

Tree [forwarding-bits-set](#)

Description This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.

This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).

Default none

Options none, all, non-fwd

Introduced 16.0.R1

Platforms All

helper-override-restart-time *number*

Synopsis Locally-configured override for restart time

Context **configure** *router string* *bgp group string* *graceful-restart long-lived helper-override-restart-time number*

Tree [helper-override-restart-time](#)

Description This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.

Range 0 to 4095

Introduced 16.0.R1

Platforms All

helper-override-stale-time *number*

Synopsis Locally-configured stale routes override time

Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived without-no-export <i>boolean</i>
Tree	without-no-export
Description	When configured to true , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0. When configured to false , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart restart-time <i>number</i>
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	16.0.R1

Platforms All

stale-routes-time *number*

Synopsis Maximum time to maintain routes after graceful restart

Context **configure** *router string* *bgp group string* *graceful-restart* *stale-routes-time number*

Tree [stale-routes-time](#)

Range 1 to 3600

Default 360

Introduced 16.0.R1

Platforms All

hold-time

Synopsis Enter the **hold-time** context

Context **configure** *router string* *bgp group string* *hold-time*

Tree [hold-time](#)

Introduced 16.0.R1

Platforms All

minimum-hold-time *number*

Synopsis Minimum hold time between successive messages

Context **configure** *router string* *bgp group string* *hold-time* *minimum-hold-time number*

Tree [minimum-hold-time](#)

Description This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.
When unconfigured, the command value is inherited from the BGP global-level setting.

Range 0 | 3 to 65536

Default 0

Introduced 16.0.R1

Platforms All

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	configure router <i>string</i> bgp group <i>string</i> hold-time seconds <i>number</i>
Tree	seconds
Description	<p>This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.</p> <p>Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances.</p> <ul style="list-style-type: none">• If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.• If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer. <p>When unconfigured, the command setting is inherited from the BGP global-level configuration.</p>
Range	0 3 to 65535
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the import context
Context	configure router <i>string</i> bgp group <i>string</i> import
Tree	import
Description	<p>Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the configure policy-options context.</p> <p>When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	BGP import policy name
Context	configure router <i>string</i> bgp group <i>string</i> import policy (<i>policy-expr-string</i> <i>string</i>)

Tree	policy
Description	<p>This command specifies route policies that control the handling of inbound routes received from certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	configure router <i>string</i> bgp group <i>string</i> initial-send-delay-zero <i>boolean</i>
Tree	initial-send-delay-zero
Description	<p>When configured to true, BGP updates are sent as soon as the session comes up.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.</p>
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure router <i>string</i> bgp group <i>string</i> keepalive <i>number</i>
Tree	keepalive

Description	<p>This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires.</p> <p>This value is generally one-third of the hold time interval configured in the hold-time seconds context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value:</p> <ul style="list-style-type: none">• If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value.• If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval.• If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer. <p>When unconfigured, the command inherits the BGP global-level setting.</p>
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure router <i>string</i> bgp group <i>string</i> label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

link-bandwidth

Synopsis	Enter the link-bandwidth context
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth
Tree	link-bandwidth
Description	<p>Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes.</p> <p>When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.</p>
Introduced	16.0.R3

Platforms All

accept-from-ebgp

Synopsis Enter the **accept-from-ebgp** context
Context **configure** [router](#) *string* [bgp group](#) *string* [link-bandwidth](#) [accept-from-ebgp](#)
Tree [accept-from-ebgp](#)
Introduced 16.0.R4
Platforms All

ipv4 *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes
Context **configure** [router](#) *string* [bgp group](#) *string* [link-bandwidth](#) [accept-from-ebgp](#) [ipv4](#) *boolean*
Tree [ipv4](#)
Default false
Introduced 16.0.R4
Platforms All

ipv6 *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes
Context **configure** [router](#) *string* [bgp group](#) *string* [link-bandwidth](#) [accept-from-ebgp](#) [ipv6](#) *boolean*
Tree [ipv6](#)
Default false
Introduced 16.0.R4
Platforms All

label-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes
Context **configure** [router](#) *string* [bgp group](#) *string* [link-bandwidth](#) [accept-from-ebgp](#) [label-ipv4](#) *boolean*
Tree [label-ipv4](#)
Default false
Introduced 16.0.R4

Platforms All

label-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv6 routes

Context **configure** *router string bgp group string link-bandwidth accept-from-ebgp label-ipv6 boolean*

Tree [label-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

vpn-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv4 routes

Context **configure** *router string bgp group string link-bandwidth accept-from-ebgp vpn-ipv4 boolean*

Tree [vpn-ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

vpn-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv6 routes

Context **configure** *router string bgp group string link-bandwidth accept-from-ebgp vpn-ipv6 boolean*

Tree [vpn-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

add-to-received-ebgp

Synopsis Enter the **add-to-received-ebgp** context

Context **configure** *router string bgp group string link-bandwidth add-to-received-ebgp*

Tree	add-to-received-ebgp
Introduced	16.0.R3
Platforms	All

ipv4 boolean

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R3
Platforms	All

ipv6 boolean

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv4 boolean

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R3
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R3
Platforms	All

aggregate-used-paths

Synopsis	Enter the aggregate-used-paths context
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth aggregate-used-paths
Tree	aggregate-used-paths
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure <i>router string</i> <i>bgp group string</i> <i>link-bandwidth aggregate-used-paths</i> ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure <i>router string</i> <i>bgp group string</i> <i>link-bandwidth aggregate-used-paths</i> ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure <i>router string</i> <i>bgp group string</i> <i>link-bandwidth aggregate-used-paths</i> label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure <i>router string</i> <i>bgp group string</i> <i>link-bandwidth aggregate-used-paths</i> label-ipv6 <i>boolean</i>
Tree	label-ipv6

Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure <i>router string bgp group string link-bandwidth aggregate-used-paths vpn-ipv4 boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure <i>router string bgp group string link-bandwidth aggregate-used-paths vpn-ipv6 boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

send-to-ebgp

Synopsis	Enter the send-to-ebgp context
Context	configure <i>router string bgp group string link-bandwidth send-to-ebgp</i>
Tree	send-to-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure <i>router string bgp group string link-bandwidth send-to-ebgp ipv4 boolean</i>

Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
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Context	configure <i>router string</i> bgp group string <i>link-bandwidth send-to-ebgp vpn-ipv4</i> <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure <i>router string</i> bgp group string <i>link-bandwidth send-to-ebgp vpn-ipv6</i> <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

local-address (*ipv4-address-no-zone | ipv6-address-no-zone | interface-name*)

Synopsis	Local IP address used when communicating with BGP peers
Context	configure <i>router string</i> bgp group string local-address (<i>ipv4-address-no-zone ipv6-address-no-zone interface-name</i>)
Tree	local-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the local-as context
Context	configure <i>router string</i> bgp group string local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
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Context	configure router <i>string</i> bgp group <i>string</i> local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	configure router <i>string</i> bgp group <i>string</i> local-as prepend-global-as <i>boolean</i>
Tree	prepend-global-as
Description	When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to false , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure router <i>string</i> bgp group <i>string</i> local-as private <i>boolean</i>
Tree	private
Description	When configured to true , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure router <i>string</i> bgp group <i>string</i> local-preference <i>number</i>
Tree	local-preference

Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure router <i>string</i> bgp group <i>string</i> loop-detect <i>keyword</i>
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	configure router <i>string</i> bgp group <i>string</i> loop-detect-threshold <i>number</i>
Tree	loop-detect-threshold
Range	0 to 15
Introduced	16.0.R6
Platforms	All

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure router <i>string</i> bgp group <i>string</i> med-out (<i>number</i> <i>keyword</i>)
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

min-route-advertisement *number*

Synopsis	Minimum time before a prefix can be advertised to peer
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Context	configure <i>router string</i> <i>bgp group string</i> <i>min-route-advertisement number</i>
Tree	<i>min-route-advertisement</i>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the monitor context
Context	configure <i>router string</i> <i>bgp group string</i> <i>monitor</i>
Tree	<i>monitor</i>
Description	Commands in this context specify BMP-related configurations at the BGP group level. When this context is unconfigured, the command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	configure <i>router string</i> <i>bgp group string</i> <i>monitor admin-state keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	configure <i>router string</i> <i>bgp group string</i> <i>monitor all-stations boolean</i>
Tree	<i>all-stations</i>
Description	When configured to true , this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.

When configured to **false**, the command is not used to indicate the stations which can receive BMP messages. The **station** command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.

Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the route-monitoring context
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> monitor route-monitoring
Tree	route-monitoring
Introduced	16.0.R1
Platforms	All

post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> monitor route-monitoring post-policy <i>boolean</i>
Tree	post-policy
Default	false
Introduced	16.0.R1
Platforms	All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> monitor route-monitoring pre-policy <i>boolean</i>
Tree	pre-policy
Default	false
Introduced	16.0.R1
Platforms	All

station [[station-name](#)] *reference*

Synopsis	Add a list entry for station
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Context	configure <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>monitor station</i> <i>reference</i>
Tree	<i>station</i>
Description	This command identifies a BMP monitoring station for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[station-name] *reference*

Synopsis	BMP monitoring station
Context	configure <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>monitor station</i> <i>reference</i>
Tree	<i>station</i>
Reference	configure <i>bmp station</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multihop *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	configure <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>multihop</i> <i>number</i>
Tree	<i>multihop</i>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

multipath-eligible *boolean*

Synopsis	Allow routes from group peers in multipath eligibility
Context	configure <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>multipath-eligible</i> <i>boolean</i>
Tree	<i>multipath-eligible</i>
Default	false
Introduced	19.5.R1

Platforms All

next-hop-self *boolean*

Synopsis Advertise routes with local address as next-hop address
Context **configure** *router string bgp group string next-hop-self boolean*
Tree [next-hop-self](#)
Default false
Introduced 16.0.R1
Platforms All

next-hop-unchanged

Synopsis Enter the **next-hop-unchanged** context
Context **configure** *router string bgp group string next-hop-unchanged*
Tree [next-hop-unchanged](#)
Description Commands in this context specify the IP address families that allow unchanged BGP next-hops when sending BGP routes to peers in the group.
Introduced 16.0.R1
Platforms All

evpn *boolean*

Synopsis Advertise EVPN routes with unchanged BGP next hop
Context **configure** *router string bgp group string next-hop-unchanged evpn boolean*
Tree [evpn](#)
Default false
Introduced 20.2.R1
Platforms All

label-ipv4 *boolean*

Synopsis Advertise label-IPv4 routes with unchanged BGP next hop
Context **configure** *router string bgp group string next-hop-unchanged label-ipv4 boolean*
Tree [label-ipv4](#)

Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label-IPv6 routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp group <i>string</i> next-hop-unchanged label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp group <i>string</i> next-hop-unchanged vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	20.2.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp group <i>string</i> next-hop-unchanged vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	20.2.R1
Platforms	All

origin-validation

Synopsis	Enter the origin-validation context
Context	configure router <i>string</i> bgp group <i>string</i> origin-validation

Tree	origin-validation
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	configure router <i>string</i> bgp group <i>string</i> origin-validation ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure router <i>string</i> bgp group <i>string</i> origin-validation ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure router <i>string</i> bgp group <i>string</i> origin-validation label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	configure router <i>string</i> bgp group <i>string</i> origin-validation label-ipv6 <i>boolean</i>

Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

outbound-route-filtering

Synopsis	Enable the outbound-route-filtering context
Context	configure router <i>string</i> bgp group <i>string</i> outbound-route-filtering
Tree	outbound-route-filtering
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF). When this context is unconfigured, the group command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

extended-community

Synopsis	Enable the extended-community context
Context	configure router <i>string</i> bgp group <i>string</i> outbound-route-filtering extended-community
Tree	extended-community
Description	Commands in this context configure the ORF send and receive capabilities based on Extended Communities. When this context is unconfigured, the command settings are inherited from the global-level configuration.
Introduced	16.0.R1
Platforms	All

accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	configure router <i>string</i> bgp group <i>string</i> outbound-route-filtering extended-community accept-orf <i>boolean</i>
Tree	accept-orf
Description	When configured to true , the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.

Introduced 16.0.R1
Platforms All

send-orf

Synopsis Enable the **send-orf** context

Context **configure** *router string bgp group string outbound-route-filtering extended-community send-orf*

Tree *send-orf*

Description Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.

When this context is unconfigured, the command settings are inherited from the BGP global-level configuration.

Introduced 16.0.R1
Platforms All

route-target [*community-name*] *string*

Synopsis Add a list entry for **route-target**

Context **configure** *router string bgp group string outbound-route-filtering extended-community send-orf route-target string*

Tree *route-target*

Introduced 16.0.R1
Platforms All

[*community-name*] *string*

Synopsis Route target community name

Context **configure** *router string bgp group string outbound-route-filtering extended-community send-orf route-target string*

Tree *route-target*

String Length 1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Enable passive mode for BGP communication
Context	configure router <i>string</i> bgp group <i>string</i> passive <i>boolean</i>
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

path-mtu-discovery *boolean*

Synopsis	Enable Path MTU Discovery
Context	configure router <i>string</i> bgp group <i>string</i> path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Description	<p>When configured to true, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to true, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to false and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p>
Introduced	16.0.R1
Platforms	All

peer-as *number*

Synopsis	Peer AS number
Context	configure router <i>string</i> bgp group <i>string</i> peer-as <i>number</i>

Tree	peer-as
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	configure router <i>string</i> bgp group <i>string</i> peer-ip-tracking <i>boolean</i>
Tree	peer-ip-tracking
Description	<p>When configured to true, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, peer tracking is disabled.</p>
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	configure router <i>string</i> bgp group <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

prefix-limit [[family](#)] *keyword*

Synopsis	Enter the prefix-limit list instance
Context	configure router <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i>
Tree	prefix-limit
Introduced	16.0.R1

Platforms All

[family] keyword

Synopsis Address family to which the limit applies

Context **configure** *router string bgp group string prefix-limit keyword*

Tree [prefix-limit](#)

Options ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

idle-timeout number

Synopsis Time BGP peering remains idle before reconnecting

Context **configure** *router string bgp group string prefix-limit keyword idle-timeout number*

Tree [idle-timeout](#)

Range 1 to 1024

Introduced 16.0.R1

Platforms All

log-only boolean

Synopsis Send warning message at threshold instead of take-down

Context **configure** *router string bgp group string prefix-limit keyword log-only boolean*

Tree [log-only](#)

Default false

Introduced 16.0.R1

Platforms All

maximum number

Synopsis Maximum number of routes to be learned from a peer

Context	configure router <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> maximum <i>number</i>
Tree	maximum
Description	This command configures the maximum number of BGP routes that can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	configure router <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> post-import <i>boolean</i>
Tree	post-import
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	configure router <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the remove-private context
Context	configure router <i>string</i> bgp group <i>string</i> remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure <i>router string bgp group string remove-private limited boolean</i>
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure <i>router string bgp group string remove-private replace boolean</i>
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	configure <i>router string bgp group string remove-private skip-peer-as boolean</i>
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

segment-routing-v6

Synopsis	Enable the segment-routing-v6 context
Context	configure <i>router string bgp group string segment-routing-v6</i>
Tree	segment-routing-v6
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-advertisement

Synopsis	Enable the route-advertisement context
Context	configure <i>router string</i> <i>bgp group string</i> <i>segment-routing-v6 route-advertisement</i>
Tree	route-advertisement
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

drop-routes-with-srv6-tlvs *boolean*

Synopsis	Drop BGP routes with SRv6 TLVs
Context	configure <i>router string</i> <i>bgp group string</i> <i>segment-routing-v6 route-advertisement drop-routes-with-srv6-tlvs boolean</i>
Tree	drop-routes-with-srv6-tlvs
Description	When configured to true , the router drops and does not advertise BGP routes (that belong to any address family) with SRv6 TLVs. When configured to false , the router advertises BGP routes with SRv6 TLVs.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure <i>router string</i> <i>bgp group string</i> <i>segment-routing-v6 route-advertisement family keyword</i>
Tree	family
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[*family-type*] *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	configure <i>router string</i> <i>bgp group string</i> <i>segment-routing-v6 route-advertisement family keyword</i>
Tree	family

Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

strip-srv6-tlvs *boolean*

Synopsis	Strip SRv6 TLVs from BGP routes advertised to peers
Context	configure router <i>string</i> bgp group <i>string</i> segment-routing-v6 route-advertisement family <i>keyword</i> strip-srv6-tlvs <i>boolean</i>
Tree	strip-srv6-tlvs
Description	When configured to true , BGP routes that belong to the address family specified using the family command are advertised to peers with SRv6 TLVs removed. Locally or remotely added SRv6 TLVs can be removed. When configured to false , SRv6 TLVs are not stripped from BGP routes advertised to peers.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-label-ipv4-install *boolean*

Synopsis	Enable selective download for bgp label-ipv4 routes
Context	configure router <i>string</i> bgp group <i>string</i> selective-label-ipv4-install <i>boolean</i>
Tree	selective-label-ipv4-install
Introduced	19.10.R1
Platforms	All

send-communities

Synopsis	Enter the send-communities context
Context	configure router <i>string</i> bgp group <i>string</i> send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended boolean

Synopsis	Advertise the Extended Communities attribute to peers
Context	configure <i>router string bgp group string send-communities extended boolean</i>
Tree	<i>extended</i>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to false, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

large boolean

Synopsis	Advertise the Large Communities attribute to peers
Context	configure <i>router string bgp group string send-communities large boolean</i>
Tree	<i>large</i>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to false, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

standard boolean

Synopsis	Advertise the Communities attribute to peers
Context	configure <i>router string bgp group string send-communities standard boolean</i>
Tree	<i>standard</i>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP standard communities are sent to peers in the Communities attribute.</p>

When configured to **false**, all standard communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1
Platforms All

send-default

Synopsis Enable the **send-default** context
Context **configure** *router string bgp group string send-default*
Tree [send-default](#)
Introduced 19.7.R1
Platforms All

export-policy *reference*

Synopsis Export policy name
Context **configure** *router string bgp group string send-default export-policy reference*
Tree [export-policy](#)
Reference **configure** *policy-options policy-statement string*
Introduced 19.7.R1
Platforms All

ipv4 *boolean*

Synopsis Generate and advertise an IPv4 default route (0/0)
Context **configure** *router string bgp group string send-default ipv4 boolean*
Tree [ipv4](#)
Default false
Introduced 19.7.R1
Platforms All

ipv6 *boolean*

Synopsis Generate and advertise an IPv6 default route (::/0)
Context **configure** *router string bgp group string send-default ipv6 boolean*

Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure router <i>string</i> bgp group <i>string</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGp and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the use of split-horizon is disabled.</p>
Introduced	16.0.R1
Platforms	All

static-group *boolean*

Synopsis	Use group for static peers
Context	configure router <i>string</i> bgp group <i>string</i> static-group <i>boolean</i>
Tree	static-group
Default	true
Introduced	16.0.R1
Platforms	All

tcp-mss (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	configure router <i>string</i> bgp group <i>string</i> tcp-mss (<i>number</i> <i>keyword</i>)
Tree	tcp-mss

Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	configure <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> third-party-nexthop <i>boolean</i>
Tree	third-party-nexthop
Description	<p>When configured to true, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	configure <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> ttl-security <i>number</i>
Tree	ttl-security

Description	This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	BGP peer type
Context	configure router <i>string</i> bgp group <i>string</i> type <i>keyword</i>
Tree	type
Default	no-type
Options	no-type, internal, external
Introduced	16.0.R1
Platforms	All

vpn-apply-export *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	configure router <i>string</i> bgp group <i>string</i> vpn-apply-export <i>boolean</i>
Tree	vpn-apply-export
Description	When configured to true , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false . When this command inherits a value of false , the export policies are not applied.
Introduced	16.0.R1
Platforms	All

vpn-apply-import *boolean*

Synopsis	Apply base-instance BGP import policies to VPN routes
Context	configure router <i>string</i> bgp group <i>string</i> vpn-apply-import <i>boolean</i>
Tree	vpn-apply-import
Description	When configured to true , base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the import policies are not applied.

Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the hold-time context
Context	configure router <i>string</i> bgp hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

minimum-hold-time *number*

Synopsis	Minimum hold time between successive messages
Context	configure router <i>string</i> bgp hold-time minimum-hold-time <i>number</i>
Tree	minimum-hold-time
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.
Range	0 3 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	configure router <i>string</i> bgp hold-time seconds <i>number</i>
Tree	seconds
Description	This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection. Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances.

- If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.
- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.

Range	0 3 to 65535
Default	90
Introduced	16.0.R1
Platforms	All

ibgp-multipath *boolean*

Synopsis	Enable IBGP multipath load balancing
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>ibgp-multipath</i> <i>boolean</i>
Tree	ibgp-multipath
Description	When configured to true , this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops. When configured to false , this command disables IBGP multipath load balancing.
Default	false
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the import context
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>import</i>
Tree	import
Description	Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the configure policy-options context. When no import policies are specified in this context, BGP routes are accepted by default.
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	BGP import policy name
Context	configure router <i>string</i> bgp import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command specifies a list of objects, where each object is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by this command is allowed to be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as session comes up
Context	configure router <i>string</i> bgp initial-send-delay-zero <i>boolean</i>
Tree	initial-send-delay-zero
Default	false
Introduced	16.0.R1
Platforms	All

inter-as-vpn *boolean*

Synopsis	Allow advertisement of VPN routes across AS boundaries
Context	configure router <i>string</i> bgp inter-as-vpn <i>boolean</i>
Tree	inter-as-vpn
Description	When configured to true , this command allows VPNs to exchange routes across AS boundaries, providing model B connectivity.

When configured to **false**, ASBRs are prevented from advertising VPN routes to peers in other ASs.

Default	false
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure <i>router string</i> <i>bgp keepalive number</i>
Tree	keepalive
Range	0 to 21845
Default	30
Introduced	16.0.R1
Platforms	All

label-allocation

Synopsis	Enter the label-allocation context
Context	configure <i>router string</i> <i>bgp label-allocation</i>
Tree	label-allocation
Introduced	20.10.R1
Platforms	All

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure <i>router string</i> <i>bgp label-allocation label-ipv6</i>
Tree	label-ipv6
Description	This command controls the label allocation behavior for labeled unicast IPv6 routes. The label options are explicit-null and normal .
Introduced	20.10.R1
Platforms	All

explicit-null *boolean*

Synopsis	Apply advertised label and associated programming rules
Context	configure router <i>string</i> bgp label-allocation label-ipv6 explicit-null <i>boolean</i>
Tree	explicit-null
Description	<p>When configured to true, this command uses the advertised label and associated programming rules on this instance of BGP. The following applies:</p> <ul style="list-style-type: none"> • The router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising. It sets the BGP label value to IPv6 explicit null (value 2), forcing a POP behavior for received packets. • The received label-unicast IPv6 routes never create tunnels in TTM that can be used to resolve other BGP routes (with an IPv6 next-hop). • A received label-unicast IPv6 route can be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP). <p>When configured to false, advertised label IPv6 programming rules are not used. The following applies</p> <ul style="list-style-type: none"> • When the router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising, it sets the BGP label value to a proper value in the dynamic label range and programs a POP or SWAP operation for that label, depending on the origin of the route and various import policy actions that could apply to the route. • Received label-unicast IPv6 routes that have a prefix length of 128 bits are automatically installed in TTM so that they can be used to resolve other (non-labeled-unicast) BGP routes (with an IPv6 next-hop). • A received label-unicast IPv6 route cannot be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP). • The label-ipv6 routes used for ECMP toward an IPv6 destination cannot be a mix of routes with regular label values and routes with special (IPv6 explicit null) label values. <p>Changes in the value of this leaf do not cause the BGP sessions of the base router to reset.</p>
Default	true
Introduced	20.10.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure router <i>string</i> bgp label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Default	170

Introduced 16.0.R1
Platforms All

link-state-route-export *boolean*

Synopsis Allow the export of the TED NLRI database
Context **configure** *router string* [bgp link-state-route-export](#) *boolean*
Tree [link-state-route-export](#)
Description When configured to **true**, this command allows BGP to export link-state information to BGP neighbors.
When configured to **false**, link-state information is not exported.
Default false
Introduced 16.0.R1
Platforms All

link-state-route-import *boolean*

Synopsis Allow the import of the TED NLRI database
Context **configure** *router string* [bgp link-state-route-import](#) *boolean*
Tree [link-state-route-import](#)
Description When configured to **true**, this command enables the import of link-state information into the BGP-LS address family for advertisement to other BGP neighbors.
When configured to **false**, this command disables the import of link-state information.
Default false
Introduced 16.0.R1
Platforms All

local-as

Synopsis Enter the **local-as** context
Context **configure** *router string* [bgp local-as](#)
Tree [local-as](#)
Introduced 16.0.R1
Platforms All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure router <i>string</i> bgp local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global AS when advertising routes to BGP peer
Context	configure router <i>string</i> bgp local-as prepend-global-as <i>boolean</i>
Tree	prepend-global-as
Description	When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to false , the global ASN is hidden in paths announced to the EBGp peer.
Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure router <i>string</i> bgp local-as private <i>boolean</i>
Tree	private
Description	When configured to true , the local ASN is hidden in paths learned from the peering. When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
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Context	configure router <i>string</i> bgp local-preference <i>number</i>
Tree	local-preference
Max. Range	0 to 4294967295
Default	100
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure router <i>string</i> bgp loop-detect <i>keyword</i>
Tree	loop-detect
Default	ignore-loop
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	configure router <i>string</i> bgp loop-detect-threshold <i>number</i>
Tree	loop-detect-threshold
Range	0 to 15
Default	0
Introduced	16.0.R6
Platforms	All

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure router <i>string</i> bgp med-out (<i>number</i> <i>keyword</i>)
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1

Platforms All

min-route-advertisement *number*

Synopsis Minimum time before a prefix can be advertised to peer
 Context **configure** *router string bgp min-route-advertisement number*
 Tree [min-route-advertisement](#)
 Range 1 to 255
 Default 30
 Introduced 16.0.R1
 Platforms All

monitor

Synopsis Enable the **monitor** context
 Context **configure** *router string bgp monitor*
 Tree [monitor](#)
 Description Commands in this context specify BMP-related configurations.
 When this context is unconfigured, the sending of BMP messages to BMP monitoring stations is disabled.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of BMP monitoring
 Context **configure** *router string bgp monitor admin-state keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	configure router <i>string</i> bgp monitor all-stations <i>boolean</i>
Tree	all-stations
Description	When configured to true , this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to false , the command is not used to indicate the stations which can receive BMP messages. The station command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the route-monitoring context
Context	configure router <i>string</i> bgp monitor route-monitoring
Tree	route-monitoring
Introduced	16.0.R1
Platforms	All

post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	configure router <i>string</i> bgp monitor route-monitoring post-policy <i>boolean</i>
Tree	post-policy
Default	false
Introduced	16.0.R1
Platforms	All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	configure router <i>string</i> bgp monitor route-monitoring pre-policy <i>boolean</i>
Tree	pre-policy
Default	false

Introduced 16.0.R1
Platforms All

station [[station-name](#)] *reference*

Synopsis Add a list entry for **station**
Context **configure** [router](#) *string* [bgp](#) [monitor](#) [station](#) *reference*
Tree [station](#)
Description This command identifies a BMP monitoring station for which BMP messages are to be sent.
Max. Instances 8
Introduced 16.0.R1
Platforms All

[station-name] *reference*

Synopsis BMP monitoring station
Context **configure** [router](#) *string* [bgp](#) [monitor](#) [station](#) *reference*
Tree [station](#)
Reference **configure** [bmp](#) [station](#) *string*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

mp-bgp-keep *boolean*

Synopsis Keep rejected VPN-IP routes in RIB-IN
Context **configure** [router](#) *string* [bgp](#) [mp-bgp-keep](#) *boolean*
Tree [mp-bgp-keep](#)
Description When configured to **true**, the RIB-IN retains all MP-BGP routes, including VPN routes rejected by import policies or not imported by any services. As a result, sending Route Refresh messages is not required when an import policy changes.
When configured to **false**, these VPN routes are deleted from the RIB-IN.
Default false
Introduced 16.0.R1

Platforms All

multihop *number*

Synopsis TTL in IP packet headers for EBGP peers multi-hops away

Context **configure** *router string bgp multihop number*

Tree [multihop](#)

Description This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGP peer multiple hops away. This command applies only to EBGP.

Range 1 to 255

Introduced 16.0.R1

Platforms All

multipath

Synopsis Enter the **multipath** context

Context **configure** *router string bgp multipath*

Tree [multipath](#)

Introduced 16.0.R1

Platforms All

ebgp *number*

Synopsis Maximum multipaths per prefix for EBGP learned routes

Context **configure** *router string bgp multipath ebgp number*

Tree [ebgp](#)

Range 1 to 64

Introduced 16.0.R1

Platforms All

family [*family-type*] *keyword*

Synopsis Enter the **family** list instance

Context **configure** *router string bgp multipath family keyword*

Tree [family](#)

Introduced	19.5.R1
Platforms	All

[family-type] *keyword*

Synopsis	Address family for which multipath selection applies
Context	configure <i>router string</i> bgp multipath family <i>keyword</i>
Tree	family
Options	ipv4, ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Maximum multipaths when best path is EBGp learned route
Context	configure <i>router string</i> bgp multipath family <i>keyword</i> ebgp <i>number</i>
Tree	ebgp
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGp learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an EBGp learned route, and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Maximum multipaths when best path is IBGP learned route
Context	configure <i>router string</i> bgp multipath family <i>keyword</i> ibgp <i>number</i>
Tree	ibgp
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1

Platforms All

max-paths *number*

Synopsis	Maximum number of multipaths per prefix or NLRI
Context	configure <i>router string</i> bgp multipath family <i>keyword</i> max-paths <i>number</i>
Tree	max-paths
Description	<p>This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the family command.</p> <p>Consider the following when configuring this command:</p> <ul style="list-style-type: none">• If the best path is an EBGP-learned route and the ebgp command is configured, the limit configured in the ebgp command overrides the limit configured in this command.• If the best path is an IBGP-learned route and the ibgp command is configured, the limit configured in the ibgp command overrides the limit configured in this command.• If the best path is an EBGP-learned route and the ebgp command is not configured, and this command is configured to 1, multipaths are disabled.• If the best path is an IBGP-learned route and the ibgp command is not configured, and this command is configured to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	configure <i>router string</i> bgp multipath family <i>keyword</i> restrict <i>keyword</i>
Tree	restrict
Default	same-as-path-length
Options	same-as-path-length, same-neighbor-as, exact-as-path
Introduced	19.5.R1
Platforms	All

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	configure <i>router string</i> bgp multipath family <i>keyword</i> unequal-cost <i>boolean</i>

Tree	unequal-cost
Description	When configured to true , BGP ignores differences in the next-hop cost when determining eligible multipaths.
Default	false
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Maximum multipaths per prefix for IBGP learned routes
Context	configure router <i>string</i> bgp multipath ibgp <i>number</i>
Tree	ibgp
Range	1 to 64
Introduced	16.0.R1
Platforms	All

max-paths number

Synopsis	Maximum multipaths per prefix
Context	configure router <i>string</i> bgp multipath max-paths <i>number</i>
Tree	max-paths
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

restrict keyword

Synopsis	AS path restriction for the non-best path
Context	configure router <i>string</i> bgp multipath restrict <i>keyword</i>
Tree	restrict
Default	same-as-path-length
Options	same-as-path-length, same-neighbor-as, exact-as-path
Introduced	16.0.R1
Platforms	All

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	configure router <i>string</i> bgp multipath unequal-cost <i>boolean</i>
Tree	unequal-cost
Default	false
Introduced	19.5.R1
Platforms	All

mvpn-vrf-import-subtype-new *boolean*

Synopsis	Encode the IANA value of 0x010b in advertised routes
Context	configure router <i>string</i> bgp mvpn-vrf-import-subtype-new <i>boolean</i>
Tree	mvpn-vrf-import-subtype-new
Description	When configured to true , this command encodes the value of 0x010b for the type or subtype in advertised routes. When configured to false , BGP encodes the extended community type or subtype as 0x010a to preserve backwards compatibility.
Default	false
Introduced	16.0.R1
Platforms	All

neighbor [**ip-address**] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Enter the neighbor list instance
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address of the BGP peer router
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	neighbor

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

add-paths

Synopsis	Enable the add-paths context
Context	configure router string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) add-paths
Tree	add-paths
Description	Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer. When unconfigured, command settings are inherited from a higher level BGP configuration.
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the evpn context
Context	configure router string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) add-paths evpn
Tree	evpn
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	21.10.R1
Platforms	All

receive boolean

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	configure router string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) add-paths evpn receive boolean
Tree	receive
Default	false
Introduced	21.10.R1

Platforms All

send (*number* | *keyword*)

Synopsis Maximum paths per EVPN prefix to Add-Path peers

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
add-paths evpn send (*number* | *keyword*)

Tree **send**

Range 1 to 16

Options multipaths

Introduced 21.10.R1

Platforms All

ipv4

Synopsis Enter the **ipv4** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
add-paths ipv4

Tree **ipv4**

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple labeled-unicast routes per IPv4 prefix

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
add-paths ipv4 receive *boolean*

Tree **receive**

Description When configured to **true**, the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per IPv6 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv6 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv4
Tree	label-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1

Platforms All

send (*number* | *keyword*)

Synopsis Maximum paths per labeled IPv4 unicast prefix

Context **configure** *router string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
add-paths label-ipv4 send (*number* | *keyword*)

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.

Range 1 to 16

Options multipaths

Introduced 16.0.R1

Platforms All

label-ipv6

Synopsis Enter the **label-ipv6** context

Context **configure** *router string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
add-paths label-ipv6

Tree **label-ipv6**

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple labeled-unicast routes per IPv6 prefix

Context **configure** *router string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
add-paths label-ipv6 receive *boolean*

Tree **receive**

Description When configured to **true**, this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv6 unicast prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4

Synopsis	Enter the mcast-vpn-ipv4 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv4
Tree	mcast-vpn-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

send number

Synopsis	Maximum paths per multicast IPv4 VPN prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv4 send number
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv4 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6

Synopsis	Enter the mcast-vpn-ipv6 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv6
Tree	mcast-vpn-ipv6
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv6 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

send number

Synopsis	Maximum paths per multicast IPv6 VPN prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv6 send number
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv6 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

mvpn-ipv4

Synopsis	Enter the mvpn-ipv4 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv4
Tree	mvpn-ipv4
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple multicast VPN routes per IPv4 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv4 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple multicast VPN routes per IPv4 prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

send number

Synopsis	Maximum paths per multicast VPN IPv4 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv4 send number
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

mvpn-ipv6

Synopsis	Enter the mvpn-ipv6 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv6
Tree	mvpn-ipv6
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple multicast VPN routes per IPv6 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv6 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple multicast VPN routes per IPv6 prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

send number

Synopsis	Maximum paths per multicast VPN IPv6 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv6 send number
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

vpn-ipv4

Synopsis	Enter the vpn-ipv4 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv4
Tree	vpn-ipv4
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv4 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple VPN-IPv4 routes per prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv4 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

vpn-ipv6

Synopsis	Enter the vpn-ipv6 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv6
Tree	vpn-ipv6
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv6 receive boolean
Tree	receive

Description	When configured to true , this command allows multiple VPN-IPv6 routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv6 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BGP neighbor
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	<p>When configured to true, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none"> • If the active route for the IP prefix is a BGP route, that route is advertised. • If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session. • If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session. <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the advertisement of inactive BGP routes to other BGP peers is disabled.</p>
Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enable the advertise-ipv6-next-hops context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops
Description	<p>Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied.</p> <p>When unconfigured, command settings are inherited from a higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops evpn <i>boolean</i>

Tree	evpn
Description	When configured to true , EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to false , EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.
Default	false
Introduced	19.5.R1
Platforms	All

ipv4 boolean

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops ipv4 boolean
Tree	ipv4
Description	When configured to true , IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to false , IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	19.5.R1
Platforms	All

label-ipv4 boolean

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops label-ipv4 boolean
Tree	label-ipv4
Description	When configured to true , label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to false , label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry

that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.

Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	configure <i>router</i> <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops label-ipv6 <i>boolean</i>
Tree	label-ipv6
Description	When configured to true , label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to false , label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	configure <i>router</i> <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Description	When configured to true , VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to false , VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	16.0.R1

Platforms All

vpn-ipv6 *boolean*

Synopsis Advertise VPN IPv6 route with IPv6 next-hop address

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
advertise-ipv6-next-hops **vpn-ipv6** *boolean*

Tree [vpn-ipv6](#)

Description When configured to **true**, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.
When configured to **false**, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.

Default false

Introduced 16.0.R1

Platforms All

advertise-ldp-prefix *boolean*

Synopsis Advertise active /32 LDP FEC prefixes to BGP peers

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
advertise-ldp-prefix *boolean*

Tree [advertise-ldp-prefix](#)

Default false

Introduced 16.0.R1

Platforms All

aggregator-id-zero *boolean*

Synopsis Set router ID in the BGP AGGREGATOR attribute to zero

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
aggregator-id-zero *boolean*

Tree [aggregator-id-zero](#)

Introduced 16.0.R1

Platforms All

aigp *boolean*

Synopsis	Add AIGP attribute to advertised routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) aigp <i>boolean</i>
Tree	aigp
Description	<p>When configured to true, this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.</p>
Introduced	16.0.R1
Platforms	All

as-override *boolean*

Synopsis	Replace the peer's ASN with the local ASN in AS Path
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) as-override <i>boolean</i>
Tree	as-override
Description	<p>When configured to true, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). This command cannot be explicitly configured to false.</p> <p>When configured to false, no AS override is performed.</p>
Introduced	19.7.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) asn-4-byte <i>boolean</i>
Tree	asn-4-byte

Introduced 16.0.R1
Platforms All

authentication-key *string*

Synopsis BGP authentication key
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
authentication-key *string*
Tree **authentication-key**
String Length 1 to 370
Introduced 16.0.R1
Platforms All

authentication-keychain *reference*

Synopsis TCP authentication keychain for the session
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
authentication-keychain *reference*
Tree **authentication-keychain**
Description This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference **configure** **system** **security** **keychains** **keychain** *string*
Introduced 16.0.R3
Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
bfd-liveness *boolean*
Tree **bfd-liveness**
Description When configured to **true**, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.
When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, BFD is removed from the associated protocol adjacency.

Introduced 16.0.R1
Platforms All

block-prefix-sid *boolean*

Synopsis Block the prefix SID attribute

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
block-prefix-sid *boolean*

Tree **block-prefix-sid**

Description When configured to **true**, all prefix SID attributes are removed from all routes exchanged between EBGp and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.

When configured to **false**, all prefix SID attributes are propagated without restriction.

A change of this configuration causes the affected BGP sessions to flap.

Default false

Introduced 19.10.R1

Platforms All

capability-negotiation *boolean*

Synopsis Enable capability negotiation

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
capability-negotiation *boolean*

Tree **capability-negotiation**

Introduced 16.0.R1

Platforms All

client-reflect *boolean*

Synopsis Allow cluster RR to advertise routes to its clients

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
client-reflect *boolean*

Tree **client-reflect**

Introduced 16.0.R1

Platforms All

cluster

Synopsis	Enter the cluster context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster
Tree	cluster
Introduced	16.0.R1
Platforms	All

allow-local-fallback *boolean*

Synopsis	Allow fallback to RR topology
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster allow-local-fallback <i>boolean</i>
Tree	allow-local-fallback
Description	When configured to true , this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to true . When configured to false , this command no route is advertised to the client.
Default	false
Introduced	16.0.R1
Platforms	All

cluster-id *string*

Synopsis	Route reflector cluster ID
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster cluster-id <i>string</i>
Tree	cluster-id
Introduced	16.0.R1
Platforms	All

orr-location *number*

Synopsis	Optimal route reflection location for the cluster
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster orr-location <i>number</i>

Tree	orr-location
Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location. With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations
Tree	damp-peer-oscillations
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations error-interval <i>number</i>
Tree	error-interval

Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

idle-hold-time

Synopsis	Enter the idle-hold-time context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	16.0.R1
Platforms	All

initial-wait number

Synopsis	Time session remains in idle state after stabilization
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time initial-wait <i>number</i>
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait number

Synopsis	Maximum session idle time after repeated instability
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time max-wait <i>number</i>
Tree	max-wait
Range	1 to 2048
Default	60

Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each repeated session failure
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time second-wait <i>number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damping <i>boolean</i>
Tree	damping
Introduced	16.0.R1
Platforms	All

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) def-recv-evpn-encap <i>keyword</i>
Tree	def-recv-evpn-encap
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community. When unconfigured, the setting for this command is inherited from the BGP group-level configuration.
Options	mpls, vxlan
Introduced	16.0.R1

Platforms All

default-label-preference

Synopsis Enter the **default-label-preference** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)
default-label-preference

Tree **default-label-preference**

Introduced 19.5.R1

Platforms All

ebgp number

Synopsis Default preference for EBGp

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)
default-label-preference **ebgp** *number*

Tree **ebgp**

Range 0 to 255

Introduced 19.5.R1

Platforms All

ibgp number

Synopsis Default preference for IBGP

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)
default-label-preference **ibgp** *number*

Tree **ibgp**

Range 0 to 255

Introduced 19.5.R1

Platforms All

default-preference

Synopsis Enter the **default-preference** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)
default-preference

Tree **default-preference**

Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGP
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-preference ebgp <i>number</i>
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-preference ibgp <i>number</i>
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-route-target boolean

Synopsis	Send default RTC route (zero prefix length) to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-route-target <i>boolean</i>
Tree	default-route-target
Description	When configured to true , this command sends the default RTC route (zero prefix length) toward the selected peers. When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false . When this command inherits a value of false , a default RTC route is not sent.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enable the ebgp-default-reject-policy context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	19.5.R1
Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy import <i>boolean</i>
Tree	import
Default	true

Introduced	19.5.R1
Platforms	All

egress-engineering

Synopsis	Enable the egress-engineering context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) egress-engineering
Tree	egress-engineering
Introduced	21.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) egress-engineering admin-state <i>keyword</i>
Tree	admin-state
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	All

egress-peer-engineering-label-unicast *boolean*

Synopsis	Generate EPE label-unicast routes for neighbor
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) egress-peer-engineering-label-unicast <i>boolean</i>
Tree	egress-peer-engineering-label-unicast
Description	When configured to true , BGP generates a label-unicast route for the /32 or /128 prefix that corresponds to the BGP neighbor address. This route can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. This supports the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	22.2.R1

Platforms All

enforce-first-as *boolean*

Synopsis Enforce the configured peer AS value in received routes

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
enforce-first-as *boolean*

Tree **enforce-first-as**

Description When configured to **true** for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the **update-fault-tolerance** command in the **error-handling** context is set to **false**) or the session is left up but the route is treated as withdrawn (if **update-fault-tolerance** is set to **true**).

This command does not flap an established session because it applies only to routes received after the command is issued.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, received routes are not checked for compliance with the rule.

Introduced 16.0.R1

Platforms All

error-handling

Synopsis Enter the **error-handling** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
error-handling

Tree **error-handling**

Introduced 16.0.R1

Platforms All

update-fault-tolerance *boolean*

Synopsis Tolerate non-critical errors in UPDATE messages

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
error-handling update-fault-tolerance *boolean*

Tree **update-fault-tolerance**

Description	<p>When configured to true, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, all errors trigger a session reset.</p>
Introduced	16.0.R1
Platforms	All

export

Synopsis	Enable the export context
Context	configure router string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) export
Tree	export
Description	<p>Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the configure policy-options context.</p> <p>When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string | string*)

Synopsis	BGP export policy name
Context	configure router string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) export policy (<i>policy-expr-string string</i>)
Tree	policy
Description	<p>This command specifies route policies that control the handling of outbound routes transmitted to certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".</p>

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enable the extended-nh-encoding context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding
Tree	extended-nh-encoding
Description	<p>Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.</p> <p>When the context is unconfigured, command settings are inherited from the higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

ipv4 boolean

Synopsis	Advertise encoding capability for IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding ipv4 boolean
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enable the family context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family
Tree	family
Introduced	16.0.R1
Platforms	All

bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family bgp-ls <i>boolean</i>
Tree	bgp-ls
Default	false
Introduced	16.0.R1

Platforms All

evpn *boolean*

Synopsis Advertise MP-BGP support for the EVPN address family

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
family evpn *boolean*

Tree **evpn**

Default false

Introduced 16.0.R1

Platforms All

flow-ipv4 *boolean*

Synopsis Advertise support for the flowspec-IPv4 address family

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
family flow-ipv4 *boolean*

Tree **flow-ipv4**

Default false

Introduced 16.0.R1

Platforms All

flow-ipv6 *boolean*

Synopsis Advertise support for the flowspec-IPv6 address family

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
family flow-ipv6 *boolean*

Tree **flow-ipv6**

Default false

Introduced 16.0.R1

Platforms All

flow-vpn-ipv4 *boolean*

Synopsis Advertise support for FlowSpec-VPN IPv4 address family

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
family flow-vpn-ipv4 *boolean*

Tree	flow-vpn-ipv4
Default	false
Introduced	22.7.R1
Platforms	All

flow-vpn-ipv6 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family flow-vpn-ipv6 <i>boolean</i>
Tree	flow-vpn-ipv6
Default	false
Introduced	22.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Add support for the IPv4 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn boolean

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family l2-vpn boolean
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 boolean

Synopsis	Advertise support for the label-IPv4 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family label-ipv4 boolean
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 boolean

Synopsis	Advertise support for the label-IPv6 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family label-ipv6 boolean
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 boolean

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-ipv4 boolean
Tree	mcast-ipv4
Default	false

Introduced 16.0.R1
Platforms All

mcast-ipv6 *boolean*

Synopsis Advertise support for the MCAST-IPv6 address family
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
family mcast-ipv6 *boolean*
Tree **mcast-ipv6**
Default false
Introduced 16.0.R1
Platforms All

mcast-vpn-ipv4 *boolean*

Synopsis Advertise support for the IPv4 VPN MCAST address family
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
family mcast-vpn-ipv4 *boolean*
Tree **mcast-vpn-ipv4**
Default false
Introduced 16.0.R1
Platforms All

mcast-vpn-ipv6 *boolean*

Synopsis Advertise support for the IPv6 VPN MCAST address family
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
family mcast-vpn-ipv6 *boolean*
Tree **mcast-vpn-ipv6**
Default false
Introduced 16.0.R1
Platforms All

mdt-safi *boolean*

Synopsis Advertise MP-BGP support for MDT-SAFI address family

Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mdt-safi <i>boolean</i>
Tree	mdt-safi
Default	false
Introduced	16.0.R1
Platforms	All

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family ms-pw <i>boolean</i>
Tree	ms-pw
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mvpn-ipv4 <i>boolean</i>
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mvpn-ipv6 <i>boolean</i>
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family route-target <i>boolean</i>
Tree	route-target
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family sr-policy-ipv4 <i>boolean</i>
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AF11/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family sr-policy-ipv6 <i>boolean</i>
Tree	sr-policy-ipv6
Description	This command allows the router to advertise the capability for AF12/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) fast-external-failover <i>boolean</i>
Tree	fast-external-failover
Description	When this command inherits a value of true , the router drops an external BGP session on a single-hop route immediately when the local interface goes down. When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true . When configured to false , the BGP session remains up until the hold time expires.
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart
Tree	graceful-restart
Description	Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers. When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart gr-notification <i>boolean</i>
Tree	gr-notification
Description	When configured to true , the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error. When configured to false , NOTIFICATION messages are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

long-lived

Synopsis	Enable the long-lived context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived
Tree	long-lived
Description	Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures. LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort. The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.

Introduced 16.0.R1
Platforms All

advertise-stale-to-all-neighbors *boolean*

Synopsis Advertise stale routes to all BGP peers
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
graceful-restart long-lived advertise-stale-to-all-neighbors *boolean*
Tree [advertise-stale-to-all-neighbors](#)
Default false
Introduced 16.0.R1
Platforms All

advertised-stale-time *number*

Synopsis Advertised long-lived stale time for LLGR routes
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
graceful-restart long-lived advertised-stale-time *number*
Tree [advertised-stale-time](#)
Range 0 to 16777215
Default 86400
Introduced 16.0.R1
Platforms All

family [[family-type](#)] *keyword*

Synopsis Enter the **family** list instance
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
graceful-restart long-lived family *keyword*
Tree [family](#)
Introduced 16.0.R1
Platforms All

[family-type] *keyword*

Synopsis Family type for family-specific LLGR configuration

Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family <i>keyword</i>
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family <i>keyword</i> advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived forwarding-bits-set <i>keyword</i>
Tree	forwarding-bits-set
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Default	none
Options	none, all, non-fwd
Introduced	16.0.R1
Platforms	All

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-restart-time <i>number</i>
Tree	helper-override-restart-time
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-stale-time <i>number</i>

Tree	helper-override-stale-time
Description	<p>This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.</p> <p>This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.</p>
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived without-no-export <i>boolean</i>
Tree	without-no-export
Description	<p>When configured to true, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.</p> <p>When configured to false, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.</p>
Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart restart-time <i>number</i>
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	BGP peer group
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) group <i>reference</i>
Tree	group
Reference	configure router <i>string</i> bgp group <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the hold-time context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

minimum-hold-time *number*

Synopsis	Minimum time BGP waits between successive messages
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time minimum-hold-time <i>number</i>
Tree	minimum-hold-time
Range	0 3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Maximum hold time between successive messages
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time seconds <i>number</i>
Tree	seconds
Description	<p>The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection.</p> <p>Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances:</p> <ul style="list-style-type: none">• If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.• If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer. <p>When unconfigured, the command setting is inherited from the BGP group-level configuration.</p>
Range	0 3 to 65535
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the import context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) import

Tree	import
Description	Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the configure policy-options context. When this context is unconfigured, the policy association is inherited from the BGP group-level configuration.
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Names of the BGP import policies
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies route policies that control the handling of inbound routes received from certain peers. Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route. Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) initial-send-delay-zero <i>boolean</i>

Tree	initial-send-delay-zero
Description	When configured to true , BGP updates are sent as soon as the session comes up. When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false . When this command inherits a value of false , BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) keepalive <i>number</i>
Tree	keepalive
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

l2vpn-cisco-interop *boolean*

Synopsis	Allow translation from Cisco non-compliant NLRI format
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) l2vpn-cisco-interop <i>boolean</i>
Tree	l2vpn-cisco-interop
Default	false
Introduced	16.0.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Introduced	16.0.R1

Platforms All

link-bandwidth

Synopsis Enter the **link-bandwidth** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth

Tree **link-bandwidth**

Introduced 16.0.R3

Platforms All

accept-from-ebgp

Synopsis Enable the **accept-from-ebgp** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp

Tree **accept-from-ebgp**

Introduced 16.0.R4

Platforms All

ipv4 boolean

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp ipv4 boolean

Tree **ipv4**

Default false

Introduced 16.0.R4

Platforms All

ipv6 boolean

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp ipv6 boolean

Tree **ipv6**

Default false

Introduced 16.0.R4
Platforms All

label-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp label-ipv4 boolean
Tree [label-ipv4](#)
Default false
Introduced 16.0.R4
Platforms All

label-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv6 routes
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp label-ipv6 boolean
Tree [label-ipv6](#)
Default false
Introduced 16.0.R4
Platforms All

vpn-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv4 routes
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp vpn-ipv4 boolean
Tree [vpn-ipv4](#)
Default false
Introduced 16.0.R4
Platforms All

vpn-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv6 routes

Context	configure <i>router string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

add-to-received-ebgp

Synopsis	Enable the add-to-received-ebgp context
Context	configure <i>router string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp
Introduced	16.0.R3
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure <i>router string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R3
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure <i>router string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R3
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false

Introduced 16.0.R3
Platforms All

aggregate-used-paths

Synopsis Enable the **aggregate-used-paths** context
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth aggregate-used-paths
Tree **aggregate-used-paths**
Introduced 16.0.R4
Platforms All

ipv4 boolean

Synopsis Support Link Bandwidth EC in IPv4 routes
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth aggregate-used-paths ipv4 boolean
Tree **ipv4**
Default false
Introduced 16.0.R4
Platforms All

ipv6 boolean

Synopsis Support Link Bandwidth EC in IPv6 routes
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth aggregate-used-paths ipv6 boolean
Tree **ipv6**
Default false
Introduced 16.0.R4
Platforms All

label-ipv4 boolean

Synopsis Support Link Bandwidth EC in label-IPv4 routes
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth aggregate-used-paths label-ipv4 boolean

Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

send-to-ebgp

Synopsis	Enable the send-to-ebgp context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 boolean

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv4 boolean
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 boolean

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv6 boolean
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 boolean

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp label-ipv4 boolean
Tree	label-ipv4
Default	false
Introduced	16.0.R4

Platforms All

label-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv6 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth send-to-ebgp label-ipv6 *boolean*

Tree [label-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

vpn-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv4 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth send-to-ebgp vpn-ipv4 *boolean*

Tree [vpn-ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

vpn-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv6 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth send-to-ebgp vpn-ipv6 *boolean*

Tree [vpn-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

Synopsis Local IP address used when communicating with BGP peers

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

Tree	local-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the local-as context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as prepend-global-as <i>boolean</i>
Tree	prepend-global-as
Description	When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to false , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as private <i>boolean</i>
Tree	private
Description	When configured to true , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-preference <i>number</i>
Tree	local-preference
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect <i>keyword</i>
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect-threshold <i>number</i>
Tree	loop-detect-threshold
Range	0 to 15
Introduced	16.0.R6
Platforms	All

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) med-out (<i>number</i> <i>keyword</i>)
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

min-route-advertisement *number*

Synopsis	Minimum interval between successive prefix updates
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) min-route-advertisement <i>number</i>
Tree	min-route-advertisement
Range	1 to 255
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the monitor context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor
Tree	monitor
Description	Commands in this context specify BMP-related configurations at the BGP neighbor level.

When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.

Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor all-stations <i>boolean</i>
Tree	all-stations
Description	When configured to true , this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to false , the command is not used to indicate the stations which can receive BMP messages. The station command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the route-monitoring context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor route-monitoring
Tree	route-monitoring

Introduced 16.0.R1
Platforms All

post-policy *boolean*

Synopsis Allow post-policy route-monitoring messages to be sent
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
monitor route-monitoring post-policy boolean
Tree [post-policy](#)
Default false
Introduced 16.0.R1
Platforms All

pre-policy *boolean*

Synopsis Allow pre-policy route-monitoring messages to be sent
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
monitor route-monitoring pre-policy boolean
Tree [pre-policy](#)
Default false
Introduced 16.0.R1
Platforms All

station [[station-name](#)] *reference*

Synopsis Add a list entry for **station**
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
monitor station reference
Tree [station](#)
Description This command configures the set of BMP monitoring stations for which BMP messages are to be sent.
Max. Instances 8
Introduced 16.0.R1
Platforms All

[station-name] reference

Synopsis	BMP monitoring station
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor station reference
Tree	station
Reference	configure bmp station <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multihop number

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) multihop number
Tree	multihop
Range	1 to 255
Introduced	16.0.R1
Platforms	All

multipath-eligible boolean

Synopsis	Allow routes from this peer in multipath eligibility
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) multipath-eligible boolean
Tree	multipath-eligible
Introduced	19.5.R1
Platforms	All

next-hop-self boolean

Synopsis	Advertise routes with local address as next-hop address
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-self boolean
Tree	next-hop-self

Description	<p>When configured to true, this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address.</p> <p>Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the configure router bgp rr-vpn-forwarding command should also be configured.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, protocol standard behavior is applied to determine whether to set next-hop-self in advertised routes.</p>
Introduced	16.0.R1
Platforms	All

next-hop-unchanged

Synopsis	Enable the next-hop-unchanged context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged
Tree	next-hop-unchanged
Description	Commands in this context specify the IP address families where the next hop remains unchanged when sending BGP routes to peers of the neighbor.
Introduced	16.0.R1
Platforms	All

evpn boolean

Synopsis	Advertise EVPN routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged evpn <i>boolean</i>
Tree	evpn
Default	false
Introduced	20.2.R1
Platforms	All

label-ipv4 boolean

Synopsis	Advertise label-IPv4 routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged label-ipv4 <i>boolean</i>

Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label-IPv6 routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	20.2.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	20.2.R1
Platforms	All

origin-validation

Synopsis	Enable the origin-validation context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation
Tree	origin-validation
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1

Platforms All

label-ipv6 *boolean*

Synopsis Enable support for labeled-unicast IPv6 routes

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
origin-validation label-ipv6 *boolean*

Tree [label-ipv6](#)

Default false

Introduced 16.0.R1

Platforms All

outbound-route-filtering

Synopsis Enable the **outbound-route-filtering** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
outbound-route-filtering

Tree [outbound-route-filtering](#)

Description Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF).
When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.

Introduced 16.0.R1

Platforms All

extended-community

Synopsis Enable the **extended-community** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
outbound-route-filtering extended-community

Tree [extended-community](#)

Description Commands in this context configure the ORF send and receive capabilities based on Extended Communities.
When this context is unconfigured, the command settings are inherited from the group-level configuration.

Introduced 16.0.R1

Platforms All

accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	configure <i>router string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) outbound-route-filtering extended-community accept-orf boolean</i>
Tree	accept-orf
Description	<p>When configured to true, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.</p>
Introduced	16.0.R1
Platforms	All

send-orf

Synopsis	Enable the send-orf context
Context	configure <i>router string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) outbound-route-filtering extended-community send-orf</i>
Tree	send-orf
Description	<p>Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.</p> <p>When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.</p>
Introduced	16.0.R1
Platforms	All

route-target [*community-name*] *string*

Synopsis	Add a list entry for route-target
Context	configure <i>router string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) outbound-route-filtering extended-community send-orf route-target string</i>
Tree	route-target
Introduced	16.0.R1
Platforms	All

[community-name] string

Synopsis	Route target community name
Context	configure router string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) outbound-route-filtering extended-community send-orf route-target string
Tree	route-target
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

passive boolean

Synopsis	Use passive mode for BGP communication
Context	configure router string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) passive boolean
Tree	passive
Introduced	16.0.R1
Platforms	All

path-mtu-discovery boolean

Synopsis	Enable path MTU discovery
Context	configure router string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) path-mtu-discovery boolean
Tree	path-mtu-discovery

Description When configured to **true**, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Introduced	16.0.R1
Platforms	All

peer-as *number*

Synopsis	Peer AS number
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-as <i>number</i>
Tree	peer-as
Description	This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer. For EBGp peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router. For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

peer-creation-type *keyword*

Synopsis	Peer creation type
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-creation-type <i>keyword</i>
Tree	peer-creation-type
Default	static
Options	static, dynamic, dynamic-if-remote, dynamic-if-local
Introduced	16.0.R1
Platforms	All

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-ip-tracking <i>boolean</i>
Tree	peer-ip-tracking

Description	<p>When configured to true, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, peer tracking is disabled.</p>
Introduced	16.0.R1
Platforms	All

preference number

Synopsis	Route preference for routes learned from all peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) preference number
Tree	preference
Description	<p>This command configures the route preference for routes learned from the configured peers.</p> <p>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.</p> <p>When unconfigured, the command setting is inherited from the group-level configuration.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

prefix-limit [family] keyword

Synopsis	Enter the prefix-limit list instance
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit keyword
Tree	prefix-limit
Introduced	16.0.R1
Platforms	All

[family] keyword

Synopsis	Address family to which the limit applies
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i>
Tree	prefix-limit
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

idle-timeout *number*

Synopsis	Time which BGP peering remains idle before reconnecting
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> idle-timeout <i>number</i>
Tree	idle-timeout
Description	This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer. When unconfigured, the command inherits the value from the group-level configuration.
Range	1 to 1024
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> maximum <i>number</i>
Tree	maximum
Description	This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> post-import <i>boolean</i>
Tree	post-import
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the remove-private context
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private limited <i>boolean</i>
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private replace <i>boolean</i>
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

segment-routing-v6

Synopsis	Enable the segment-routing-v6 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6
Tree	segment-routing-v6
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-advertisement

Synopsis	Enable the route-advertisement context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6 route-advertisement
Tree	route-advertisement
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

drop-routes-with-srv6-tlvs *boolean*

Synopsis	Drop BGP routes with SRv6 TLVs
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6 route-advertisement drop-routes-with-srv6-tlvs <i>boolean</i>
Tree	drop-routes-with-srv6-tlvs
Description	When configured to true , the router drops and does not advertise BGP routes (that belong to any address family) with SRv6 TLVs. When configured to false , the router advertises BGP routes with SRv6 TLVs.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6 route-advertisement family <i>keyword</i>
Tree	family

Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[family-type] *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6 route-advertisement family <i>keyword</i>
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

strip-srv6-tlvs *boolean*

Synopsis	Strip SRv6 TLVs from BGP routes advertised to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6 route-advertisement family <i>keyword</i> strip-srv6-tlvs <i>boolean</i>
Tree	strip-srv6-tlvs
Description	When configured to true , BGP routes that belong to the address family specified using the family command are advertised to peers with SRv6 TLVs removed. Locally or remotely added SRv6 TLVs can be removed. When configured to false , SRv6 TLVs are not stripped from BGP routes advertised to peers.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-label-ipv4-install *boolean*

Synopsis	Enable selective download for BGP label-ipv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) selective-label-ipv4-install <i>boolean</i>
Tree	selective-label-ipv4-install
Introduced	19.10.R1
Platforms	All

send-communities

Synopsis	Enter the send-communities context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities extended <i>boolean</i>
Tree	extended
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to false, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities large <i>boolean</i>
Tree	large
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to false, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities standard <i>boolean</i>
Tree	standard
Description	When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true . When this command inherits a value of true , BGP standard communities are sent to peers in the Communities attribute. When configured to false , all standard communities are removed from all routes advertised to BGP peers.
Introduced	16.0.R1
Platforms	All

send-default

Synopsis	Enable the send-default context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default
Tree	send-default
Introduced	19.7.R1
Platforms	All

export-policy *reference*

Synopsis	Export policy name
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 family type
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the use of split-horizon is disabled.</p>
Introduced	16.0.R1
Platforms	All

tcp-mss (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) tcp-mss (<i>number</i> <i>keyword</i>)
Tree	tcp-mss
Description	This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command). The configured value controls two properties of the TCP connection as follows: TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router. TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) third-party-nexthop <i>boolean</i>
Tree	third-party-nexthop
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ttl-security <i>number</i>
Tree	ttl-security
Description	This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.

When unconfigured, the command inherits the value of the group-level setting.

Range	1 to 255
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	BGP peer type
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) type keyword
Tree	type
Options	no-type, internal, external
Introduced	16.0.R1
Platforms	All

vpn-apply-export *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) vpn-apply-export <i>boolean</i>
Tree	vpn-apply-export
Description	When configured to true , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false . When this command inherits a value of false , the export policies are not applied.
Introduced	16.0.R1
Platforms	All

vpn-apply-import *boolean*

Synopsis	Apply base-instance BGP import policies to VPN routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) vpn-apply-import <i>boolean</i>
Tree	vpn-apply-import
Description	When configured to true , base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the import policies are not applied.

Introduced	16.0.R1
Platforms	All

neighbor-trust

Synopsis	Enter the neighbor-trust context
Context	configure router string bgp neighbor-trust
Tree	neighbor-trust
Description	<p>Commands in this context enable a label security feature at an inter-AS boundary for the specified IP families.</p> <p>This label security feature allows the configuration of a router, acting in a PE or in an ASBR role, to accept packets of VPRN prefixes only from direct EBGP neighbors to which it advertised a VPRN label.</p> <p>The untrusted state identifies the participating interfaces. The router supports a maximum of 15 network interfaces that can participate in this feature.</p> <p>At a high level, BGP tracks each direct EBGP neighbor over an untrusted interface and to which it sent a VPRN prefix label. For each of those VPRN prefixes, BGP programs a bit map in the ILM record that indicates, on a per-untrusted interface basis, whether the matching received packets must be forwarded or dropped.</p>
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Enable inter-AS label security for the VPN-IPv4 family
Context	configure router string bgp neighbor-trust vpn-ipv4 boolean
Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Enable inter-AS label security for the VPN-IPv6 family
Context	configure router string bgp neighbor-trust vpn-ipv6 boolean

Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

next-hop-resolution

Synopsis	Enter the next-hop-resolution context
Context	configure router <i>string</i> bgp next-hop-resolution
Tree	next-hop-resolution
Introduced	16.0.R1
Platforms	All

allow-unresolved-leaking *boolean*

Synopsis	Allow unresolved BGP routes to be leaked to VPRN routes
Context	configure router <i>string</i> bgp next-hop-resolution allow-unresolved-leaking <i>boolean</i>
Tree	allow-unresolved-leaking
Description	When configured to true , this command instructs BGP in the base router instance to allow its routes to be leaked to other (VPRN) BGP instances even if the routes to be leaked do not have a BGP next-hop that can be resolved by the base instance. When configured to false , VPRN cannot import a route.
Default	false
Introduced	19.10.R1
Platforms	All

labeled-routes

Synopsis	Enter the labeled-routes context
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes
Tree	labeled-routes
Introduced	16.0.R1
Platforms	All

allow-static *boolean*

Synopsis	Allow static routes to resolve BGP next-hop
Context	configure <i>router string</i> <i>bgp next-hop-resolution</i> <i>labeled-routes</i> <i>allow-static</i> <i>boolean</i>
Tree	<i>allow-static</i>
Description	<p>When configured to true, the BGP next-hop of label-IPv4, label-IPv6, VPN-IPv4, and VPN-IPv6 routes received from any EBGP or IBGP peer can be resolved using static routes, except for static default routes (0/0 and ::/0).</p> <p>A static route is less preferred than a local or interface route for resolving the BGP next-hop of labeled route but is more preferred than other IGP routes or tunnels.</p> <p>When configured to false, BGP next-hop resolution using static routes is not allowed.</p> <p>A label-IPv4 or label-IPv6 route can be resolved by a static blackhole route, even when this command is configured to false, but only if the static blackhole route is the longest prefix match (LPM) static route for the BGP next-hop address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

rr-use-route-table *boolean*

Synopsis	Use RTM to resolve BGP next-hop if TTM resolution fails
Context	configure <i>router string</i> <i>bgp next-hop-resolution</i> <i>labeled-routes</i> <i>rr-use-route-table</i> <i>boolean</i>
Tree	<i>rr-use-route-table</i>
Description	<p>When configured to true, this command enables BGP to perform a lookup of IGP routes in the route table to resolve the BGP next-hop of label-IPv4 and label-IPv6 routes. This is useful for a Route Reflector (RR) that does not participate in tunnel signaling protocols such as LDP and RSVP and therefore, does not have tunnels to resolve the BGP next-hops of label-unicast routes.</p> <p>Disable route table installation (via the route-table-install command) before setting this command to true; otherwise, forwarding of label routes resolved in this way will be incorrect.</p> <p>When configured to false, RTM next-hop resolution is not enabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

transport-tunnel

Synopsis	Enter the transport-tunnel context
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Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel
Tree	transport-tunnel
Description	Commands in this context configure options for the next-hop resolution of BGP labeled routes (VPN-IP and labeled-unicast) using tunnels in TTM.
Introduced	16.0.R1
Platforms	All

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i>
Tree	family
Introduced	16.0.R1
Platforms	All

[family-type] *keyword*

Synopsis	Address family type for tunnel selection
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i>
Tree	family
Options	vpn, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> allow-flex-algo-fallback <i>boolean</i>
Tree	allow-flex-algo-fallback
Description	When configured to true , a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.

When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.

Default	false
Introduced	20.10.R1
Platforms	All

enforce-strict-tunnel-tagging *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	configure <i>router string</i> bgp next-hop-resolution labeled-routes transport-tunnel <i>family keyword</i> enforce-strict-tunnel-tagging <i>boolean</i>
Tree	enforce-strict-tunnel-tagging
Description	When configured to true , the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered. When configured to false , matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.
Default	false
Introduced	16.0.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	configure <i>router string</i> bgp next-hop-resolution labeled-routes transport-tunnel <i>family keyword</i> resolution <i>keyword</i>
Tree	resolution
Default	filter
Options	none, filter, any
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
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Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter bgp <i>boolean</i>
Tree	bgp
Description	When configured to true , this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes. When configured to false , BGP tunneling for next-hop resolution is not enabled.
Introduced	16.0.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter ldp <i>boolean</i>
Tree	ldp
Description	When configured to true , this command enables the selection of LDP tunneling for next-hop resolution and specifies the LDP tunnels in the tunnel table corresponding to /32 IPv4 FECs and /128 IPv6 FECs. When configured to false , LDP tunneling for next-hop resolution is not enabled.
Default	true
Introduced	16.0.R1
Platforms	All

mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
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Context	configure <i>router</i> <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter mpls-fwd-policy <i>boolean</i>
Tree	mpls-fwd-policy
Default	false
Introduced	16.0.R4
Platforms	All

rib-api *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	configure <i>router</i> <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter rib-api <i>boolean</i>
Tree	rib-api
Default	false
Introduced	16.0.R4
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure <i>router</i> <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter rsvp <i>boolean</i>
Tree	rsvp
Description	<p>When configured to true, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations.</p> <p>This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to false, this command disables the selection of RSVP tunneling for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
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Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter sr-isis <i>boolean</i>
Tree	sr-isis
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment-routing tunnel in the tunnel table submitted by the lowest preference IS-IS instance or, in case of a tie, the lowest numbered IS-IS instance.</p> <p>When configured to false, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter sr-ospf <i>boolean</i>
Tree	sr-ospf
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPF instance or, in case of a tie, the lowest numbered OSPF instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter sr-ospf3 <i>boolean</i>
Tree	sr-ospf3

Description	<p>When configured to true, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance or, in case of a tie, the lowest numbered OSPFv3 instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R6
Platforms	All

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure <i>router string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	<p>When configured to true, this command enables the use of segment routing policies to resolve the BGP next hop of certain BGP routes (depending on the context).</p> <p>The segment routing policies that are considered are statically configured in the local router or learned by BGP routes (AFI 1/SAFI 73). For a BGP route to be resolved by an SR policy, the highest numbered color extended community attached to BGP route must match the color of the SR policy. Next hop resolution of VPN-IP routes by SR policies is not supported.</p> <p>When configured to false, segment routing policies are not enabled for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure <i>router string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Description	When configured to true , this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution.

In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.

When configured to **false**, the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.

Default	false
Introduced	16.0.R1
Platforms	All

udp boolean

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	configure router string bgp next-hop-resolution labeled-routes transport-tunnel family keyword resolution-filter udp boolean
Tree	udp
Default	false
Introduced	16.0.R1
Platforms	All

use-bgp-routes

Synopsis	Enter the use-bgp-routes context
Context	configure router string bgp next-hop-resolution labeled-routes use-bgp-routes
Tree	use-bgp-routes
Introduced	21.2.R1
Platforms	All

label-ipv6-explicit-null boolean

Synopsis	Use BGP routes to resolve address family routes
Context	configure router string bgp next-hop-resolution labeled-routes use-bgp-routes label-ipv6-explicit-null boolean
Tree	label-ipv6-explicit-null
Description	When configured to true , a labeled IPv6 route with the explicit-null label can be resolved by other routes, and also by unlabeled IPv4 routes and unlabeled IPv6 routes that are resolved by static routes, interface routes, or tunnels. Up to four levels of recursive resolution are supported when the top route is a labeled IPv6 route with an explicit-null label. When disabled, a labeled IPv6 route cannot be resolved by other labeled IPv6 routes.

A labeled IPv6 route with a regular label (not explicit-null) is never resolved by other labeled IPv6 routes.

Default	false
Introduced	21.2.R1
Platforms	All

policy reference

Synopsis	Policy that filters routes for BGP next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution policy reference
Tree	policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

shortcut-tunnel

Synopsis	Enter the shortcut-tunnel context
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel
Tree	shortcut-tunnel
Description	Commands in this context configure the tunnel types that can be used to resolve unlabeled IPv4 and IPv6 BGP routes.
Introduced	16.0.R1
Platforms	All

family [\[family-type\]](#) *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i>
Tree	family
Introduced	16.0.R1
Platforms	All

[family-type] *keyword*

Synopsis	Address family type for shortcut tunnel selection
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Context	configure <i>router string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i>
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure <i>router string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> allow-flex-algo-fallback <i>boolean</i>
Tree	allow-flex-algo-fallback
Description	<p>When configured to true, a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to false, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	20.10.R1
Platforms	All

disallow-igp *boolean*

Synopsis	Do not perform route table lookup to resolve BGP route
Context	configure <i>router string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> disallow-igp <i>boolean</i>
Tree	disallow-igp
Description	<p>When configured to true, no attempt is made to resolve the IPv4 or IPv6 BGP route using route table lookup if no resolving tunnel can be found in the tunnel table.</p> <p>When configured to false, route table lookup can be performed if no resolving tunnel is found in the tunnel table.</p>
Default	false
Introduced	16.0.R1
Platforms	All

enforce-strict-tunnel-tagging *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	configure <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family</i> <i>keyword</i> enforce-strict-tunnel-tagging <i>boolean</i>
Tree	enforce-strict-tunnel-tagging
Description	<p>When configured to true, the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered.</p> <p>When configured to false, matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.</p>
Default	false
Introduced	16.0.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	configure <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family</i> <i>keyword</i> resolution <i>keyword</i>
Tree	resolution
Default	none
Options	none, filter, any
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family</i> <i>keyword</i> resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter bgp <i>boolean</i>
Tree	bgp
Description	When configured to true , this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes. When configured to false , BGP tunneling for next-hop resolution is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter ldp <i>boolean</i>
Tree	ldp
Description	When configured to true , BGP selects the LDP FEC that is the longest prefix match to the BGP next-hop address. When configured to false , LDP tunneling for next-hop resolution is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter mpls-fwd-policy <i>boolean</i>
Tree	mpls-fwd-policy
Default	false
Introduced	16.0.R4
Platforms	All

rib-api *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter rib-api <i>boolean</i>
Tree	rib-api
Default	false
Introduced	16.0.R4
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter rsvp <i>boolean</i>
Tree	rsvp
Description	<p>When configured to true, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations.</p> <p>This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to false, this command disables the selection of RSVP tunneling for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter sr-isis <i>boolean</i>
Tree	sr-isis
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment-routing tunnel in the tunnel table submitted by the lowest preference IS-IS instance or, in case of a tie, the lowest numbered IS-IS instance.</p>

When configured to **false**, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.

Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter sr-ospf boolean</i>
Tree	<i>sr-ospf</i>
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPF instance or, in case of a tie, the lowest numbered OSPF instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter sr-ospf3 boolean</i>
Tree	<i>sr-ospf3</i>
Description	<p>When configured to true, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance or, in case of a tie, the lowest numbered OSPFv3 instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false

Introduced	16.0.R6
Platforms	All

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	<p>When configured to true, this command enables the use of segment routing policies to resolve the BGP next hop of certain BGP routes (depending on the context).</p> <p>The segment routing policies that are considered are statically configured in the local router or learned by BGP routes (AFI 1/SAFI 73). For a BGP route to be resolved by an SR policy, the highest numbered color extended community attached to BGP route must match the color of the SR policy.</p> <p>When configured to false, segment routing policies are not enabled for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution.</p> <p>In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.</p> <p>When configured to false, the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

use-bgp-routes *boolean*

Synopsis	Use BGP routes to resolve BGP next hops
Context	configure router <i>string</i> bgp next-hop-resolution use-bgp-routes <i>boolean</i>
Tree	use-bgp-routes
Description	<p>This command enables the use of BGP routes to resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route.</p> <p>This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN).</p>
Default	false
Introduced	16.0.R1
Platforms	All

vpn-family-policy *reference*

Synopsis	Policy to filter routes for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution vpn-family-policy <i>reference</i>
Tree	vpn-family-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	20.5.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Use weighted ECMP for next-hop tunnel selection for 6PE
Context	configure router <i>string</i> bgp next-hop-resolution weighted-ecmp <i>boolean</i>
Tree	weighted-ecmp
Description	<p>When configured to true, this command enables weighted ECMP for next-hop tunnel selection for 6PE. When weighted ECMP is enabled, the RSVP-TE tunnel used to forward 6PE packets to the ECMP next hop that is chosen according to the outcome of the hash on the packet at the normalized load-balancing weight of the tunnel.</p> <p>When configured to false, weighted ECMP is disabled for next-hop tunnel selection for 6PE.</p>
Default	false
Introduced	16.0.R1

Platforms All

optimal-route-reflection

Synopsis Enter the **optimal-route-reflection** context
 Context **configure** *router string* **bgp optimal-route-reflection**
 Tree **optimal-route-reflection**
 Introduced 16.0.R1
 Platforms All

location [*location-id*] *number*

Synopsis Enter the **location** list instance
 Context **configure** *router string* **bgp optimal-route-reflection location** *number*
 Tree **location**
 Description Commands in this context configure the location ID for the route reflector. A BGP neighbor can be associated with a location if it is a route-reflector client.
 Up to three IPv4 addresses and three IPv6 addresses can be specified per location.
 If the TE DB is unable find a node in its topology database that matches a primary address of the location, it tries to find a node matching a secondary address. If this attempt also fails, the TE DB tries to find a node matching a tertiary address.
 The IP addresses specified for a location should be topologically “close” to a set of clients that should all receive the same optimal path for that location.
 Introduced 16.0.R1
 Platforms All

[*location-id*] *number*

Synopsis Optimal route reflection location ID
 Context **configure** *router string* **bgp optimal-route-reflection location** *number*
 Tree **location**
 Range 1 to 255
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

primary-ip-address *string*

Synopsis	Primary IPv4 address of the reference location for ORR
Context	configure router <i>string</i> bgp optimal-route-reflection location <i>number</i> primary-ip-address <i>string</i>
Tree	primary-ip-address
Introduced	16.0.R1
Platforms	All

primary-ipv6-address *string*

Synopsis	Primary IPv6 address of the reference location for ORR
Context	configure router <i>string</i> bgp optimal-route-reflection location <i>number</i> primary-ipv6-address <i>string</i>
Tree	primary-ipv6-address
Introduced	16.0.R4
Platforms	All

secondary-ip-address *string*

Synopsis	Secondary IPv4 address of reference location for ORR
Context	configure router <i>string</i> bgp optimal-route-reflection location <i>number</i> secondary-ip-address <i>string</i>
Tree	secondary-ip-address
Introduced	16.0.R1
Platforms	All

secondary-ipv6-address *string*

Synopsis	Secondary IPv6 address of reference location for ORR
Context	configure router <i>string</i> bgp optimal-route-reflection location <i>number</i> secondary-ipv6-address <i>string</i>
Tree	secondary-ipv6-address
Introduced	16.0.R4
Platforms	All

tertiary-ip-address *string*

Synopsis	Tertiary IPv4 address of the reference location for ORR
Context	configure router <i>string</i> bgp optimal-route-reflection location <i>number</i> tertiary-ip-address <i>string</i>
Tree	tertiary-ip-address
Introduced	16.0.R1
Platforms	All

tertiary-ipv6-address *string*

Synopsis	Tertiary IPv6 address of the reference location for ORR
Context	configure router <i>string</i> bgp optimal-route-reflection location <i>number</i> tertiary-ipv6-address <i>string</i>
Tree	tertiary-ipv6-address
Introduced	16.0.R4
Platforms	All

spf-wait

Synopsis	Enter the spf-wait context
Context	configure router <i>string</i> bgp optimal-route-reflection spf-wait
Tree	spf-wait
Description	Commands in this context specify the interval between consecutive SPF calculations performed by the TE DB in support of BGP optimal route reflection. The time components implement an exponential back-off algorithm. .
Introduced	16.0.R1
Platforms	All

initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure router <i>string</i> bgp optimal-route-reflection spf-wait initial-wait <i>number</i>
Tree	initial-wait
Range	1 to 300
Default	5

Introduced	16.0.R1
Platforms	All

max-wait *number*

Synopsis	Maximum interval between consecutive SPF calculations
Context	configure router <i>string</i> bgp optimal-route-reflection spf-wait max-wait <i>number</i>
Tree	max-wait
Range	1 to 600
Default	60
Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Delay between first and second SPF calculation
Context	configure router <i>string</i> bgp optimal-route-reflection spf-wait second-wait <i>number</i>
Tree	second-wait
Range	1 to 300
Default	15
Introduced	16.0.R1
Platforms	All

outbound-route-filtering

Synopsis	Enable the outbound-route-filtering context
Context	configure router <i>string</i> bgp outbound-route-filtering
Tree	outbound-route-filtering
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF). When unconfigured, the ORF capabilities are not enabled.
Introduced	16.0.R1
Platforms	All

extended-community

Synopsis	Enable the extended-community context
Context	configure <i>router string</i> bgp outbound-route-filtering extended-community
Tree	extended-community
Description	<p>Commands in this context configure the ORF send and receive capabilities based on Extended Communities.</p> <p>When this context is unconfigured, the ORF capabilities for Extended Communities is not enabled.</p>
Introduced	16.0.R1
Platforms	All

accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	configure <i>router string</i> bgp outbound-route-filtering extended-community accept-orf boolean
Tree	accept-orf
Description	<p>When configured to true, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.</p> <p>When configured to false, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.</p>
Default	false
Introduced	16.0.R1
Platforms	All

send-orf

Synopsis	Enable the send-orf context
Context	configure <i>router string</i> bgp outbound-route-filtering extended-community send-orf
Tree	send-orf
Description	<p>Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.</p> <p>When this context is unconfigured, ORF send capability is not enabled.</p>
Introduced	16.0.R1
Platforms	All

route-target [*community-name*] *string*

Synopsis	Add a list entry for route-target
Context	configure <i>router string</i> bgp outbound-route-filtering extended-community send-orf route-target <i>string</i>
Tree	route-target
Introduced	16.0.R1
Platforms	All

[community-name] *string*

Synopsis	Route target community name
Context	configure <i>router string</i> bgp outbound-route-filtering extended-community send-orf route-target <i>string</i>
Tree	route-target
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

override-tunnel-elc *boolean*

Synopsis	Enable entropy label capability on BGP tunnels
Context	configure <i>router string</i> bgp override-tunnel-elc <i>boolean</i>
Tree	override-tunnel-elc
Description	<p>When configured to true, this command renders all far ends for BGP tunnels as entropy-label-capable, regardless of any received capability signaling. This ensures that the entropy label will be inserted on BGP tunnels in the absence of capability signaling support by the far end.</p> <p>This is a system-wide configuration, since efficient entropy label operation requires that all LSRs in a network support entropy labels. This command should be used with care, particularly in inter-AS use cases, as entropy label capability may differ between domains.</p> <p>When configured to false, this command disables all far ends for BGP tunnels as entropy-label-capable.</p>
Default	false
Introduced	16.0.R1

Platforms All

path-mtu-discovery *boolean*

Synopsis Enable Path MTU Discovery

Context **configure** *router string bgp path-mtu-discovery boolean*

Tree [path-mtu-discovery](#)

Description When configured to **true**, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Default false

Introduced 16.0.R1

Platforms All

peer-ip-tracking *boolean*

Synopsis Enable BGP peer tracking

Context **configure** *router string bgp peer-ip-tracking boolean*

Tree [peer-ip-tracking](#)

Default false

Introduced 16.0.R1

Platforms All

peer-tracking-policy *reference*

Synopsis Policy for BGP peer tracking on router instance

Context **configure** *router string bgp peer-tracking-policy reference*

Tree [peer-tracking-policy](#)

Description	<p>This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled.</p> <p>When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.</p> <p>Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	configure router <i>string</i> bgp preference <i>number</i>
Tree	preference
Description	<p>This command configures the route preference for routes learned from the configured peers.</p> <p>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.</p>
Range	1 to 255
Default	170
Introduced	16.0.R1
Platforms	All

purge-timer *number*

Synopsis	Maximum time before stale routes are purged
Context	configure router <i>string</i> bgp purge-timer <i>number</i>
Tree	purge-timer
Description	<p>This command configures the maximum time before stale routes are purged.</p> <p>When a route refresh request is sent to a peer for VPN-IP routes received from that peer (in the RIB-IN), the routes are set to stale and the purge timer is started. If the routes are not updated (refreshed) before the purge timer expires, the routes are removed.</p>
Range	1 to 60
Default	10

Introduced 16.0.R1
Platforms All

rapid-update

Synopsis Enter the **rapid-update** context
Context **configure router string bgp rapid-update**
Tree **rapid-update**
Description Commands in this context specify the address families that are configured to support the rapid update functionality.
The rapid update functionality overrides the remaining time on a peer's MRAI timer and immediately sends routes belonging the specified address families (and all other pending updates) to the peers receiving these routes.
Introduced 16.0.R1
Platforms All

evpn boolean

Synopsis Include EVPN address family routes
Context **configure router string bgp rapid-update evpn boolean**
Tree **evpn**
Default false
Introduced 16.0.R1
Platforms All

I2-vpn boolean

Synopsis Include L2 VPN address family routes
Context **configure router string bgp rapid-update I2-vpn boolean**
Tree **I2-vpn**
Default false
Introduced 16.0.R1
Platforms All

label-ipv4 *boolean*

Synopsis	Include labeled IPv4 address family routes
Context	configure router <i>string</i> bgp rapid-update label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Include labeled IPv6 address family routes
Context	configure router <i>string</i> bgp rapid-update label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Include multicast VPN IPv4 address family routes
Context	configure router <i>string</i> bgp rapid-update mcast-vpn-ipv4 <i>boolean</i>
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Include multicast VPN IPv6 address family routes
Context	configure router <i>string</i> bgp rapid-update mcast-vpn-ipv6 <i>boolean</i>
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mdt-safi *boolean*

Synopsis	Include MDT SAFI address family routes
Context	configure <i>router string bgp rapid-update mdt-safi boolean</i>
Tree	mdt-safi
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Include MVPN IPv4 address family routes
Context	configure <i>router string bgp rapid-update mvpn-ipv4 boolean</i>
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Include MVPN IPv6 address family routes
Context	configure <i>router string bgp rapid-update mvpn-ipv6 boolean</i>
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Include VPN IPv4 address family routes
Context	configure <i>router string bgp rapid-update vpn-ipv4 boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Include VPN IPv6 address family routes
Context	configure <i>router string</i> bgp rapid-update vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

rapid-withdrawal *boolean*

Synopsis	Send BGP withdrawal UPDATE messages immediately
Context	configure <i>router string</i> bgp rapid-withdrawal <i>boolean</i>
Tree	rapid-withdrawal
Description	<p>When configured to true, UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger.</p> <p>When configured to false, withdrawal processing continues with the normal behavior.</p>
Default	false
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the remove-private context
Context	configure <i>router string</i> bgp remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure <i>router string</i> bgp remove-private limited <i>boolean</i>
Tree	limited

Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure router <i>string</i> bgp remove-private replace <i>boolean</i>
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if AS-PATH contains eBGP peer's ASN
Context	configure router <i>string</i> bgp remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

rib-management

Synopsis	Enter the rib-management context
Context	configure router <i>string</i> bgp rib-management
Tree	rib-management
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> bgp rib-management ipv4
Tree	ipv4

Introduced 16.0.R1
Platforms All

leak-import

Synopsis Enter the **leak-import** context
Context **configure** [router](#) *string* [bgp](#) [rib-management](#) [ipv4](#) [leak-import](#)
Tree [leak-import](#)
Description Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced 16.0.R1
Platforms All

policy (*policy-expr-string* | *string*)

Synopsis Leak import policy name
Context **configure** [router](#) *string* [bgp](#) [rib-management](#) [ipv4](#) [leak-import](#) [policy](#) (*policy-expr-string* | *string*)
Tree [policy](#)
Description This command specifies one or more leak import policies.
Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length 1 to 255
Max. Instances 15
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

route-table-import

Synopsis Enter the **route-table-import** context
Context **configure** [router](#) *string* [bgp](#) [rib-management](#) [ipv4](#) [route-table-import](#)

Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure router <i>string</i> bgp rib-management ipv4 route-table-import policy-name reference

Tree	policy-name
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Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.
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When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.

Aggregate routes are always imported into each RIB, independent of the specified policy.

Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.

When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Reference	configure policy-options policy-statement string
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>string</i> bgp rib-management ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

leak-import

Synopsis	Enter the leak-import context
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Context	configure router <i>string</i> bgp rib-management ipv6 leak-import
Tree	leak-import
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv6 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure router <i>string</i> bgp rib-management ipv6 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the route-table-import context
Context	configure router <i>string</i> bgp rib-management ipv6 route-table-import
Tree	route-table-import
Description	This command enables the context to specify the name of a route to control the importation of active routes from the IP route table into one of the BGP RIBs. If this command is configured, then routes dropped or rejected by the configured policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by this command then the

best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.

Aggregate routes are always imported into each RIB, independent of this command's policy.

Route modifications specified in the actions of this command's policy are ignored and have no effect on the imported routes.

If this command is not configured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure router <i>string</i> bgp rib-management ipv6 route-table-import policy-name <i>reference</i>
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure router <i>string</i> bgp rib-management label-ipv4
Tree	label-ipv4

Introduced 16.0.R1
Platforms All

leak-import

Synopsis Enter the **leak-import** context
Context **configure** [router](#) *string* [bgp](#) [rib-management](#) [label-ipv4](#) [leak-import](#)
Tree [leak-import](#)
Description Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the labeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced 16.0.R1
Platforms All

policy (*policy-expr-string* | *string*)

Synopsis Leak import policy name
Context **configure** [router](#) *string* [bgp](#) [rib-management](#) [label-ipv4](#) [leak-import](#) [policy](#) (*policy-expr-string* | *string*)
Tree [policy](#)
Description This command specifies one or more leak import policies.
Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length 1 to 255
Max. Instances 15
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

route-table-import

Synopsis Enter the **route-table-import** context
Context **configure** [router](#) *string* [bgp](#) [rib-management](#) [label-ipv4](#) [route-table-import](#)

Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure router <i>string</i> bgp rib-management label-ipv4 route-table-import policy-name reference
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure router <i>string</i> bgp rib-management label-ipv6
Tree	label-ipv6
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the route-table-import context
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Context	configure router <i>string</i> bgp rib-management label-ipv6 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure router <i>string</i> bgp rib-management label-ipv6 route-table-import policy-name reference
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

route-table-install *boolean*

Synopsis	Install all IPv4 and IPv6 BGP routes in FIB and RTM
Context	configure router <i>string</i> bgp route-table-install <i>boolean</i>
Tree	route-table-install
Default	true
Introduced	16.0.R1
Platforms	All

route-target-list [**community-name**] *string*

Synopsis	Add a list entry for route-target-list
Context	configure router <i>string</i> bgp route-target-list <i>string</i>
Tree	route-target-list
Description	This command specifies a route target to be accepted from or advertised to peers. This command is only applicable if the router is a route-reflector server.
Introduced	16.0.R1
Platforms	All

[community-name] *string*

Synopsis	Route target community name
Context	configure router <i>string</i> bgp route-target-list <i>string</i>
Tree	route-target-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

router-id *string*

Synopsis	Router ID for the BGP instance in the AS
Context	configure router <i>string</i> bgp router-id <i>string</i>
Tree	router-id
Description	This command specifies the router ID to be used with the BGP instance. Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID. When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address.
Introduced	16.0.R1
Platforms	All

rr-vpn-forwarding *boolean*

Synopsis	Allow route reflector to forward VPN-IP routes
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Context	configure router <i>string</i> bgp rr-vpn-forwarding <i>boolean</i>
Tree	rr-vpn-forwarding
Description	<p>When configured to true, the route reflector resolves VPN-IPv4 and VPN-IPv6 routes, sets itself as the next hop, and generates new labels for all the resolved routes.</p> <p>During this process, all received VPN-IP routes, regardless of route target, are imported into the dummy VRF, where the BGP next hops are resolved. The routes are resolved to next-hop-self, and BGP allocates new VPRN service-label values for the routes, which are then advertised to peers.</p> <p>The transport-tunnel command under the configure router bgp next-hop-resolution labeled-routes context determines what types of tunnels are eligible to resolve the next hops. If a received VPN-IP route from IBGP peer X is resolved and selected as the best path so that it can be re-advertised to an IBGP peer Y, and the BGP next-hop is modified toward peer Y (by using the next-hop-self command in Y's group or neighbor context or by using a next-hop action in an export policy applied to Y), BGP allocates a new VPRN service label value for the route, signals that new label value to Y, and programs the IOM to do the corresponding label swap operation. The supported combinations of X and Y are outlined below:</p> <ul style="list-style-type: none">• from X (client) to Y (client)• from X (client) to Y (non-client)• from X (non-client) to Y (client) <p>When configured to false, the routes are re-advertised without signaling new VPRN labels, even if the BGP next hop is changed.</p> <p>Nokia recommends setting this command to false for scaling and convergence reasons.</p>
Default	false
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router <i>string</i> bgp segment-routing
Tree	segment-routing
Description	Commands in this context configure options related to BGP segment routing (including prefix SID support).
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	configure router <i>string</i> bgp segment-routing admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

prefix-sid-range

Synopsis	Enable the prefix-sid-range context
Context	configure router <i>string</i> bgp segment-routing prefix-sid-range
Tree	prefix-sid-range
Introduced	19.10.R1
Platforms	All

global

Synopsis	Allow label allocation from entire SRBG space
Context	configure router <i>string</i> bgp segment-routing prefix-sid-range global
Tree	global
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	19.10.R1
Platforms	All

max-index *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Last label value available in contiguous range
Context	configure router <i>string</i> bgp segment-routing prefix-sid-range max-index <i>number</i>
Tree	max-index
Range	0 to 524287

Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	19.10.R1
Platforms	All

start-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	First label value available in a contiguous range
Context	configure <i>router string</i> bgp segment-routing prefix-sid-range start-label <i>number</i>
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	19.10.R1
Platforms	All

segment-routing-v6

Synopsis	Enable the segment-routing-v6 context
Context	configure <i>router string</i> bgp segment-routing-v6
Tree	segment-routing-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure <i>router string</i> bgp segment-routing-v6 family <i>keyword</i>
Tree	family
Description	Commands in this context configure family-specific behavior for processing prefix SID attributes containing SRv6 TLVs.
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[family-type] *keyword*

Synopsis IP address type that SRv6 route attributes apply to
Context **configure** *router string* [bgp segment-routing-v6 family keyword](#)
Tree [family](#)
Options ipv4, ipv6
Notes This element is part of a list key.
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

add-srv6-tlvs

Synopsis Enable the **add-srv6-tlvs** context
Context **configure** *router string* [bgp segment-routing-v6 family keyword](#) [add-srv6-tlvs](#)
Tree [add-srv6-tlvs](#)
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator-name *reference*

Synopsis SRv6 locator name
Context **configure** *router string* [bgp segment-routing-v6 family keyword](#) [add-srv6-tlvs locator-name reference](#)
Tree [locator-name](#)
Reference **configure** *router string* [segment-routing segment-routing-v6 base-routing-instance locator reference](#)
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator-name *reference*

Synopsis Micro-segment SRv6 locator name
Context **configure** *router string* [bgp segment-routing-v6 family keyword](#) [add-srv6-tlvs micro-segment-locator-name reference](#)

Tree	micro-segment-locator-name
Description	This command adds a prefix SID attribute containing an SRv6 TLV to routes that belong to the family and that are redistributed from another protocol to BGP. This command also adds a prefix SID attribute with SRv6 TLV to BGP routes that are received from other peers without the SRv6 TLV and that are propagated to other peers with next-hop-self applied.
Reference	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ignore-received-srv6-tlvs *boolean*

Synopsis	Ignore SRv6 TLVs for received routes
Context	configure router <i>string</i> bgp segment-routing-v6 family <i>keyword</i> ignore-received-srv6-tlvs <i>boolean</i>
Tree	ignore-received-srv6-tlvs
Description	<p>When configured to true, if a route of the family is received with a prefix SID attribute carrying an SRv6 TLV, the SRv6 TLV is ignored and the route resolution is based on the BGP next-hop only.</p> <p>When configured to false, if a route of the family is received with a prefix SID attribute carrying an SRv6 TLV, the SRv6 TLV is processed. Such a route is resolved only if its BGP next-hop is reachable and the locator prefix is reachable. The datapath programming and IGP cost to reach the next-hop (used by the BGP decision process) is based on the route to the locator prefix.</p>
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

resolution *keyword*

Synopsis	Resolution options for routes
Context	configure router <i>string</i> bgp segment-routing-v6 family <i>keyword</i> resolution <i>keyword</i>
Tree	resolution
Default	route-table
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address *string*

Synopsis	Source address used in SRv6 packet
Context	configure <i>router string</i> bgp segment-routing-v6 source-address <i>string</i>
Tree	source-address
Description	<p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the router "base" segment-routing segment-routing-v6 source-address context.</p> <p>A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-label-ip *keyword*

Synopsis	Label IP routes installed for local use on NHS router
Context	configure <i>router string</i> bgp selective-label-ip <i>keyword</i>
Tree	selective-label-ip
Description	<p>This command enables selective installation of labeled unicast routes for resolution by local services and IP shortcuts on a labeled unicast Next-hop=self router.</p> <p>This command is supported for labeled unicast for both IPv4 and IPv6 routes.</p> <p>The no-install option installs labeled IP routes that are required by services. This option conserves labeled route table space in addition to RTM table space on BGP-LU next-hop-self route reflectors. The route-table-install-only option ensures that the labeled unicast routes are installed in the RTM in full. When no-install is specified, the download of labeled unicast routes for NHLFE resolution by services continues.</p>
Options	no-install, route-table-install-only
Introduced	22.10.R1
Platforms	All

selective-label-ip-prioritization *boolean*

Synopsis	Enable BGP selective prioritization for labeled routes
Context	configure <i>router string</i> bgp selective-label-ip-prioritization <i>boolean</i>
Tree	selective-label-ip-prioritization

Description	<p>When this command is set to true, every labeled IPv4 and IPv6 route that is received and potentially usable by a local service is automatically prioritized for fast control plane reconvergence. When the reachability of a BGP next-hop changes, the labeled IPv4 and IPv6 routes are updated into the route table first, along with other routes manually tagged as high priority by import policies. A /32 or /128 labeled unicast route (and associated BGP-LU tunnel) is determined to be potentially usable by a local service if one of the following conditions applies:</p> <ul style="list-style-type: none"> the route matches the far-end address of a user-provisioned SDP of a Layer 2 service and the SDP is configured to use BGP tunnels as transport the route matches the BGP next-hop address of a BGP-EVPN or IP VPN route, and this VPN route is either imported into a local service or readvertised by the router acting as a next-hop-self route reflector or a model-B ASBR <p>When this command is set to false, selective-label IP prioritization for BGP is not used.</p>
Default	false
Introduced	21.10.R1
Platforms	All

selective-label-ipv4-install *boolean*

Synopsis	Enable selective download for BGP label-ipv4 routes
Context	configure <i>router string</i> bgp selective-label-ipv4-install <i>boolean</i>
Tree	selective-label-ipv4-install
Default	false
Introduced	19.10.R1
Platforms	All

send-communities

Synopsis	Enter the send-communities context
Context	configure <i>router string</i> bgp send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	configure <i>router string</i> bgp send-communities extended <i>boolean</i>

Tree	extended
Default	true
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	configure router <i>string</i> bgp send-communities large <i>boolean</i>
Tree	large
Default	true
Introduced	16.0.R1
Platforms	All

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	configure router <i>string</i> bgp send-communities standard <i>boolean</i>
Tree	standard
Default	true
Introduced	16.0.R1
Platforms	All

send-default

Synopsis	Enter the send-default context
Context	configure router <i>string</i> bgp send-default
Tree	send-default
Introduced	19.7.R1
Platforms	All

export-policy *reference*

Synopsis	Export policy name
Context	configure router <i>string</i> bgp send-default export-policy <i>reference</i>

Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	configure router <i>string</i> bgp send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	configure router <i>string</i> bgp send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure router <i>string</i> bgp split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When configured to false, the use of split-horizon is disabled.</p>
Default	false

Introduced	16.0.R1
Platforms	All

sr-policy-import *boolean*

Synopsis	Import all segment routing policies into the BGP RIB
Context	configure router <i>string</i> bgp sr-policy-import <i>boolean</i>
Tree	sr-policy-import
Description	<p>When configured to true, statically-configured non-local segment routing policies from the segment routing database are imported into the BGP RIB so that they can be advertised as originated routes toward BGP peers supporting segment routing policies (sr-policy-ipv4 IP family type).</p> <p>When configured to false, the SR policies are not imported into the BGP RIB.</p>
Default	false
Introduced	16.0.R1
Platforms	All

subconfed-vpn-forwarding *boolean*

Synopsis	Allow subconfed route resolution, next hop and labels
Context	configure router <i>string</i> bgp subconfed-vpn-forwarding <i>boolean</i>
Tree	subconfed-vpn-forwarding
Description	<p>When this is set to true, the base router BGP instance retains all received VPN-IPv4 and VPN-IPv6 routes, including those with route targets not matching any VRF import policy of any locally configured VPRN. In addition, when the base router BGP is configured to apply a next-hop-self command to a peer of any type (EBGP, IBGP, or confed-EBGP), VPN-IPv4 and VPN-IPv6 routes are advertised to the peer with a new BGP label, next hop, and label-swap forwarding entry. These behaviors described above are applied when the enable-inter-as-vpn or enable-rr-vpn-forwarding commands are enabled in the configure router bgp context, in the same BGP instance. This applies regardless of whether the base router has a confederation configuration.</p> <p>When this command is set to false, subconfederation VPN forwarding is not used.</p>
Default	false
Introduced	21.10.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size override
Context	configure <i>router</i> <i>string</i> bgp <i>tcp-mss</i> <i>number</i>
Tree	tcp-mss
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Introduced	21.2.R1
Platforms	All

third-party-next-hop *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	configure <i>router</i> <i>string</i> bgp <i>third-party-next-hop</i> <i>boolean</i>
Tree	third-party-next-hop
Description	<p>When configured to true, this command enables the router to send third-party next hop to EBGp peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGp peer and advertised to another EBGp peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When configured to false, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Default	false
Introduced	16.0.R1
Platforms	All

vpn-apply-export *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	configure <i>router</i> <i>string</i> bgp <i>vpn-apply-export</i> <i>boolean</i>

Tree	vpn-apply-export
Description	When configured to true , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When configured to false , the export policies are not applied.
Default	false
Introduced	16.0.R1
Platforms	All

vpn-apply-import *boolean*

Synopsis	Apply base-instance import route policies to VPN routes
Context	configure router <i>string</i> bgp vpn-apply-import <i>boolean</i>
Tree	vpn-apply-import
Description	When configured to true , base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When configured to false , the import policies are not applied.
Default	false
Introduced	16.0.R1
Platforms	All

bier

Synopsis	Enable the bier context
Context	configure router <i>string</i> bier
Tree	bier
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	configure router <i>string</i> bier admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 19.5.R1
Platforms All

bfd-liveness *keyword*

Synopsis BIER next-hops with BFD enabled
Context **configure** *router string bier bfd-liveness keyword*
Tree [bfd-liveness](#)
Options ipv4
Max. 1
Instances
Introduced 21.7.R1
Platforms All

fast-reroute *boolean*

Synopsis Enable BIER Fast Reroute
Context **configure** *router string bier fast-reroute boolean*
Tree [fast-reroute](#)
Default false
Introduced 21.7.R1
Platforms All

template [[template-name](#)] *string*

Synopsis Enter the **template** list instance
Context **configure** *router string bier template string*
Tree [template](#)
Description Commands in this context create a BIER template to be assigned to IGP.
Introduced 19.5.R1
Platforms All

[template-name] *string*

Synopsis BIER template name

Context	configure router string bier template string
Tree	template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the BIER template
Context	configure router string bier template string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

sub-domain [start] number end number

Synopsis	Enter the sub-domain list instance
Context	configure router string bier template string sub-domain number end number
Tree	sub-domain
Introduced	19.5.R1
Platforms	All

[start] number

Synopsis	Lower bound of sub-domain range
Context	configure router string bier template string sub-domain number end number
Tree	sub-domain
Range	0 to 255
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

end number

Synopsis	Upper bound of sub-domain range
Context	configure router <i>string bier template string sub-domain number end number</i>
Tree	sub-domain
Range	0 to 255
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

bfr-id number

Synopsis	BIER ID for the sub-domain
Context	configure router <i>string bier template string sub-domain number end number bfr-id number</i>
Tree	bfr-id
Range	1 to 4096
Introduced	19.5.R1
Platforms	All

multi-topology keyword

Synopsis	Multi-topology for the sub-domain
Context	configure router <i>string bier template string sub-domain number end number multi-topology keyword</i>
Tree	multi-topology
Default	ipv4-unicast
Options	ipv4-unicast, ipv6-unicast, ipv4-multicast, ipv6-multicast
Introduced	19.5.R1
Platforms	All

prefix string

Synopsis	IP address used as BFR prefix
Context	configure router <i>string bier template string sub-domain number end number prefix string</i>

Tree	prefix
Description	This command specifies the IP address to be used as the BFR prefix. The prefix can be a loopback interface or system IP address.
Default	0.0.0.0
Introduced	19.5.R1
Platforms	All

class-forwarding *boolean*

Synopsis	Allow class-based forwarding over IGP shortcuts
Context	configure router <i>string</i> class-forwarding <i>boolean</i>
Tree	class-forwarding
Description	<p>When configured to true, this command enables class-based forwarding (CBF) over IGP shortcuts.</p> <p>Weighted ECMP, at the transport-tunnel level of BGP prefixes over IGP shortcuts, and the CBF feature on a per-BGP next-hop basis are mutually exclusive.</p> <p>When configured to false, class-based forwarding (CBF) over IGP shortcuts is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

confederation

Synopsis	Enter the confederation context
Context	configure router <i>string</i> confederation
Tree	confederation
Description	<p>Commands in this context configure members that are to be part of a confederation.</p> <p>Creating confederation autonomous systems within an AS can be used to reduce the number of IBGP sessions required within an AS.</p>
Introduced	16.0.R1
Platforms	All

confed-as-num *number*

Synopsis	Confederation AS number
Context	configure router <i>string</i> confederation confed-as-num <i>number</i>

Tree	confed-as-num
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

members [[as-number](#)] *number*

Synopsis	Add a list entry for members
Context	configure router <i>string</i> confederation members <i>number</i>
Tree	members
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[as-number] *number*

Synopsis	Confederation member AS number
Context	configure router <i>string</i> confederation members <i>number</i>
Tree	members
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dhcp-server

Synopsis	Enter the dhcp-server context
Context	configure <i>router string dhcp-server</i>
Tree	<i>dhcp-server</i>
Introduced	16.0.R1
Platforms	All

dhcpv4 [name] string

Synopsis	Enter the dhcpv4 list instance
Context	configure <i>router string dhcp-server dhcpv4 string</i>
Tree	<i>dhcpv4</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	DHCP server name
Context	configure <i>router string dhcp-server dhcpv4 string</i>
Tree	<i>dhcpv4</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the DHCP server
Context	configure <i>router string dhcp-server dhcpv4 string admin-state keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure <i>router string dhcp-server dhcpv4 string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure <i>router string dhcp-server dhcpv4 string failover</i>
Tree	failover
Description	Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure <i>router string dhcp-server dhcpv4 string failover admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure <i>router string dhcp-server dhcpv4 string failover ignore-mclt-on-takeover boolean</i>
Tree	ignore-mclt-on-takeover

Description	When configured to true , the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire. When configured to false , the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure <i>router string dhcp-server dhcpv4 string failover maximum-client-lead-time number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure <i>router string dhcp-server dhcpv4 string failover partner-down-delay number</i>

Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Default	86399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> failover peer <i>reference</i>
Tree	peer
Description	<p>Commands in this context define the peer-related parameters for DHCP failover.</p> <p>DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link.</p> <p>MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed.</p> <p>The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis communication link is broken. In this case, the two redundant nodes can become isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.</p>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> failover peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> failover peer <i>reference</i> sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600

Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-renews *boolean*

Synopsis	Send FORCERENEW messages to force renewals of leases
Context	configure <i>router string dhcp-server dhcpv4 string force-renews boolean</i>
Tree	force-renews
Description	When configured to true , FORCERENEW messages are enabled for DHCP.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-hold

Synopsis	Enter the lease-hold context
Context	configure <i>router string dhcp-server dhcpv4 string lease-hold</i>
Tree	lease-hold
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

additional-scenarios

Synopsis	Enter the additional-scenarios context
Context	configure <i>router string dhcp-server dhcpv4 string lease-hold additional-scenarios</i>
Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> lease-hold additional-scenarios internal-lease-ipsec <i>boolean</i>
Tree	internal-lease-ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> lease-hold additional-scenarios solicited-release <i>boolean</i>
Tree	solicited-release
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Lease hold time
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> lease-hold time <i>number</i>
Tree	time
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool [*pool-name*] *string*

Synopsis	Enter the pool list instance
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i>
Tree	pool

Description	Commands in this context configure a DHCP address pool on the router.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[pool-name] string

Synopsis	DHCP server pool name
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i>
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover
Tree	failover
Description	Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time

currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.

Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover partner-down-delay <i>number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Default	86399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [**address**] *reference*

Synopsis	Enter the peer list instance
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover peer <i>reference</i>
Tree	peer
Description	Commands in this context configure peer-related parameters for DHCP failover. DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is

carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link.

MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed.

The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis communication link is broken. In this case, the two redundant nodes can become isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.

Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] reference

Synopsis	IP address of the failover peer
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover peer <i>reference</i> sync-tag <i>string</i>
Tree	sync-tag

String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lease-time *number*

Synopsis	Maximum lease time
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> max-lease-time <i>number</i>
Tree	max-lease-time
Range	10 to 315446399
Default	864000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-lease-time *number*

Synopsis	Minimum lease time
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> min-lease-time <i>number</i>
Tree	min-lease-time
Range	10 to 315446399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free

Synopsis	Enter the minimum-free context
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free absolute <i>number</i>
Tree	absolute
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
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Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Description	When configured to true , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to false , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free percent <i>number</i>
Tree	percent
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nak-non-matching-subnet *boolean*

Synopsis	Send NAK if no match for request address pool range
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> nak-non-matching-subnet <i>boolean</i>
Tree	nak-non-matching-subnet
Description	When configured to true , a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK. When configured to false or unconfigured, the system drops the DHCP packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

offer-time *number*

Synopsis	Time interval during which a DHCP offer remains valid
Context	configure <i>router string dhcp-server dhcpv4 string pool string offer-time number</i>
Tree	<i>offer-time</i>
Range	10 to 600
Default	60
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure <i>router string dhcp-server dhcpv4 string pool string options</i>
Tree	<i>options</i>
Description	Commands in this context define DHCPv4 pool options.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [*number*] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure <i>router string dhcp-server dhcpv4 string pool string options option (number keyword)</i>
Tree	<i>option</i>
Description	This command configures DHCP options at the pool level. The pool options can be overruled by the value of the same option in the local user database.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*number*] (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	configure <i>router string dhcp-server dhcpv4 string pool string options option (number keyword)</i>

Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time duration
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Remove DHCP option from configuration
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Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option specified as a list of IPv4 addresses
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i>
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option specified as a NetBIOS node type
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Context	configure <i>router string dhcp-server dhcpv4 string pool string options option (number keyword) netbios-node-type keyword</i>
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet [[ipv4-prefix](#)] *string*

Synopsis	Enter the subnet list instance
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string</i>
Tree	subnet
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[\[ipv4-prefix\]](#) *string*

Synopsis	IPv4 prefix for the subnet
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string</i>
Tree	subnet
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-range [[start](#)] *string* [end](#) *string*

Synopsis	Enter the address-range list instance
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string address-range string end string</i>
Tree	address-range
Description	This command configures the range of IP addresses to be served from the pool subnet. The range includes all the IP addresses between the specified start and end addresses, other than specifically excluded addresses. The start and end addresses must be unique within the subnet.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[start] *string*

Synopsis Lower bound of the IP address range

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **subnet** *string* **address-range** *string* **end** *string*

Tree **address-range**

Description This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis Upper bound of the IP address range

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **subnet** *string* **address-range** *string* **end** *string*

Tree **address-range**

Description This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover-control-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Failover control type for this range

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **subnet** *string* **address-range** *string* **end** *string* **failover-control-type** *keyword*

Tree **failover-control-type**

Default local

Options	local, remote, access-driven
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis	Prevent new lease assignment from this subnet
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>pool</i> <i>string</i> <i>subnet</i> <i>string</i> drain <i>boolean</i>
Tree	drain
Description	When configured to true , new leases cannot be assigned and existing leases are kept up until they are released. When configured to false , the subnet is active and new leases can be assigned.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-addresses [*start*] *string* *end* *string*

Synopsis	Add a list entry for exclude-addresses
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>pool</i> <i>string</i> <i>subnet</i> <i>string</i> exclude-addresses <i>string</i> <i>end</i> <i>string</i>
Tree	exclude-addresses
Description	This command configures an IP address to be excluded from the pool of IP addresses in the subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[start] *string*

Synopsis	Lower bound of the IP address range
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>pool</i> <i>string</i> <i>subnet</i> <i>string</i> exclude-addresses <i>string</i> <i>end</i> <i>string</i>
Tree	exclude-addresses
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end string

Synopsis	Upper bound of the IP address range
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> exclude-addresses <i>string</i> end string
Tree	exclude-addresses
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-declined *number*

Synopsis	Maximum number of declined addresses allowed
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> maximum-declined <i>number</i>
Tree	maximum-declined
Max. Range	0 to 4294967295
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free

Synopsis	Enter the minimum-free context
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free absolute number</i>
Tree	<i>absolute</i>
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free event-when-depleted boolean</i>
Tree	<i>event-when-depleted</i>
Description	When configured to true , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to false , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis Enter the **options** context

Context **configure** *router string dhcp-server dhcpv4 string pool string subnet string options*

Tree [options](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] (*number | keyword*)

Synopsis Enter the **option** list instance

Context **configure** *router string dhcp-server dhcpv4 string pool string subnet string options option (number | keyword)*

Tree [option](#)

Description This command configures DHCP options at the pool subnet level. The options can be overruled by the value of the same option in the local user database.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number | keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** *router string dhcp-server dhcpv4 string pool string subnet string options option (number | keyword)*

Tree [option](#)

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option specified as a list of IPv4 addresses
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i>
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option specified as a NetBIOS node type
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i>
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-selection

Synopsis	Enter the pool-selection context
Context	configure router string dhcp-server dhcpv4 string pool-selection
Tree	pool-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-gi-address

Synopsis	Enable the use-gi-address context
Context	configure router string dhcp-server dhcpv4 string pool-selection use-gi-address
Tree	use-gi-address
Description	<p>Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address.</p> <p>A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	GI address-matching scope
Context	configure router string dhcp-server dhcpv4 string pool-selection use-gi-address scope keyword
Tree	scope
Default	subnet
Options	subnet, pool
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool-selection use-pool-from-client
Tree	use-pool-from-client
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool-selection use-pool-from-client delimiter <i>string</i>
Tree	delimiter
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database for authentication
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-identification *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
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Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>user-identification</i> <i>keyword</i>
Tree	<i>user-identification</i>
Options	mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcpv6 [*name*] *string*

Synopsis	Enter the dhcpv6 list instance
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>string</i>
Tree	<i>dhcpv6</i>
Description	Commands in this context configure DHCPv6 parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis	DHCP server name
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>string</i>
Tree	<i>dhcpv6</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP server
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>string</i> <i>admin-state</i> <i>keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-provisioned *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Auto-provision the pools of this server
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> auto-provisioned <i>boolean</i>
Tree	auto-provisioned
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the defaults context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults
Tree	defaults
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options
Tree	options
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [*number*] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>)
Tree	option

Description	This command configures DHCP options at the pool level. The pool options defined here can be overruled by the value of the same option in the local user database.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String Length	1 to 127

Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256

Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i>
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults preferred-lifetime <i>number</i>
Tree	preferred-lifetime
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime. Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Default	3600
Units	seconds
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-time *number*

Synopsis Rebind time for the lease

Context **configure** *router string dhcp-server dhcpv6 string defaults rebind-time number*

Tree [rebind-time](#)

Description This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.

The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.

Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

Range 0 to 1209600

Default 2880

Units seconds

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-time *number*

Synopsis Renew time for the lease

Context **configure** *router string dhcp-server dhcpv6 string defaults renew-time number*

Tree [renew-time](#)

Description This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.

The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.

Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to

extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

Range	0 to 604800
Default	1800
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis Time for the lease to remain valid

Context **configure** *router string dhcp-server dhcpv6 string defaults valid-lifetime number*

Tree *valid-lifetime*

Description This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.

Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).

Range	300 to 315446399
Default	86400
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** *router string dhcp-server dhcpv6 string description string*

Tree *description*

String Length 1 to 80

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure router string dhcp-server dhcpv6 string failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure router string dhcp-server dhcpv6 string failover admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure router string dhcp-server dhcpv6 string failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure <i>router string dhcp-server dhcpv6 string failover maximum-client-lead-time number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure <i>router string dhcp-server dhcpv6 string failover partner-down-delay number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Default	86399
Units	seconds

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] *reference*

Synopsis Enter the **peer** list instance
Context **configure** [router](#) *string* [dhcp-server](#) [dhcpv6](#) *string* [failover](#) [peer](#) *reference*
Tree [peer](#)
Max. Instances 1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] *reference*

Synopsis IP address of the failover peer
Context **configure** [router](#) *string* [dhcp-server](#) [dhcpv6](#) *string* [failover](#) [peer](#) *reference*
Tree [peer](#)
Reference **configure** [redundancy](#) [multi-chassis](#) [peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tag that identifies synchronizing server or pool pairs
Context **configure** [router](#) *string* [dhcp-server](#) [dhcpv6](#) *string* [failover](#) [peer](#) *reference* [sync-tag](#) *string*
Tree [sync-tag](#)
String Length 1 to 32
Notes This element is mandatory.
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure <i>router string dhcp-server dhcpv6 string failover startup-wait-time number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-rapid-commit *boolean*

Synopsis	Ignore Rapid Commit option
Context	configure <i>router string dhcp-server dhcpv6 string ignore-rapid-commit boolean</i>
Tree	ignore-rapid-commit
Description	When configured to true , the server ignores the Rapid Commit option sent by the client and uses the regular message exchange.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-id-mapping *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Map hosts within interface-to-prefix combinations
Context	configure <i>router string dhcp-server dhcpv6 string interface-id-mapping boolean</i>
Tree	interface-id-mapping
Description	When configured to true , this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-hold

Synopsis	Enter the lease-hold context
Context	configure <i>router string dhcp-server dhcpv6 string lease-hold</i>
Tree	lease-hold
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

additional-scenarios

Synopsis	Enter the additional-scenarios context
Context	configure <i>router string dhcp-server dhcpv6 string lease-hold additional-scenarios</i>
Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	configure <i>router string dhcp-server dhcpv6 string lease-hold additional-scenarios internal-lease-ipsec boolean</i>

Tree	internal-lease-ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold additional-scenarios solicited-release <i>boolean</i>
Tree	solicited-release
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Lease hold time
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold time <i>number</i>
Tree	time
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-query *boolean*

Synopsis	Handle and reply to lease query messages
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-query <i>boolean</i>
Tree	lease-query
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool [*pool-name*] *string*

Synopsis	Enter the pool list instance
Context	configure <i>router string dhcp-server dhcpv6 string pool string</i>
Tree	<i>pool</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[pool-name] *string*

Synopsis	DHCP server pool name
Context	configure <i>router string dhcp-server dhcpv6 string pool string</i>
Tree	<i>pool</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix

Synopsis	Enter the delegated-prefix context
Context	configure <i>router string dhcp-server dhcpv6 string pool string delegated-prefix</i>
Tree	<i>delegated-prefix</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis	Prefix length for pool if unspecified by client
Context	configure <i>router string dhcp-server dhcpv6 string pool string delegated-prefix length number</i>
Tree	<i>length</i>
Range	48 to 127
Default	64
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum number

Synopsis Maximum delegated prefix length for this pool

Context **configure** *router string dhcp-server dhcpv6 string pool string delegated-prefix maximum number*

Tree [maximum](#)

Range 48 to 127

Default 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum number

Synopsis Minimum delegated prefix length for this pool

Context **configure** *router string dhcp-server dhcpv6 string pool string delegated-prefix minimum number*

Tree [minimum](#)

Range 48 to 127

Default 48

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis Text description

Context **configure** *router string dhcp-server dhcpv6 string pool string description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-prefix [ipv6-prefix] string

Synopsis Add a list entry for **exclude-prefix**

Context	configure <i>router string dhcp-server dhcpv6 string pool string exclude-prefix string</i>
Tree	<i>exclude-prefix</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-prefix] *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	configure <i>router string dhcp-server dhcpv6 string pool string exclude-prefix string</i>
Tree	<i>exclude-prefix</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure <i>router string dhcp-server dhcpv6 string pool string failover</i>
Tree	<i>failover</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure <i>router string dhcp-server dhcpv6 string pool string failover admin-state keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure <i>router string dhcp-server dhcpv6 string pool string failover</i> ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure <i>router string dhcp-server dhcpv6 string pool string failover</i> maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure <i>router string dhcp-server dhcpv6 string pool string failover partner-down-delay number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Default	86399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure <i>router string dhcp-server dhcpv6 string pool string failover peer reference</i>
Tree	peer
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[address](#)] *reference*

Synopsis	IP address of the failover peer
Context	configure <i>router string dhcp-server dhcpv6 string pool string failover peer reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover peer <i>reference</i> sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127

Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) empty
Tree	empty

Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i>
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix [**ipv6-prefix**] *string*

Synopsis	Enter the prefix list instance
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i>
Tree	prefix
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-prefix**] *string*

Synopsis IPv6 prefix to be excluded from available pool prefixes
 Context **configure** *router string dhcp-server dhcpv6 string pool string prefix string*
 Tree [prefix](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis No new leases can be assigned
 Context **configure** *router string dhcp-server dhcpv6 string pool string prefix string drain boolean*
 Tree [drain](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover-control-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Failover control type for this range
 Context **configure** *router string dhcp-server dhcpv6 string pool string prefix string failover-control-type keyword*
 Tree [failover-control-type](#)
 Default local
 Options local, remote, access-driven
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127

Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) empty
Tree	empty

Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i>
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> preferred-lifetime <i>number</i>
Tree	preferred-lifetime

Description	<p>This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.</p> <p>Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Default	3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length-threshold [**prefix-length**] *number*

Synopsis	Enter the prefix-length-threshold list instance
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number</i>
Tree	prefix-length-threshold
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[prefix-length] *number*

Synopsis	Delegated prefix length for pool thresholds
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number</i>
Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free prefixes for this prefix length
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number absolute number</i>
Tree	<i>absolute</i>
Range	1 to 4294967295
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number event-when-depleted boolean</i>
Tree	<i>event-when-depleted</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum percentage of free prefixes for prefix length
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number percent number</i>
Tree	<i>percent</i>
Range	1 to 100
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-type

Synopsis	Enter the prefix-type context
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-type</i>

Tree	prefix-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-PD prefixes from this prefix pool
Context	configure router string dhcp-server dhcpv6 string pool string prefix string prefix-type pd <i>boolean</i>
Tree	pd
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-host *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-NA or SLAAC prefixes from this prefix pool
Context	configure router string dhcp-server dhcpv6 string pool string prefix string prefix-type wan-host <i>boolean</i>
Tree	wan-host
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-time *number*

Synopsis	Rebind time for the lease
Context	configure router string dhcp-server dhcpv6 string pool string prefix string rebind-time <i>number</i>
Tree	rebind-time

Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Default	2880
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-time *number*

Synopsis	Renew time for the lease
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string renew-time number</i>
Tree	renew-time
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 604800
Default	1800
Units	seconds

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	Time for the lease to remain valid
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string valid-lifetime number</i>
Tree	valid-lifetime
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Default	86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length-threshold [[prefix-length](#)] *number*

Synopsis	Enter the prefix-length-threshold list instance
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix-length-threshold number</i>
Tree	prefix-length-threshold
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[prefix-length] number

Synopsis	Delegated prefix length for pool thresholds
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i>
Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted boolean

Synopsis	Generate a notification when this pool is depleted
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i> event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free-percent number

Synopsis	Percentage of free prefixes for this prefix length
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i> minimum-free-percent <i>number</i>
Tree	minimum-free-percent
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-selection

Synopsis	Enter the pool-selection context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool-selection
Tree	pool-selection

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-link-address

Synopsis	Enable the use-link-address context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool-selection use-link-address
Tree	use-link-address
Description	This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	Scope of the IP address selection
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool-selection use-link-address scope <i>keyword</i>
Tree	scope
Default	subnet
Options	subnet, pool
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool-selection use-pool-from-client
Tree	use-pool-from-client
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
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Context	configure <i>router string dhcp-server dhcpv6 string pool-selection use-pool-from-client delimiter string</i>
Tree	<i>delimiter</i>
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis	Enter the server-id context
Context	configure <i>router string dhcp-server dhcpv6 string server-id</i>
Tree	<i>server-id</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-enterprise

Synopsis	Enter the duid-enterprise context
Context	configure <i>router string dhcp-server dhcpv6 string server-id duid-enterprise</i>
Tree	<i>duid-enterprise</i>
Notes	The following elements are part of a choice: duid-enterprise or duid-link-local .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DUID enterprise server ID specified as an ASCII string
Context	configure <i>router string dhcp-server dhcpv6 string server-id duid-enterprise ascii-string string</i>
Tree	<i>ascii-string</i>
String Length	1 to 58
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis DUID enterprise server ID specified as a hex string

Context **configure** *router string dhcp-server dhcpv6 string server-id duid-enterprise hex-string string*

Tree [hex-string](#)

String Length 1 to 118

Notes The following elements are part of a choice: **ascii-string** or **hex-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-link-local

Synopsis Derive DUID server ID from a system link-layer address

Context **configure** *router string dhcp-server dhcpv6 string server-id duid-link-local*

Tree [duid-link-local](#)

Notes The following elements are part of a choice: **duid-enterprise** or **duid-link-local**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-identification *keyword*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis User identification method for the DHCP server

Context **configure** *router string dhcp-server dhcpv6 string user-identification keyword*

Tree [user-identification](#)

Options mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enter the dns context
Context	configure <i>router string</i> dns
Tree	dns
Introduced	20.2.R1
Platforms	All

redirect-vprn

Synopsis	Enter the redirect-vprn context
Context	configure <i>router string</i> dns redirect-vprn
Tree	redirect-vprn
Description	Commands in this context configure DNS resolution of all packets through the VPRN DNS server. The VPRN DNS server must be configured before using the commands in this context. If the VPRN DNS server is not configured, all packet resolution fails.
Introduced	20.2.R1
Platforms	All

service [*service-name*] *reference*

Synopsis	Enter the service list instance
Context	configure <i>router string</i> dns redirect-vprn service <i>reference</i>
Tree	service
Max. Instances	1
Introduced	20.2.R1
Platforms	All

[*service-name*] *reference*

Synopsis	Administrative service name
Context	configure <i>router string</i> dns redirect-vprn service <i>reference</i>
Tree	service
Reference	configure <i>service vprn string</i>
Notes	This element is part of a list key.

Introduced	20.2.R1
Platforms	All

preference *number*

Synopsis	Service preference
Context	configure router <i>string</i> dns redirect-vprn service <i>reference</i> preference <i>number</i>
Tree	preference
Range	0 to 255
Introduced	20.2.R1
Platforms	All

ecmp *number*

Synopsis	Maximum equal-cost routes for routing table instance
Context	configure router <i>string</i> ecmp <i>number</i>
Tree	ecmp
Description	<p>This command configures ECMP and defines the number of routes for path sharing. For example, the value 2 means that two equal-cost routes are used for cost sharing.</p> <p>ECMP can be used only for routes learned with the same preference and the same protocol.</p> <p>When more ECMP routes are available at the best preference than the number specified with this command, the lowest next-hop IP-address algorithm is used to select the routes.</p> <p>If this command is configured to 1, ECMP path sharing is disabled.</p>
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

entropy-label *boolean*

Synopsis	Use entropy label
Context	configure router <i>string</i> entropy-label <i>boolean</i>
Tree	entropy-label
Description	When configured to true , this command enables the use of entropy labels.

The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the **configure router mpls** or **configure router mpls lsp** context.

This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP.

The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured.

When configured to **false**, this command disables the use of entropy labels.

Default	false
Introduced	16.0.R1
Platforms	All

fib-priority *keyword*

Synopsis	FIB priority for VPRN BGP routes
Context	configure router <i>string fib-priority keyword</i>
Tree	fib-priority
Default	standard
Options	standard, high
Introduced	16.0.R1
Platforms	All

fib-telemetry *boolean*

Synopsis	Collect extra state information
Context	configure router <i>string fib-telemetry boolean</i>
Tree	fib-telemetry
Default	false
Introduced	16.0.R4
Platforms	All

firewall

Synopsis	Enter the firewall context
Context	configure router string firewall
Tree	firewall
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

domain [[name](#)] [string](#)

Synopsis	Enter the domain list instance
Context	configure router string firewall domain string
Tree	domain
Max. Instances	1024
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[name\]](#) [string](#)

Synopsis	Firewall domain name
Context	configure router string firewall domain string
Tree	domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state [keyword](#)

Synopsis	Administrative state of the firewall domain
Context	configure router string firewall domain string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv6-server

Synopsis Enter the **dhcpv6-server** context
Context **configure** *router string firewall domain string dhcpv6-server*
Tree [dhcpv6-server](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis DHCPv6 server name
Context **configure** *router string firewall domain string dhcpv6-server name string*
Tree [name](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Router name
Context **configure** *router string firewall domain string dhcpv6-server router-instance string*
Tree [router-instance](#)
Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group for this domain
Context	configure <i>router string firewall domain string nat-group reference</i>
Tree	<i>nat-group</i>
Reference	configure <i>isa nat-group number</i>
Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [*ip-prefix*] *string*

Synopsis	Enter the prefix list instance
Context	configure <i>router string firewall domain string prefix string</i>
Tree	<i>prefix</i>
Max. Instances	4096
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*ip-prefix*] *string*

Synopsis	IP prefix and prefix length for the domain firewall
Context	configure <i>router string firewall domain string prefix string</i>
Tree	<i>prefix</i>
Description	This command configures a prefix for which firewall functionality applies within the domain. Prefixes cannot be shared or duplicated across multiple domains in the same routing context. A domain can contain multiple prefixes.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure router <i>string</i> firewall domain <i>string</i> prefix <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN GW group used for NAT
Context	configure router <i>string</i> firewall domain <i>string</i> wlan-gw-group <i>reference</i>
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

flowspec

Synopsis	Enter the flowspec context
Context	configure router <i>string</i> flowspec
Tree	flowspec
Introduced	16.0.R1
Platforms	All

filter-cam-type *keyword*

Synopsis	Filter policy type for FlowSpec embedding
Context	configure router <i>string</i> flowspec filter-cam-type <i>keyword</i>
Tree	filter-cam-type

Description	This command specifies the filter type that is required to embed FlowSpec entries. The filter type defines the match criteria that are available in the filter policy.
Default	normal
Options	normal, packet-length
Introduced	20.7.R1
Platforms	All

ip-filter-max-size *number*

Synopsis	Maximum number of flowspec rule entries in IPv4 filter
Context	configure <i>router string flowspec ip-filter-max-size number</i>
Tree	ip-filter-max-size
Description	<p>This command configures the maximum number of IPv4 flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p> <p>The sum of the maximum-size value and the highest offset in any IPv4 filter that embeds IPv4 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of IPv4 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.</p>
Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

ipv6-filter-max-size *number*

Synopsis	Maximum number of flowspec rule entries in IPv6 filter
Context	configure <i>router string flowspec ipv6-filter-max-size number</i>
Tree	ipv6-filter-max-size
Description	<p>This command configures the maximum number of IPv6 flowspec routes or rules that can be embedded into an ingress IPv6 filter policy for a specified routing instance. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p>

The sum of the maximum-size value and the highest offset in any IPv6 filter that embeds IPv6 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.

The maximum size can be adjusted up or down at any time. If the current number of IPv6 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.

Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

gtm

Synopsis	Enter the gtm context
Context	configure router string gtm
Tree	gtm
Introduced	19.5.R1
Platforms	All

mvpn *boolean*

Synopsis	Enable the configuration of MVPN-related parameters
Context	configure router string gtm mvpn boolean
Tree	mvpn
Default	false
Introduced	19.5.R1
Platforms	All

provider-tunnel

Synopsis	Enter the provider-tunnel context
Context	configure router string gtm provider-tunnel
Tree	provider-tunnel
Introduced	19.5.R1
Platforms	All

inclusive

Synopsis	Enter the inclusive context
Context	configure router <i>string</i> gtm provider-tunnel inclusive
Tree	inclusive
Introduced	19.5.R1
Platforms	All

rsvp

Synopsis	Enable the rsvp context
Context	configure router <i>string</i> gtm provider-tunnel inclusive rsvp
Tree	rsvp
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of P2MP RSVP as provider tunnel
Context	configure router <i>string</i> gtm provider-tunnel inclusive rsvp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

lsp-template *reference*

Synopsis	LSP template name
Context	configure router <i>string</i> gtm provider-tunnel inclusive rsvp lsp-template <i>reference</i>
Tree	lsp-template
Reference	configure router <i>string</i> mpls lsp-template <i>string</i>
Introduced	19.5.R1
Platforms	All

selective

Synopsis	Enter the selective context
Context	configure <i>router string gtm provider-tunnel selective</i>
Tree	<i>selective</i>
Introduced	19.5.R1
Platforms	All

data-delay-interval *number*

Synopsis	Delay before a PBR switches traffic to selective tunnel
Context	configure <i>router string gtm provider-tunnel selective data-delay-interval number</i>
Tree	<i>data-delay-interval</i>
Range	3 to 180
Default	3
Introduced	19.5.R1
Platforms	All

data-threshold

Synopsis	Enter the data-threshold context
Context	configure <i>router string gtm provider-tunnel selective data-threshold</i>
Tree	<i>data-threshold</i>
Introduced	19.5.R1
Platforms	All

group-prefix [*ip-group-prefix*] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the group-prefix list instance
Context	configure <i>router string gtm provider-tunnel selective data-threshold group-prefix (ipv4-prefix ipv6-prefix)</i>
Tree	<i>group-prefix</i>
Introduced	19.5.R1
Platforms	All

[ip-group-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Multicast group-prefix
Context	configure router <i>string</i> gtm provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

pe-threshold-add *number*

Synopsis	Number of receiver PBRs to create S-PMSI
Context	configure router <i>string</i> gtm provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) pe-threshold-add <i>number</i>
Tree	pe-threshold-add
Range	1 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

pe-threshold-delete *number*

Synopsis	Number of receiver PBRs to delete S-PMSI
Context	configure router <i>string</i> gtm provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) pe-threshold-delete <i>number</i>
Tree	pe-threshold-delete
Range	2 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

threshold *number*

Synopsis	Threshold for a group prefix
Context	configure router <i>string</i> gtm provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) threshold <i>number</i>

Tree	threshold
Range	1 to 4294967294
Units	kilobps
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

maximum-p2mp-spmsi *number*

Synopsis	Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels
Context	configure router <i>string</i> gtm provider-tunnel selective maximum-p2mp-spmsi <i>number</i>
Tree	maximum-p2mp-spmsi
Range	1 to 4000
Default	10
Introduced	19.5.R1
Platforms	All

rsvp

Synopsis	Enable the rsvp context
Context	configure router <i>string</i> gtm provider-tunnel selective rsvp
Tree	rsvp
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of P2MP RSVP as provider tunnel
Context	configure router <i>string</i> gtm provider-tunnel selective rsvp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

lsp-template *reference*

Synopsis	LSP template name
Context	configure router <i>string</i> gtp provider-tunnel selective rsvp lsp-template <i>reference</i>
Tree	lsp-template
Reference	configure router <i>string</i> mpls lsp-template <i>string</i>
Introduced	19.5.R1
Platforms	All

gtp

Synopsis	Enter the gtp context
Context	configure router <i>string</i> gtp
Tree	gtp
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

s11

Synopsis	Enter the s11 context
Context	configure router <i>string</i> gtp s11
Tree	s11
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface [**interface-name**] *reference*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> gtp s11 interface <i>reference</i>
Tree	interface
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[interface-name] reference

Synopsis	Name for the S11 interface
Context	configure router <i>string</i> gtp s11 interface <i>reference</i>
Tree	interface
Reference	configure router <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn-policy reference

Synopsis	Access point name policy for the S11 interface
Context	configure router <i>string</i> gtp s11 interface <i>reference</i> apn-policy <i>reference</i>
Tree	apn-policy
Reference	configure subscriber-mgmt gtp apn-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis	Enter the peer-profile-map context
Context	configure router <i>string</i> gtp s11 peer-profile-map
Tree	peer-profile-map
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [peer-prefix] (ipv4-prefix | ipv6-prefix)

Synopsis	Enter the prefix list instance
Context	configure router <i>string</i> gtp s11 peer-profile-map prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[peer-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the subnet
Context	configure router <i>string</i> gtp s11 peer-profile-map prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis	GTP peer profile associated with the address prefix
Context	configure router <i>string</i> gtp s11 peer-profile-map prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) peer-profile <i>reference</i>
Tree	peer-profile
Reference	configure subscriber-mgmt gtp peer-profile <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

upf-data-endpoint

Synopsis	Enable the upf-data-endpoint context
Context	configure router <i>string</i> gtp upf-data-endpoint
Tree	upf-data-endpoint
Description	Commands in this context configure a GTP - User Plane (GTP-U) endpoint used by BNG CUPS FWA sessions.
Introduced	21.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*

Synopsis	FPE used to encapsulate and decapsulate GTP-U traffic
Context	configure router <i>string</i> gtp upf-data-endpoint fpe <i>reference</i>
Tree	fpe
Reference	configure fwd-path-ext fpe <i>number</i>

Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *reference*

Synopsis	Interface on which the GTP-U packets terminate
Context	configure router string gtp upf-data-endpoint interface <i>reference</i>
Tree	interface
Reference	configure router string interface <i>string</i>
Notes	This element is mandatory.
Introduced	21.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uplink

Synopsis	Enable the uplink context
Context	configure router string gtp uplink
Tree	uplink
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn *string*

Synopsis	Network identifier part of the APN for the uplink
Context	configure router string gtp uplink apn <i>string</i>
Tree	apn
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pdn-type *keyword*

Synopsis	Default PDN to be signaled in GTP
Context	configure router string gtp uplink pdn-type <i>keyword</i>

Tree	pdn-type
Default	ipv4
Options	ipv4, ipv6, ipv4v6
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis	Enter the peer-profile-map context
Context	configure router <i>string</i> gtp uplink peer-profile-map
Tree	peer-profile-map
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [[peer-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure router <i>string</i> gtp uplink peer-profile-map prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[peer-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the subnet
Context	configure router <i>string</i> gtp uplink peer-profile-map prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis	GTP peer profile associated with the address prefix
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Context	configure router <i>string</i> gtp uplink peer-profile-map prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) peer-profile <i>reference</i>
Tree	peer-profile
Reference	configure subscriber-mgmt gtp peer-profile <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-tunneling *boolean*

Synopsis	Allow tunneling of ICMP reply packets over MPLS LSPs
Context	configure router <i>string</i> icmp-tunneling <i>boolean</i>
Tree	icmp-tunneling
Default	false
Introduced	16.0.R1
Platforms	All

igmp

Synopsis	Enable the igmp context
Context	configure router <i>string</i> igmp
Tree	igmp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure router <i>string</i> igmp admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

forwarding-group-interface forwarding-service *string* group-interface-name *reference*

Synopsis	Enter the forwarding-group-interface list instance
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i>
Tree	forwarding-group-interface
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forwarding-service *string*

Synopsis	Forwarding service for the subscriber interface
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i>
Tree	forwarding-group-interface
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i>
Tree	forwarding-group-interface
Reference	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> import-policy <i>reference</i>
Tree	import-policy
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	<p>This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.</p>
Range	1 to 32000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the mcac context
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac
Tree	mcac
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the bandwidth context
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac bandwidth
Tree	bandwidth
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac</i> <i>bandwidth</i> <i>mandatory</i> (<i>number</i> <i>keyword</i>)
Tree	<i>mandatory</i>
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac</i> <i>bandwidth</i> <i>total</i> (<i>number</i> <i>keyword</i>)
Tree	<i>total</i>
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac</i> <i>interface-policy</i> <i>reference</i>
Tree	<i>interface-policy</i>
Reference	configure <i>mcac</i> <i>interface-policy</i> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy reference

Synopsis	Multicast CAC policy name
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac policy reference
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none">• subscriber level and redirected interface when redirection is configured• subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-last-member-interval <i>number</i>

Tree	query-last-member-interval
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for IGMP queries
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-source-address <i>string</i>
Tree	query-source-address
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> sub-hosts-only <i>boolean</i>
Tree	sub-hosts-only
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP protocol version
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> version <i>keyword</i>
Tree	version
Default	3
Options	1, 2, 3
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-if-query-source-address *string*

Synopsis	Default query-source address for all group interfaces
Context	configure router <i>string</i> igmp group-if-query-source-address <i>string</i>
Tree	group-if-query-source-address
Introduced	16.0.R1

Platforms All

group-interface [\[group-interface-name\]](#) *reference*

Synopsis Enter the **group-interface** list instance
Context **configure** [router](#) *string* [igmp](#) [group-interface](#) *reference*
Tree [group-interface](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[group-interface-name] *reference*

Synopsis Group interface name
Context **configure** [router](#) *string* [igmp](#) [group-interface](#) *reference*
Tree [group-interface](#)
Reference **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of IGMP
Context **configure** [router](#) *string* [igmp](#) [group-interface](#) *reference* [admin-state](#) *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis Import policy that filters IGMP packets
Context **configure** [router](#) *string* [igmp](#) [group-interface](#) *reference* [import-policy](#) *reference*
Tree [import-policy](#)

Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure router <i>string</i> igmp group-interface <i>reference</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure router <i>string</i> igmp group-interface <i>reference</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
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Context	configure router <i>string</i> igmp group-interface <i>reference</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the mcac context
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac
Tree	mcac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the bandwidth context
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac policy <i>reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none">• subscriber level and redirected interface when redirection is configured• subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the</p>

policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	configure mcac policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string igmp group-interface reference query-interval number</i>
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string igmp group-interface reference query-last-member-interval number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>string igmp group-interface reference query-response-interval number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for IGMP queries
Context	configure router <i>string</i> igmp group-interface <i>reference</i> query-source-address <i>string</i>
Tree	query-source-address
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure router <i>string</i> igmp group-interface <i>reference</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	configure router <i>string</i> igmp group-interface <i>reference</i> sub-hosts-only <i>boolean</i>
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	configure router <i>string</i> igmp group-interface <i>reference</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP protocol version
Context	configure router <i>string</i> igmp group-interface <i>reference</i> version <i>keyword</i>
Tree	version
Default	3
Options	1, 2, 3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [**ip-interface-name**] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> igmp interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[ip-interface-name] *string*

Synopsis	IP interface name
Context	configure router <i>string</i> igmp interface <i>string</i>
Tree	interface
Description	This command configures the interface name, which must be unique within the group of defined IP interfaces for the context. If the IP interface name does not exist or does not have an IP address configured, an error message is returned. If the IP interface exists in a different area, it is moved to this area. An interface name cannot be in the form of an IP address.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
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Context	configure router <i>string</i> igmp interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure router <i>string</i> igmp interface <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure router <i>string</i> igmp interface <i>string</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	<p>This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.</p>
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure router <i>string</i> igmp interface <i>string</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure router <i>string</i> igmp interface <i>string</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the mcac context
Context	configure router <i>string</i> igmp interface <i>string</i> mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
Context	configure router <i>string</i> igmp interface <i>string</i> mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure router <i>string</i> igmp interface <i>string</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> igmp interface <i>string</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> igmp interface <i>string</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the mc-constraints context
Context	configure router <i>string</i> igmp interface <i>string</i> mcac mc-constraints

Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

level [[level-id](#)] *number*

Synopsis	Enter the level list instance
Context	configure router <i>string</i> igmp interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Description	Commands in this context configure the amount of bandwidth available within a given bundle for MC traffic for a specified level.
Introduced	16.0.R1
Platforms	All

[level-id] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure router <i>string</i> igmp interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure router <i>string</i> igmp interface <i>string</i> mcac mc-constraints level <i>number</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [[number-lag-port-down](#)] *number*

Synopsis	Enter the number-down list instance
Context	configure router <i>string</i> igmp interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down
Description	Commands in this context configure the number of ports down along with level for the MCAC policy on the interface.
Introduced	16.0.R1
Platforms	All

[number-lag-port-down] *number*

Synopsis	Number of ports that are down in this LAG link
Context	configure router <i>string</i> igmp interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	configure router <i>string</i> igmp interface <i>string</i> mcac mc-constraints number-down <i>number</i> level <i>number</i>
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
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Context	configure router <i>string</i> igmp interface <i>string</i> mcac mc-constraints use-lag-port-weight <i>boolean</i>
Tree	use-lag-port-weight
Description	When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	Multicast CAC policy name
Context	configure router <i>string</i> igmp interface <i>string</i> mcac policy reference
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none">• subscriber level and redirected interface when redirection is configured• subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy <i>string</i>
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string</i> igmp interface <i>string</i> query-interval <i>number</i>

Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string</i> igmp interface <i>string</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>string</i> igmp interface <i>string</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

redundant-mcast *boolean*

Synopsis	Use interface as a redundant-pair member for multicast
Context	configure router <i>string</i> igmp interface <i>string</i> redundant-mcast <i>boolean</i>
Tree	redundant-mcast
Default	false
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
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Context	configure router <i>string</i> igmp interface <i>string</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure router <i>string</i> igmp interface <i>string</i> ssm-translate
Tree	ssm-translate
Description	Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.
Introduced	16.0.R1
Platforms	All

group-range *start string end string*

Synopsis	Enter the group-range list instance
Context	configure router <i>string</i> igmp interface <i>string</i> ssm-translate group-range <i>start string end string</i>
Tree	group-range
Description	Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the IP address group range
Context	configure router <i>string</i> igmp interface <i>string</i> ssm-translate group-range <i>start string end string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

end string

Synopsis Upper bound of the IP address group range

Context **configure** [router](#) *string* [igmp](#) [interface](#) *string* [ssm-translate](#) [group-range](#) [start](#) *string* [end](#) *string*

Tree [group-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

source [[source-address](#)] *string*

Synopsis Add a list entry for **source**

Context **configure** [router](#) *string* [igmp](#) [interface](#) *string* [ssm-translate](#) [group-range](#) [start](#) *string* [end](#) *string* [source](#) *string*

Tree [source](#)

Min. Instances 1

Introduced 16.0.R1

Platforms All

[source-address] *string*

Synopsis Source IP address of multicast channel sending data

Context **configure** [router](#) *string* [igmp](#) [interface](#) *string* [ssm-translate](#) [group-range](#) [start](#) *string* [end](#) *string* [source](#) *string*

Tree [source](#)

Notes This element is part of a list key.

Introduced 16.0.R2

Platforms All

static

Synopsis Enter the **static** context

Context	configure router <i>string</i> igmp interface <i>string</i> static
Tree	static
Description	Commands in this context configure the testing of multicast forwarding on an interface without a receiver host.
Introduced	16.0.R1
Platforms	All

group [*group-address*] *string*

Synopsis	Enter the group list instance
Context	configure router <i>string</i> igmp interface <i>string</i> static group <i>string</i>
Tree	group
Description	<p>Commands in this context configure a static multicast group as either a starg (*,G), or one or more SSM (S,G) records. IGMP static group memberships are used to test multicast forwarding without a receiver host.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p> <p>When the group entries are configured on point-to-point links that connect routers to a rendezvous point (RP), the static IGMP group entries do not generate join messages toward the RP.</p>
Introduced	16.0.R1
Platforms	All

[*group-address*] *string*

Synopsis	Group address of static IGMP multicast channel
Context	configure router <i>string</i> igmp interface <i>string</i> static group <i>string</i>
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [*source-address*] *string*

Synopsis	Add a list entry for source
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Context	configure <i>router string igmp interface string static group string source string</i>
Tree	<i>source</i>
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure <i>router string igmp interface string static group string source string</i>
Tree	<i>source</i>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	configure <i>router string igmp interface string static group string starg</i>
Tree	<i>starg</i>
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

group-range *start string end string step string*

Synopsis	Enter the group-range list instance
Context	configure <i>router string igmp interface string static group-range start string end string step string</i>
Tree	<i>group-range</i>
Description	Commands in this context configure the ranges of IP addresses for the static groups.
Introduced	16.0.R1
Platforms	All

start string

Synopsis	IP address for the start of the static group range
Context	configure router <i>string</i> igmp interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end string

Synopsis	IP address for the end of the static group range
Context	configure router <i>string</i> igmp interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

step string

Synopsis	Step interval in the group-range address
Context	configure router <i>string</i> igmp interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [**source-address**] *string*

Synopsis	Add a list entry for source
Context	configure router <i>string</i> igmp interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .

Introduced 16.0.R1
Platforms All

[source-address] *string*

Synopsis Source IP address of multicast channel sending data
Context **configure** *router string igmp interface string static group-range start string end string step string source string*
Tree *source*
Notes This element is part of a list key.
Introduced 16.0.R2
Platforms All

starg

Synopsis Add a starg (*,G) address entry for the group range
Context **configure** *router string igmp interface string static group-range start string end string step string starg*
Tree *starg*
Notes The following elements are part of a mandatory choice: **source** or **starg**.
Introduced 16.0.R2
Platforms All

subnet-check *boolean*

Synopsis Allow subnet checking
Context **configure** *router string igmp interface string subnet-check boolean*
Tree *subnet-check*
Default true
Introduced 16.0.R1
Platforms All

version *keyword*

Synopsis IGMP protocol version
Context **configure** *router string igmp interface string version keyword*

Tree	version
Default	3
Options	1, 2, 3
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string</i> igmp query-interval <i>number</i>
Tree	query-interval
Description	This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1.
Range	2 to 1024
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string</i> igmp query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Description	This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group.
Range	1 to 1023
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>string</i> igmp query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure router <i>string</i> igmp robust-count <i>number</i>
Tree	robust-count
Description	This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, the robust-count can be increased.
Range	2 to 10
Default	2
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure router <i>string</i> igmp ssm-translate
Tree	ssm-translate
Description	Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.
Introduced	16.0.R1
Platforms	All

group-range *start string end string*

Synopsis	Enter the group-range list instance
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Context	configure <i>router string igmp ssm-translate group-range start string end string</i>
Tree	<i>group-range</i>
Description	Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.
Introduced	16.0.R1
Platforms	All

start string

Synopsis	Lower bound of the IP address group range
Context	configure <i>router string igmp ssm-translate group-range start string end string</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end string

Synopsis	Upper bound of the IP address group range
Context	configure <i>router string igmp ssm-translate group-range start string end string</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] string

Synopsis	Add a list entry for source
Context	configure <i>router string igmp ssm-translate group-range start string end string source string</i>
Tree	<i>source</i>
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure router <i>string</i> igmp ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

tunnel-interface

Synopsis	Enter the tunnel-interface context
Context	configure router <i>string</i> igmp tunnel-interface
Tree	tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp-root [[p2mp-id](#)] *reference* [sender-address](#) *reference*

Synopsis	Enter the ldp-p2mp-root list instance
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i>
Tree	ldp-p2mp-root
Description	Commands in this context configure the LDP parameters for the IGMP P2MP LSP tunnel.
Introduced	16.0.R1
Platforms	All

[[p2mp-id](#)] *reference*

Synopsis	RSVP P2MP LSP ID
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i>
Tree	ldp-p2mp-root
Reference	configure router <i>string</i> tunnel-interface ldp-p2mp-root <i>number</i> sender-address <i>string</i>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sender-address *reference*

Synopsis	System address of the ingress LER for the P2MP RSVP LSP
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i>
Tree	ldp-p2mp-root
Reference	configure router <i>string</i> tunnel-interface ldp-p2mp-root <i>number</i> sender-address <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the static context
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> static
Tree	static
Description	<p>Commands in this context configure static multicast receiver hosts on a tunnel interface associated with an RSVP P2MP LSP.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p>

Introduced 16.0.R1
Platforms All

group [*group-address*] *string*

Synopsis Enter the **group** list instance

Context **configure** *router string igmp tunnel-interface ldp-p2mp-root reference sender-address reference static group string*

Tree *group*

Description Commands in this context configure a static multicast group as either a starg (*,G), or one or more SSM (S,G) records.

Static multicast group joins can be assigned to a tunnel interface associated with an RSVP P2MP LSP.

A given <*,G> or <S,G> can only be associated with a single tunnel interface.

A multicast packet which is received on an interface and which succeeds the RPF check for the source address will be replicated and forwarded to all OIFs which correspond to the branches of the P2MP LSP. The packet is sent on each OIF with the label stack indicated in the NHLFE of this OIF. The packets will also be replicated and forwarded natively on all OIFs which have received IGMP or PIM joins for this <S,G>.

The multicast packet can be received over a PIM or IGMP interface which can be an IES interface, a spoke SDP terminated IES interface, or a network interface.

Introduced 16.0.R1
Platforms All

[group-address] *string*

Synopsis Group address of static IGMP multicast channel

Context **configure** *router string igmp tunnel-interface ldp-p2mp-root reference sender-address reference static group string*

Tree *group*

Description This command configures an address that receives data on an interface. The IP address must be unique for each static group.

Notes This element is part of a list key.

Introduced 16.0.R1
Platforms All

source [source-address] *string*

Synopsis	Add a list entry for source
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> static group <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

rsvp-p2mp-root [lsp-name] *reference*

Synopsis	Enter the rsvp-p2mp-root list instance
Context	configure router <i>string</i> igmp tunnel-interface rsvp-p2mp-root <i>reference</i>
Tree	rsvp-p2mp-root
Description	Commands in this context configure the RSVP parameters for the IGMP P2MP LSP tunnel.

Introduced 16.0.R1
Platforms All

[lsp-name] *reference*

Synopsis LSP name for the RSVP P2MP LSP
Context **configure** [router](#) *string* [igmp](#) [tunnel-interface](#) [rsvp-p2mp-root](#) *reference*
Tree [rsvp-p2mp-root](#)
Reference **configure** [router](#) *string* [tunnel-interface](#) [rsvp-p2mp-root](#) *string*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of IGMP
Context **configure** [router](#) *string* [igmp](#) [tunnel-interface](#) [rsvp-p2mp-root](#) *reference* [admin-state](#) *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

static

Synopsis Enter the **static** context
Context **configure** [router](#) *string* [igmp](#) [tunnel-interface](#) [rsvp-p2mp-root](#) *reference* [static](#)
Tree [static](#)
Description Commands in this context configure static multicast receiver hosts on a tunnel interface associated with an RSVP P2MP LSP.
When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.
Introduced 16.0.R1
Platforms All

group [*group-address*] *string*

Synopsis	Enter the group list instance
Context	configure <i>router string igmp tunnel-interface rsvp-p2mp-root reference static group string</i>
Tree	<i>group</i>
Introduced	16.0.R1
Platforms	All

[group-address] *string*

Synopsis	Group address of static IGMP multicast channel
Context	configure <i>router string igmp tunnel-interface rsvp-p2mp-root reference static group string</i>
Tree	<i>group</i>
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [*source-address*] *string*

Synopsis	Add a list entry for source
Context	configure <i>router string igmp tunnel-interface rsvp-p2mp-root reference static group string source string</i>
Tree	<i>source</i>
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure <i>router string igmp tunnel-interface rsvp-p2mp-root reference static group string source string</i>

Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	configure router string igmp tunnel-interface rsvp-p2mp-root reference static group string starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

interface [[interface-name](#)] [string](#)

Synopsis	Enter the interface list instance
Context	configure router string interface string
Tree	interface
Description	Commands in this context create a logical IP routing or unnumbered MPLS-TP interface. An IP address, port, or system can then be associated with the IP interface.
Introduced	16.0.R1
Platforms	All

[\[interface-name\]](#) [string](#)

Synopsis	Router interface name
Context	configure router string interface string
Tree	interface
Description	This command specifies the name of the router interface. When a user enters a new name, the system creates a new logical interface and the context changes to that interface for more command processing. When an existing interface name is entered, the user enters the router interface context for editing and configuration.

Nokia recommends using names that are meaningful and unique to remove ambiguity when displaying the state associated with IP interfaces either via show commands or model-driven interfaces.

See "Router configuration overview" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about the interface name.

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure router string interface string admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

cflowd-parameters

Synopsis	Enter the cflowd-parameters context
Context	configure router string interface string cflowd-parameters
Tree	cflowd-parameters
Description	Commands in this context configure cflowd parameters for the associated IP interfaces.
Introduced	16.0.R1
Platforms	All

sampling [[sampling-type](#)] *keyword*

Synopsis	Enter the sampling list instance
Context	configure router string interface string cflowd-parameters sampling <i>keyword</i>
Tree	sampling
Description	Commands in this context configure cflowd sampling behavior, which configures the collection of traffic flow samples for analysis for this IP interface.
Introduced	16.0.R1

Platforms All

[sampling-type] keyword

Synopsis Traffic sampling type

Context **configure** *router string interface string cflowd-parameters sampling keyword*

Tree *sampling*

Description This command configures the type of traffic to be sampled on the associated IP interface.

Options unicast, multicast, both

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

direction keyword

Synopsis Direction of traffic for cflowd sampling

Context **configure** *router string interface string cflowd-parameters sampling keyword direction keyword*

Tree *direction*

Description This command configures the direction in which sampling occurs on the associated IP interfaces.

Default ingress-only

Options ingress-only, egress-only, both

Introduced 16.0.R1

Platforms All

sample-profile (keyword | number)

Synopsis Sample profile ID

Context **configure** *router string interface string cflowd-parameters sampling keyword sample-profile (keyword | number)*

Tree *sample-profile*

Description This command defines the sampling rate profile associated with this interface.

Max. Range 0 to 4294967295

Options 1

Introduced 19.5.R1
Platforms All

type *keyword*

Synopsis Type of cflowd analysis
Context **configure** *router string interface string cflowd-parameters sampling keyword type keyword*
Tree *type*
Description This command configures the cflowd sampling type on the associated IP interface.
Options acl, interface
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

cpu-protection *reference*

Synopsis CPU protection policy ID for the interface
Context **configure** *router string interface string cpu-protection reference*
Tree *cpu-protection*
Description This command assigns an existing CPU protection policy to the associated interface. For these interface types, the per-source rate limit is not applicable.
If no CPU-protection policy is assigned to an interface, the default policy is used to limit the overall rate.
Reference **configure** *system security cpu-protection policy number*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** *router string interface string description string*
Tree *description*
String Length 1 to 255
Introduced 16.0.R1

Platforms All

dist-cpu-protection *reference*

Synopsis DCP policy name for interface

Context **configure** *router string interface string dist-cpu-protection reference*

Tree [dist-cpu-protection](#)

Description This command configures a Distributed CPU Protection (DCP) policy for the associated IP interface or SAP. The user can only assign a valid created DCP policy to a SAP or network interface (this rule does not apply to templates such as an MSAP policy).
If the operator does not assign a DCP policy to a router interface, the system uses the default network DCP policy.
See "Distributed CPU protection" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR System Management Guide* for more information.

Reference **configure** *system security dist-cpu-protection policy string*

Introduced 16.0.R1

Platforms All

egress

Synopsis Enter the **egress** context

Context **configure** *router string interface string egress*

Tree [egress](#)

Description Commands in this context configure egress network filter policies for the IP interface. The system does not filter unless an operator defines a filter.

Introduced 16.0.R1

Platforms All

filter

Synopsis Enter the **filter** context

Context **configure** *router string interface string egress filter*

Tree [filter](#)

Description Commands in this context configure the names of the egress IPv4 and IPv6 network filter policies for the interface. Filter policies control packet forwarding and dropping based on IP match criteria.

Introduced 16.0.R1

Platforms All

ip reference

Synopsis IPv4 filter policy name
 Context **configure** router string interface string egress filter ip reference
 Tree ip
 Reference **configure** filter ip-filter string
 Introduced 16.0.R1
 Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
 Context **configure** router string interface string egress filter ipv6 reference
 Tree ipv6
 Reference **configure** filter ipv6-filter string
 Introduced 16.0.R1
 Platforms All

eth-cfm

Synopsis Enter the **eth-cfm** context
 Context **configure** router string interface string eth-cfm
 Tree eth-cfm
 Description Commands in this context configure the Ethernet CFM parameters for the associated IP interface.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name reference ma-admin-name reference mep-id number

Synopsis Enter the **mep** list instance
 Context **configure** router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
 Tree mep

Description	Commands in this context configure an 802.1ag Maintenance Endpoint (MEP) instance.
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>string</i> association <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis Time that must expire before an FNG alarm is reset

Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number*

Tree [fng-reset-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis Generate CCM messages

Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean*

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis Priority of CCM and LTM messages transmitted by the MEP

Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number*

Tree [ccm-ltm-priority](#)

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i>
Tree	ccm-padding-size
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-tlv-ignore *keyword*

Synopsis	TLV to ignore on reception
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-tlv-ignore <i>keyword</i>
Tree	ccm-tlv-ignore
Description	<p>This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine.</p> <p>When unconfigured, the MEP processes all the recognized TLVs.</p>
Options	interface-status, port-status
Max. Instances	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> collect-lmm-fc-stats
Tree	collect-lmm-fc-stats

Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-lmm-fc-stats fc keyword</i>
Tree	fc
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile keyword

Synopsis	Forwarding class name for profile-aware counter
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-lmm-fc-stats fc-in-profile keyword</i>
Tree	fc-in-profile
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p>

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Description	<p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test</i>
Tree	<i>eth-test</i>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number</i>
Tree	<i>bit-error-threshold</i>
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</i>
Tree	<i>test-pattern</i>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
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Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean</i>
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-fault *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number facility-fault boolean</i>
Tree	facility-fault
Description	When configured to true , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition. When configured to false , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
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Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace</i>
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</i>
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number</i>
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</i>
Tree	priority
Range	0 to 7

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean*
Tree [rx-eth-ed](#)
Description This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP
Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean*
Tree [tx-eth-ed](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis Enter the **eth-vsm-grace** context
Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace*
Tree [eth-vsm-grace](#)
Description Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>eth-cfm mep md-admin-name</i> <i>reference ma-admin-name</i> <i>reference mep-id</i> <i>number</i> <i>grace eth-vsm-grace rx-eth-vsm-grace</i> <i>boolean</i>
Tree	<i>rx-eth-vsm-grace</i>
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>eth-cfm mep md-admin-name</i> <i>reference ma-admin-name</i> <i>reference mep-id</i> <i>number</i> <i>grace eth-vsm-grace tx-eth-vsm-grace</i> <i>boolean</i>
Tree	<i>tx-eth-vsm-grace</i>
Description	When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to false , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	configure <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>eth-cfm mep md-admin-name</i> <i>reference ma-admin-name</i> <i>reference mep-id</i> <i>number</i> <i>lbm-svc-act-responder</i> <i>boolean</i>

Tree	lbm-svc-act-responder
Description	<p>When configured to true, the router enables the MEP to process service activation streams encapsulated in ETH-CFM LBM frames that are directed to it.</p> <p>When configured to false, this command reverts to MEP LBM standard processing.</p> <p>There is interaction between this command and the tools perform service id loopback eth command. Nokia recommends that either the lbm-svc act-responder or the tools perform service id loopback eth command be used within a service. If both commands must be configured, and the target reflection point is the MAC Swap Loopback function, the inbound stream of data must not include ETH-CFM traffic that is equal to or lower than the domain level of any configured MEP that would otherwise extract and process the ETH-CFM message.</p> <p>See "Promiscuous ETH-LBM mode of operation" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Services Overview Guide</i> for more information.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect for fault alarm generation
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Description	This command specifies the lowest priority defect that generates a fault alarm and also configures the fault state of the MEP that causes a network reaction.
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> mac-address <i>string</i>
Tree	mac-address
Description	<p>This command specifies the MAC address of the MEP.</p> <p>When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.</p>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis Threshold time limit for the one-way delay test

Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number*

Tree [one-way-delay-threshold](#)

Range 0 to 600

Default 3

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

flavor *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Network interface flavor

Context **configure** *router string interface string flavor keyword*

Tree [flavor](#)

Default regular

Options regular, control-tunnel, pdn, unnumbered-mpls-tp, gmpls-loopback

Introduced 16.0.R1

Platforms All

gre-termination *boolean*

Synopsis Terminate GRE packets on primary subnet of interface

Context **configure** *router string interface string gre-termination boolean*

Tree [gre-termination](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hold-time

Synopsis	Enter the hold-time context
Context	configure router string interface string hold-time
Tree	hold-time
Description	Commands in this context configure the interface-level up and down hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router string interface string hold-time ipv4
Tree	ipv4
Description	Commands in this context configure the interface-level IPv4 hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the down context
Context	configure router string interface string hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure router string interface string hold-time ipv4 down init-only boolean

Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure router string interface string hold-time ipv4 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the up context
Context	configure router string interface string hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure router string interface string hold-time ipv4 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1

Platforms All

ipv6

Synopsis Enter the **ipv6** context

Context **configure** *router string* *interface string* *hold-time* *ipv6*

Tree *ipv6*

Description Commands in this context configure the interface-level IPv6 hold timers for the associated IP interface.

Introduced 16.0.R1

Platforms All

down

Synopsis Enter the **down** context

Context **configure** *router string* *interface string* *hold-time* *ipv6* **down**

Tree *down*

Description Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.

Introduced 16.0.R1

Platforms All

init-only *boolean*

Synopsis Apply delay only at interface configuration or reboot

Context **configure** *router string* *interface string* *hold-time* *ipv6* **down** *init-only* *boolean*

Tree *init-only*

Description This command applies the delay only when when the IP interface is first configured or after a system reboot.

Default false

Introduced 16.0.R1

Platforms All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure <i>router string interface string hold-time ipv6 down seconds number</i>
Tree	<i>seconds</i>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the up context
Context	configure <i>router string interface string hold-time ipv6 up</i>
Tree	<i>up</i>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure <i>router string interface string hold-time ipv6 up seconds number</i>
Tree	<i>seconds</i>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

if-attribute

Synopsis	Enter the if-attribute context
Context	configure <i>router string interface string if-attribute</i>
Tree	<i>if-attribute</i>

Description	Commands in this context configure attributes of the IP interface.
Introduced	16.0.R1
Platforms	All

admin-group *reference*

Synopsis	Administrative group name for the interface
Context	configure router <i>string</i> interface <i>string</i> if-attribute admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

delay

Synopsis	Enter the delay context
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay
Tree	delay
Introduced	20.7.R1
Platforms	All

delay-selection *keyword*

Synopsis	Delay source advertised by IGP for the interface
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay delay-selection <i>keyword</i>
Tree	delay-selection
Default	static-preferred
Options	static, dynamic, static-preferred, dynamic-preferred
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dynamic

Synopsis	Enter the dynamic context
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic
Tree	dynamic
Description	Commands in this context configure dynamic link delay measurement options for the interface.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

measurement-template *reference*

Synopsis	Link delay measurement template for the interface
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic measurement-template <i>reference</i>
Tree	measurement-template
Reference	configure test-oam link-measurement measurement-template <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

twamp-light

Synopsis	Enter the twamp-light context
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light
Tree	twamp-light
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light ipv4
Tree	ipv4
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of IPv4 TWAMP Light packets
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light ipv4 admin-state <i>keyword</i>
Tree	admin-state
Description	This command specifies the administrative state of the IPv4 encapsulated TWAMP Light measurement packets.
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination *string*

Synopsis	TWAMP Light measurement packet destination IPv4 address
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light ipv4 destination <i>string</i>
Tree	destination
Description	This command specifies the unicast destination address to be associated with the IPv4 TWAMP Light measurement packet.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source *string*

Synopsis	TWAMP Light measurement packets source IPv4 address
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light ipv4 source <i>string</i>
Tree	source
Description	This command specifies the unicast source address to be associated with the IPv4 TWAMP Light measurement packet.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light ipv6
Tree	ipv6
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of IPv6 TWAMP Light packets
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light ipv6 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination *string*

Synopsis	TWAMP Light measurement packet destination IPv6 address
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light ipv6 destination <i>string</i>
Tree	destination
Description	This command specifies the unicast destination address to be associated with the IPv6 TWAMP Light measurement packet. Globally routable and Link Local addressing is supported.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source *string*

Synopsis	TWAMP Light measurement packets source IPv6 address
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light ipv6 source <i>string</i>
Tree	source

Description	This command specifies the unicast source address to be associated with the IPv6 TWAMP Light measurement packet. Globally routable and Link Local addressing is supported.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

static number

Synopsis	Unidirectional link delay static information
Context	configure router string interface string if-attribute delay static number
Tree	static
Description	This command configures the unidirectional link delay. By default there is no configured delay, and the link delay metric TLV is pruned in the IGP.
Range	1 to 16777214
Units	microseconds
Introduced	20.7.R1
Platforms	All

srlg-group [name] reference

Synopsis	Add a list entry for srlg-group
Context	configure router string interface string if-attribute srlg-group reference
Tree	srlg-group
Description	<p>Commands in this context add a list entry for a Shared Risk Link Group (SRLG) that can be associated with an IP or MPLS interface to tag IP or MPLS interfaces that share a specific outcome with the same identifier. For example, an SRLG group identifier could represent all links that use separate fibers but are carried in the same fiber conduit.</p> <p>The name and identifier of each SRLG group must be configured locally on each router before the user configures the SRLG membership of an interface. A maximum of 1024 SRLGs can be configured per system. The user can apply SRLGs to an IES, VPRN, network IP, or MPLS interface. A maximum of 64 SRLGs can be applied to an interface.</p> <p>See "Shared Risk Link Groups" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide</i> for more information about SRLGs.</p>
Introduced	16.0.R1
Platforms	All

[name] *reference*

Synopsis	SRLG name
Context	configure router <i>string</i> interface <i>string</i> if-attribute srlg-group <i>reference</i>
Tree	srlg-group
Reference	configure routing-options if-attribute srlg-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure router <i>string</i> interface <i>string</i> ingress
Tree	ingress
Description	Commands in this context configure ingress network filter policies for the IP interface. If an ingress filter is not defined, the system performs no filtering.
Introduced	16.0.R1
Platforms	All

destination-class-lookup *boolean*

Synopsis	Enable BGP destination class lookup
Context	configure router <i>string</i> interface <i>string</i> ingress destination-class-lookup <i>boolean</i>
Tree	destination-class-lookup
Description	When configured to true , the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the destination-class match criterion for an IP filter policy to filter egress traffic based on BGP destination classes. When configured to false , destination class lookup is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

filter

Synopsis	Enter the filter context
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Context	configure router <i>string</i> interface <i>string</i> ingress filter
Tree	filter
Description	Commands in this context associate an IP filter policy with an IP interface. Filter policies control packet forwarding and dropping based on IP match criteria.
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	configure router <i>string</i> interface <i>string</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	configure router <i>string</i> interface <i>string</i> ingress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

policy-accounting *reference*

Synopsis	Policy accounting template applied to the interface
Context	configure router <i>string</i> interface <i>string</i> ingress policy-accounting <i>reference</i>
Tree	policy-accounting
Reference	configure routing-options policy-accounting policy-acct-template <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-stats *boolean*

Synopsis	Collect ingress statistics
Context	configure router <i>string</i> interface <i>string</i> ingress-stats <i>boolean</i>
Tree	ingress-stats
Description	<p>When configured to true, the router configures the collection of IPv4 and IPv6 offered packets and octets. This only applies to IP statistics, not to uRPF statistics.</p> <p>Octet statistics for IPv4 and IPv6 bytes at IP interfaces include the Layer 2 frame overhead.</p> <p>When configured to false, the router does not collect the statistics.</p>
Default	false
Introduced	16.0.R1
Platforms	All

ip-mtu *number*

Synopsis	Interface IP MTU
Context	configure router <i>string</i> interface <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	<p>This command configures the IP maximum transmit unit (packet) for the associated router IP interface.</p> <p>The operational IP MTU used for the interface is based on the configured IP MTU and the port MTU of the port bound to this interface; that is, the operational MTU is set to the lesser of the values configured by this command and the port MTU value less the Ethernet header size.</p> <p>If the interface supports IPv6 packets, this command must be set to at least 1280, in accordance with RFC 2460 <i>Internet Protocol, Version 6 (IPv6) Specification</i>.</p>
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	All

ip-tunnel

Synopsis	Enter the ip-tunnel context
Context	configure router <i>string</i> interface <i>string</i> ip-tunnel
Tree	ip-tunnel

Description	Commands in this context configure the IP or GRE tunnel on a control-channel loopback interface. The local-end tunnel IP address is configured using the interface primary IP address.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-ip *string*

Synopsis	IP address of the remote end of the IP tunnel
Context	configure router <i>string</i> interface <i>string</i> ip-tunnel remote-ip <i>string</i>
Tree	remote-ip
Description	This command configures the destination address of the outer IP header in the IP or GRE encapsulation.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipsec

Synopsis	Enable the ipsec context
Context	configure router <i>string</i> interface <i>string</i> ipsec
Tree	ipsec
Description	Commands in this context configure an IPsec secured interface.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	configure router <i>string</i> interface <i>string</i> ipsec admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

ip-exception *reference*

Synopsis	IP exception filter
Context	configure router <i>string</i> interface <i>string</i> ipsec ip-exception <i>reference</i>
Tree	ip-exception
Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	configure filter ip-exception <i>string</i>
Introduced	22.7.R1
Platforms	VSR

ipsec-tunnel [*name*] *string*

Synopsis	Enter the ipsec-tunnel list instance
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i>
Tree	ipsec-tunnel
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	22.7.R1
Platforms	VSR

[*name*] *string*

Synopsis	IPsec tunnel name
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i>
Tree	ipsec-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

bfd



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the bfd context
Context	configure <i>router string interface string ipsec ipsec-tunnel string</i> bfd
Tree	bfd
Introduced	22.7.R1
Platforms	VSR

bfd-designate *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	configure <i>router string interface string ipsec ipsec-tunnel string</i> bfd bfd-designate <i>boolean</i>
Tree	bfd-designate
Default	false
Introduced	22.7.R1
Platforms	VSR

bfd-liveness



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the bfd-liveness context
----------	--

Context	configure <i>router string interface string ipsec ipsec-tunnel string bfd bfd-liveness</i>
Tree	<i>bfd-liveness</i>
Description	<p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p>
Introduced	22.7.R1
Platforms	VSR

dest-ip *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
Context	configure <i>router string interface string ipsec ipsec-tunnel string bfd bfd-liveness dest-ip string</i>
Tree	<i>dest-ip</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

interface *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	configure <i>router string interface string ipsec ipsec-tunnel string bfd bfd-liveness interface string</i>
Tree	<i>interface</i>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> bfd bfd-liveness service-name <i>string</i>
Tree	service-name
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

clear-df-bit *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Description	When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	22.7.R1
Platforms	VSR

copy-traffic-class-upon-decapsulation *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
----------	--

Context	configure <i>router string interface string ipsec ipsec-tunnel string copy-traffic-class-upon-decapsulation boolean</i>
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	22.7.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	configure <i>router string interface string ipsec ipsec-tunnel string description string</i>
Tree	description
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure <i>router string interface string ipsec ipsec-tunnel string encapsulated-ip-mtu number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp-generation context
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	22.7.R1
Platforms	VSR

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the frag-required context
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required <i>admin-state</i> <i>keyword</i>

Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Default	enable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Default	10
Units	seconds
Introduced	22.7.R1
Platforms	VSR

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count

Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	22.7.R1
Platforms	VSR

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big
Tree	packet-too-big
Description	Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side. The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel. The private MTU for the tunnel is configured via the configure router interface ipsec ipsec-tunnel ip-mtu command for the interface.
Introduced	22.7.R1

Platforms VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big interval <i>number</i>
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Introduced	22.7.R1
Platforms	VSR

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	configure <i>router string interface string ipsec ipsec-tunnel string icmp6-generation packet-too-big message-count number</i>
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	configure <i>router string interface string ipsec ipsec-tunnel string ip-mtu number</i>
Tree	ip-mtu
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

key-exchange



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key-exchange context
Context	configure <i>router string interface string ipsec ipsec-tunnel string</i> key-exchange
Tree	key-exchange
Introduced	22.7.R1
Platforms	VSR

dynamic



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the dynamic context
Context	configure <i>router string interface string ipsec ipsec-tunnel string</i> key-exchange dynamic
Tree	dynamic
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	22.7.R1
Platforms	VSR

auto-establish *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	configure <i>router string interface string ipsec ipsec-tunnel string</i> key-exchange dynamic auto-establish <i>boolean</i>
Tree	auto-establish
Default	false
Introduced	22.7.R1
Platforms	VSR

cert



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the cert context
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	22.7.R1
Platforms	VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>string</i>
Introduced	22.7.R1
Platforms	VSR

status-verify



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the status-verify context
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	22.7.R1
Platforms	VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Default	revoked
Options	revoked, good
Introduced	22.7.R1
Platforms	VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify primary <i>keyword</i>
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Default	crI
Options	crI, ocsp
Introduced	22.7.R1
Platforms	VSR

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify secondary <i>keyword</i>
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Default	none
Options	none, crI, ocsp

Introduced 22.7.R1
Platforms VSR

trust-anchor-profile *reference*

Synopsis Trust anchor profile name
Context **configure** *router string interface string ipsec ipsec-tunnel string key-exchange dynamic cert trust-anchor-profile reference*
Tree [trust-anchor-profile](#)
Reference **configure** *ipsec trust-anchor-profile string*
Introduced 22.7.R1
Platforms VSR

id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context
Context **configure** *router string interface string ipsec ipsec-tunnel string key-exchange dynamic id*
Tree [id](#)
Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

Introduced 22.7.R1
Platforms VSR

fqdn *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic id fqdn string</i>
Tree	<i>fqdn</i>
String Length	1 to 255
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ipv4 string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic id ipv4 string</i>
Tree	<i>ipv4</i>
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic id ipv6 (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	<i>ipv6</i>
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ike-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ike-policy <i>reference</i>
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The ipsec-transport-mode-profile configuration only supports IKEv2.
Reference	configure ipsec ike-policy <i>number</i>
Introduced	22.7.R1
Platforms	VSR

ipsec-transform *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ipsec-transform <i>reference</i>
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>
Max. Instances	4
Introduced	22.7.R1
Platforms	VSR

pre-shared-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic pre-shared-key string</i>
Tree	<i>pre-shared-key</i>
String Length	1 to 115
Introduced	22.7.R1
Platforms	VSR

manual



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the manual context
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange manual</i>
Tree	<i>manual</i>
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	22.7.R1
Platforms	VSR

keys [*security-association*] *number direction keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the keys list instance
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword</i>
Tree	<i>keys</i>
Description	Commands in this context configure the security association list for the tunnel.
Introduced	22.7.R1
Platforms	VSR

[**security-association**] *number*

Synopsis	SA entry ID
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

direction *keyword*

Synopsis	Direction of the IPsec tunnel
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

authentication-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 130

Introduced 22.7.R1
Platforms VSR

encryption-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Key used for the encryption algorithm
Context **configure** *router string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword encryption-key string*
Tree [encryption-key](#)
String Length 1 to 66
Introduced 22.7.R1
Platforms VSR

ipsec-transform *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Transform entry used by manual SAs
Context **configure** *router string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword ipsec-transform reference*
Tree [ipsec-transform](#)
Reference **configure** *ipsec ipsec-transform number*
Notes This element is mandatory.
Introduced 22.7.R1
Platforms VSR

spi number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword spi number</i>
Tree	<i>spi</i>
Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

local-gateway-address-override (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	configure <i>router string interface string ipsec ipsec-tunnel string local-gateway-address-override (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	<i>local-gateway-address-override</i>
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	22.7.R1
Platforms	VSR

max-history-key-records



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the max-history-key-records context
Context	configure <i>router string interface string ipsec ipsec-tunnel string max-history-key-records</i>
Tree	<i>max-history-key-records</i>
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	22.7.R1
Platforms	VSR

esp number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	configure <i>router string interface string ipsec ipsec-tunnel string max-history-key-records esp number</i>
Tree	<i>esp</i>
Range	1 to 48
Introduced	22.7.R1
Platforms	VSR

ike number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	configure <i>router string interface string ipsec ipsec-tunnel string max-history-key-records ike number</i>
Tree	<i>ike</i>
Range	1 to 3

Introduced 22.7.R1
Platforms VSR

pmtu-discovery-aging *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Aging out time of the learned path MTU
Context **configure** *router string interface string ipsec ipsec-tunnel string pmtu-discovery-aging number*
Tree [pmtu-discovery-aging](#)
Description This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range 900 to 3600
Default 900
Units seconds
Introduced 22.7.R1
Platforms VSR

private-sap *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Private SAP ID
Context **configure** *router string interface string ipsec ipsec-tunnel string private-sap number*
Tree [private-sap](#)
Range 0 to 4094
Notes This element is mandatory.
Introduced 22.7.R1
Platforms VSR

private-service *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private service name
Context	configure <i>router string interface string ipsec ipsec-tunnel string private-service string</i>
Tree	<i>private-service</i>
Description	This command configures the private service name. If unconfigured, the private service is the service where the secured interface resides.
String Length	1 to 64
Introduced	22.7.R1
Platforms	VSR

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	configure <i>router string interface string ipsec ipsec-tunnel string private-tcp-mss-adjust number</i>
Tree	<i>private-tcp-mss-adjust</i>
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure <i>router string interface string ipsec ipsec-tunnel string propagate-pmtu-v4 boolean</i>
Tree	propagate-pmtu-v4
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

propagate-pmtu-v6 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	configure <i>router string interface string ipsec ipsec-tunnel string propagate-pmtu-v6 boolean</i>
Tree	propagate-pmtu-v6
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

public-tcp-mss-adjust (*number | keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
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Context	configure <i>router string</i> <i>interface string</i> <i>ipsec ipsec-tunnel string</i> <i>public-tcp-mss-adjust (number keyword)</i>
Tree	<i>public-tcp-mss-adjust</i>
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	22.7.R1
Platforms	VSR

remote-gateway-address (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	configure <i>router string</i> <i>interface string</i> <i>ipsec ipsec-tunnel string</i> <i>remote-gateway-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	<i>remote-gateway-address</i>
Introduced	22.7.R1
Platforms	VSR

replay-window *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	configure <i>router string</i> <i>interface string</i> <i>ipsec ipsec-tunnel string</i> <i>replay-window number</i>
Tree	<i>replay-window</i>
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 64 128 256 512
Units	packets

Introduced 22.7.R1
Platforms VSR

security-policy



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **security-policy** context
Context **configure** *router string interface string ipsec ipsec-tunnel string security-policy*
Tree *security-policy*
Description Commands in this context specify a security policy used by the tunnel.
Introduced 22.7.R1
Platforms VSR

id number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Security policy ID for use by the tunnel
Context **configure** *router string interface string ipsec ipsec-tunnel string security-policy id number*
Tree *id*
Max. Range 0 to 4294967295
Introduced 22.7.R1
Platforms VSR

strict-match *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable strict match of the security policy entry

Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> security-policy strict-match <i>boolean</i>
Tree	strict-match
Description	<p>When configured to true, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p>
Default	false
Introduced	22.7.R1
Platforms	VSR

ipv6-exception *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	configure router <i>string</i> interface <i>string</i> ipsec ipv6-exception <i>reference</i>
Tree	ipv6-exception
Description	<p>This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.</p>
Reference	configure filter ipv6-exception <i>string</i>
Introduced	22.7.R1
Platforms	VSR

public-sap *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Public SAP ID
Context	configure router <i>string</i> interface <i>string</i> ipsec public-sap <i>number</i>

Tree	public-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

tunnel-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID
Context	configure router <i>string</i> interface <i>string</i> ipsec tunnel-group <i>reference</i>
Tree	tunnel-group
Reference	configure isa tunnel-group <i>number</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> interface <i>string</i> ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	configure router <i>string</i> interface <i>string</i> ipv4 allow-directed-broadcasts <i>boolean</i>
Tree	allow-directed-broadcasts
Description	When configured to true , the router forwards packets received on a local router interface to the subnet broadcast address of another IP interface.

When configured to **false**, this router does not allow directed broadcasts and the packets are discarded.

Allowing directed broadcasts is a well-known mechanism used for denial-of-service attacks.

Default	false
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure router <i>string</i> interface <i>string</i> ipv4 bfd
Tree	bfd
Description	Commands in this context configure the Bidirectional Forwarding Detection (BFD) settings for the associated IP interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure router <i>string</i> interface <i>string</i> ipv4 bfd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1

Platforms All

multiplier *number*

Synopsis Number of consecutive BFD messages missed from the peer

Context **configure** *router string interface string ipv4 bfd multiplier number*

Tree [multiplier](#)

Description This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.

Range 1 to 20

Default 3

Introduced 16.0.R1

Platforms All

receive *number*

Synopsis BFD receive interval over this interface

Context **configure** *router string interface string ipv4 bfd receive number*

Tree [receive](#)

Description This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 16.0.R1

Platforms All

transmit-interval *number*

Synopsis BFD transmit interval over this interface

Context **configure** *router string interface string ipv4 bfd transmit-interval number*

Tree [transmit-interval](#)

Description This command configures the transmit intervals.

On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Local termination point for the BFD session
Context	configure router <i>string</i> interface <i>string</i> ipv4 bfd type <i>keyword</i>
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Default	auto
Options	cpm-np, auto, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dhcp

Synopsis	Enter the dhcp context
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

gi-address *string*

Synopsis	GI address for the DHCP relay
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp gi-address <i>string</i>
Tree	gi-address
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	All

option-82

Synopsis	Enter the option-82 context
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82

Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 action <i>keyword</i>
Tree	action
Default	keep
Options	replace, drop, keep
Introduced	16.0.R1
Platforms	All

circuit-id

Synopsis	Enter the circuit-id context
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	All

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

if-name

Synopsis	Use the interface name for the circuit ID
Context	configure <i>router string interface string ipv4 dhcp option-82 circuit-id if-name</i>
Tree	if-name
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

ifindex

Synopsis	Use the interface index for the circuit ID
Context	configure <i>router string interface string ipv4 dhcp option-82 circuit-id ifindex</i>
Tree	ifindex
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the circuit ID
Context	configure <i>router string interface string ipv4 dhcp option-82 circuit-id none</i>
Tree	none
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

port-id

Synopsis	Use the port ID for the circuit ID
Context	configure <i>router string interface string ipv4 dhcp option-82 circuit-id port-id</i>
Tree	port-id
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .

Introduced	16.0.R1
Platforms	All

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	configure <i>router string interface string ipv4 dhcp option-82 circuit-id vlan-ascii-tuple</i>
Tree	vlan-ascii-tuple
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

remote-id

Synopsis	Enter the remote-id context
Context	configure <i>router string interface string ipv4 dhcp option-82 remote-id</i>
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	All

ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	configure <i>router string interface string ipv4 dhcp option-82 remote-id ascii-string string</i>
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1

Platforms All

mac

Synopsis Use the MAC address for the remote ID

Context **configure** [router](#) *string* [interface](#) *string* [ipv4 dhcp option-82 remote-id mac](#)

Tree [mac](#)

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

none

Synopsis Do not include the remote ID

Context **configure** [router](#) *string* [interface](#) *string* [ipv4 dhcp option-82 remote-id none](#)

Tree [none](#)

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

vendor-specific-option

Synopsis Enter the **vendor-specific-option** context

Context **configure** [router](#) *string* [interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option](#)

Tree [vendor-specific-option](#)

Description Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.

Introduced 16.0.R1

Platforms All

client-mac-address *boolean*

Synopsis Send the MAC address in the VSO

Context **configure** [router](#) *string* [interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option client-mac-address](#) *boolean*

Tree [client-mac-address](#)

Default	false
Introduced	16.0.R1
Platforms	All

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option pool-name <i>boolean</i>
Tree	pool-name
Default	false
Introduced	16.0.R1
Platforms	All

port-id *boolean*

Synopsis	Send the port ID in the VSO
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option port-id <i>boolean</i>
Tree	port-id
Default	false
Introduced	16.0.R1
Platforms	All

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i>
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option <i>string</i> <i>string</i>
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option <i>system-id</i> <i>boolean</i>
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp python-policy <i>reference</i>
Tree	python-policy
Description	This command associates a Python policy name with the interface.
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

relay-plain-bootp *boolean*

Synopsis	Relay plain BOOTP messages
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp relay-plain-bootp <i>boolean</i>
Tree	relay-plain-bootp
Description	When configured to true , the system relays plain BOOTP messages.

When configured to **false**, the system considers the plain BOOTP packets as malformed DHCP packets; therefore, the system does not relay the messages.

Default	false
Introduced	16.0.R1
Platforms	All

release-include-gi-address *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	configure <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <i>dhcp</i> <i>release-include-gi-address</i> <i>boolean</i>
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	IP addresses for DHCP server requests
Context	configure <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <i>dhcp</i> <i>server</i> <i>string</i>
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	configure <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <i>dhcp</i> <i>src-ip-addr</i> <i>keyword</i>
Tree	src-ip-addr
Default	auto

Options	auto, gi-address
Introduced	16.0.R1
Platforms	All

trusted *boolean*

Synopsis	Relay untrusted packets
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp trusted <i>boolean</i>
Tree	trusted
Description	<p>When configured to true, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p>
Default	false
Introduced	16.0.R1
Platforms	All

icmp

Synopsis	Enter the icmp context
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp
Tree	icmp
Description	Commands in this context configure Internet Control Message Protocol (ICMP) parameters on a network IP interface.
Introduced	16.0.R1
Platforms	All

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp mask-reply <i>boolean</i>
Tree	mask-reply
Default	true

Introduced 16.0.R1
Platforms All

param-problem

Synopsis Enter the **param-problem** context
Context **configure** *router string interface string ipv4 icmp param-problem*
Tree *param-problem*
Description Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of sent Parameter Problem messages
Context **configure** *router string interface string ipv4 icmp param-problem admin-state keyword*
Tree *admin-state*
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

number *number*

Synopsis Maximum number of Parameter Problem messages to send
Context **configure** *router string interface string ipv4 icmp param-problem number number*
Tree *number*
Range 10 to 1000
Default 100
Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

redirects

Synopsis	Enter the redirects context
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp redirects
Tree	redirects
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp redirects admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
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Context	configure <i>router string interface string ipv4 icmp redirects number number</i>
Tree	<i>number</i>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	configure <i>router string interface string ipv4 icmp redirects seconds number</i>
Tree	<i>seconds</i>
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

ttl-expired

Synopsis	Enter the ttl-expired context
Context	configure <i>router string interface string ipv4 icmp ttl-expired</i>
Tree	<i>ttl-expired</i>
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	configure <i>router string interface string ipv4 icmp ttl-expired admin-state keyword</i>
Tree	<i>admin-state</i>
Default	enable
Options	enable, disable

Introduced 16.0.R1
Platforms All

number *number*

Synopsis Maximum number of TTL expired messages to send
Context **configure** *router string interface string ipv4 icmp ttl-expired number number*
Tree *number*
Range 10 to 2000
Default 100
Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis Time used to limit the number of TTL expired messages
Context **configure** *router string interface string ipv4 icmp ttl-expired seconds number*
Tree *seconds*
Range 1 to 60
Default 10
Units seconds
Introduced 16.0.R1
Platforms All

unreachables

Synopsis Enter the **unreachables** context
Context **configure** *router string interface string ipv4 icmp unreachables*
Tree *unreachables*
Description Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp unreachables admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp unreachables number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp unreachables seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

ip-helper-address *string*

Synopsis	IP address of the target UDP broadcast gateway
Context	configure router <i>string</i> interface <i>string</i> ipv4 ip-helper-address <i>string</i>
Tree	ip-helper-address

Description	This command configures the redirection of broadcast UDP packets received on the associated interface to the specified helper gateway address, and then to the gateway.
Introduced	16.0.R1
Platforms	All

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 local-dhcp-server <i>reference</i>
Tree	local-dhcp-server
Reference	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

learn-unsolicited *boolean*

Synopsis	Learn new entries from any received NA message
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery learn-unsolicited <i>boolean</i>
Tree	learn-unsolicited
Description	<p>When configured to true, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to false, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none">• If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored.• If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in

the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.

Default	false
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the limit context
Context	configure <i>router string interface string ipv4 neighbor-discovery limit</i>
Tree	<i>limit</i>
Description	<p>Commands in this context configure the maximum number of dynamic neighbor entries that can be learned on the interface</p> <p>When the number of entries reaches the threshold (the configured percentage) of this limit, the system sends an SNMP trap.</p> <p>When the limit is exceeded, the system learns no new entries until an entry expires and traffic to these destinations is dropped. Already learned entries are refreshed.</p>
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Generate log entries only if limit is reached
Context	configure <i>router string interface string ipv4 neighbor-discovery limit log-only boolean</i>
Tree	<i>log-only</i>
Default	false
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	configure <i>router string interface string ipv4 neighbor-discovery limit max-entries number</i>
Tree	<i>max-entries</i>
Range	0 to 524288
Introduced	16.0.R1

Platforms All

threshold *number*

Synopsis Threshold value that triggers a warning message

Context **configure** *router string interface string ipv4 neighbor-discovery limit threshold number*

Tree [threshold](#)

Range 1 to 100

Default 90

Units percent

Introduced 16.0.R1

Platforms All

local-proxy-arp *boolean*

Synopsis Enable local proxy ARP on interface

Context **configure** *router string interface string ipv4 neighbor-discovery local-proxy-arp boolean*

Tree [local-proxy-arp](#)

Description When configured to **true**, the router enables local proxy ARP on the interface.
When configured to **false**, the router does not respond to ARP requests for addresses on the same subnet.

Introduced 16.0.R1

Platforms All

proactive-refresh *boolean*

Synopsis Send a single refresh message before entry timeout

Context **configure** *router string interface string ipv4 neighbor-discovery proactive-refresh boolean*

Tree [proactive-refresh](#)

Description When configured to **true**, the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries).
When configured to **false**, the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.

Default	false
Introduced	16.0.R1
Platforms	All

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i>
Tree	proxy-arp-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i>
Tree	remote-proxy-arp
Default	false
Introduced	16.0.R1
Platforms	All

retry-timer *number*

Synopsis	ARP retry interval
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery retry-timer <i>number</i>
Tree	retry-timer
Range	1 to 300
Default	50
Units	deciseconds
Introduced	16.0.R1

Platforms All

static-neighbor [ipv4-address] *string*

Synopsis Enter the **static-neighbor** list instance

Context **configure** *router string interface string ipv4 neighbor-discovery static-neighbor string*

Tree [static-neighbor](#)

Description Commands in this context configure a static ARP entry that associates an IP address with a MAC address for the core router instance.

Introduced 16.0.R1

Platforms All

[ipv4-address] *string*

Synopsis IPv4 address that corresponds to the physical address

Context **configure** *router string interface string ipv4 neighbor-discovery static-neighbor string*

Tree [static-neighbor](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

mac-address *string*

Synopsis MAC address for the static neighbor

Context **configure** *router string interface string ipv4 neighbor-discovery static-neighbor string mac-address string*

Tree [mac-address](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

static-neighbor-unnumbered

Synopsis Enable the **static-neighbor-unnumbered** context

Context **configure** *router string interface string ipv4 neighbor-discovery static-neighbor-unnumbered*

Tree	static-neighbor-unnumbered
Description	Commands in this context configure the static ARP MAC for an unnumbered interface. This entry overrides the dynamic ARP entry on the unnumbered interface.
Introduced	16.0.R1
Platforms	All

mac-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address for the static neighbor
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor-unnumbered mac-address <i>string</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Default	14400
Units	seconds
Introduced	16.0.R1
Platforms	All

primary

Synopsis	Enable the primary context
Context	configure router string interface string ipv4 primary
Tree	primary
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	configure router string interface string ipv4 primary address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure router string interface string ipv4 primary broadcast keyword
Tree	broadcast
Description	<p>This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts.</p> <p>This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.</p>
Default	host-ones
Options	all-ones, host-ones
Introduced	16.0.R1
Platforms	All

gre-termination *boolean*

Synopsis	Enable GRE termination
Context	configure router string interface string ipv4 primary gre-termination boolean
Tree	gre-termination

Description	When configured to true , the router terminates MPLS-over-GRE and IP-over-GRE packets for destination IP addresses from a user-defined subnet. The user defines a subnet for the termination of GRE packets by executing this command on a numbered network IP interface or a loopback interface.
Default	false
Introduced	19.10.R1
Platforms	VSR

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure <i>router string interface string ipv4 primary prefix-length number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	configure <i>router string interface string ipv4 primary track-srrp number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

qos-route-lookup *keyword*

Synopsis	QoS route lookup of ingress IP packets
Context	configure <i>router string interface string ipv4 qos-route-lookup keyword</i>
Tree	qos-route-lookup
Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary [[address](#)] *string*

Synopsis	Enter the secondary list instance
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i>
Tree	secondary
Introduced	16.0.R1
Platforms	All

[address] *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i>
Tree	secondary
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> broadcast <i>keyword</i>
Tree	broadcast
Description	This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts. This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.
Default	host-ones
Options	all-ones, host-ones
Introduced	16.0.R1
Platforms	All

igp-inhibit *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> igp-inhibit <i>boolean</i>

Tree	igp-inhibit
Description	When configured to true , the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 tcp-mss <i>number</i>
Tree	tcp-mss
Range	384 to 9746
Introduced	16.0.R1
Platforms	All

unnumbered

Synopsis	Enter the unnumbered context
Context	configure <i>router string interface string ipv4 unnumbered</i>
Tree	<i>unnumbered</i>
Description	Commands in this context configure an IP interface as an unnumbered interface and specify the IP address to use for the interface. An operator can configure unnumbered interfaces to conserve IP addresses.
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	IP address to associate with unnumbered IP interface
Context	configure <i>router string interface string ipv4 unnumbered ip-address string</i>
Tree	<i>ip-address</i>
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	16.0.R1
Platforms	All

ip-int-name *string*

Synopsis	Unnumbered IP interface name
Context	configure <i>router string interface string ipv4 unnumbered ip-int-name string</i>
Tree	<i>ip-int-name</i>
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	16.0.R1
Platforms	All

system

Synopsis	Use system IP address for the unnumbered IP interface
Context	configure <i>router string interface string ipv4 unnumbered system</i>
Tree	<i>system</i>

Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the urpf-check context
Context	configure <i>router string interface string ipv4 urpf-check</i>
Tree	<i>urpf-check</i>
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default routes when performing a uRPF check
Context	configure <i>router string interface string ipv4 urpf-check ignore-default boolean</i>
Tree	<i>ignore-default</i>
Description	When configured to true , the router ignores default routes while performing a uRPF check to determine the validity of incoming packets. When configured to false , default routes are considered eligible.
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure <i>router string interface string ipv4 urpf-check mode keyword</i>
Tree	<i>mode</i>
Default	strict
Options	strict, loose, strict-no-ecmp
Introduced	16.0.R1
Platforms	All

vrrp [*virtual-router-id*] *number*

Synopsis	Enter the vrrp list instance
Context	configure <i>router string interface string ipv4 vrrp number</i>
Tree	<i>vrrp</i>
Description	Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its Virtual Router Identifier (VRID) and a set of IP addresses.
Introduced	16.0.R1
Platforms	All

[virtual-router-id] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	configure <i>router string interface string ipv4 vrrp number</i>
Tree	<i>vrrp</i>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	configure <i>router string interface string ipv4 vrrp number admin-state keyword</i>
Tree	<i>admin-state</i>
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-key string

Synopsis	Password for simple text authentication
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> authentication-key <i>string</i>
Tree	authentication-key
Description	<p>This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.</p> <p>If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.</p>
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

backup string

Synopsis	Virtual router IP addresses for the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> backup <i>string</i>
Tree	backup
Description	<p>This command associates virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.</p>

See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

Max. Instances	16
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure <i>router string interface string ipv4 vrrp number</i> bfd-liveness
Tree	bfd-liveness
Description	<p>Commands in this context assign a Bidirectional Forwarding Detection (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat mechanism that speeds up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP advertisement message. In addition, the standby VRRP routers transition to a master state to speed up convergence.</p> <p>The VRRP election process takes place based on the advertisement messages sent by all VRRP routers.</p> <p>Only one BFD session can be assigned to any VRRP or SRRP instance, but multiple SRRP or VRRP sessions can use the same BFD session.</p>
Introduced	16.0.R1
Platforms	All

dest-ip *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IP address to use for BFD session
Context	configure <i>router string interface string ipv4 vrrp number</i> bfd-liveness dest-ip <i>string</i>
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

interface-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> bfd-liveness interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

service-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> bfd-liveness service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> init-delay <i>number</i>
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	16.0.R1

Platforms All

mac string

Synopsis Virtual MAC address to use in ARP responses

Context **configure** **router** *string* **interface** *string* **ipv4** **vrrp** *number* **mac** *string*

Tree **mac**

Description This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.

Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced 16.0.R1

Platforms All

master-int-inherit boolean

Synopsis Allow master instance to dictate the master down timer

Context **configure** **router** *string* **interface** *string* **ipv4** **vrrp** *number* **master-int-inherit** *boolean*

Tree **master-int-inherit**

Description When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 16.0.R1

Platforms All

message-interval *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	configure <i>router string interface string ipv4 vrrp number message-interval number</i>
Tree	message-interval
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the master-int-inherit command:</p> <ul style="list-style-type: none">• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The master-int-inherit command has no effect when operating as master.• When a non-owner is in the backup state with master-int-inherit disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.• When a non-owner is in the backup state with master-int-inherit enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.
Range	1 to 2559
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure <i>router string interface string ipv4 vrrp number monitor-oper-group reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other

protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.

Reference	configure service oper-group <i>string</i>
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure router <i>string interface string ipv4 vrrp number ntp-reply boolean</i>
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure router <i>string interface string ipv4 vrrp number oper-group reference</i>
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R1
Platforms	All

owner boolean

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	configure router string interface string ipv4 vrrp number owner boolean
Tree	owner
Description	<p>When configured to true, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.</p> <p>When configured to false, this virtual router instance is designated as a non-owner.</p>
Default	false
Introduced	16.0.R1
Platforms	All

passive boolean

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure router string interface string ipv4 vrrp number passive boolean
Tree	passive
Description	<p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> ping-reply <i>boolean</i>
Tree	ping-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	VRRP priority control policy
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> policy <i>reference</i>
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	configure vrrp policy <i>number</i>
Introduced	16.0.R1
Platforms	All

preempt *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master
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Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> preempt <i>boolean</i>
Tree	preempt
Description	<p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Base priority for the VRRP
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> priority <i>number</i>
Tree	priority
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

ssh-reply *boolean*

Synopsis	Allow the non-owner master to reply to SSH requests
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> ssh-reply <i>boolean</i>
Tree	ssh-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).</p> <p>When configure to false, SSH requests to non-owner master virtual IP addresses are silently discarded.</p>

Default	false
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> standby-forwarding <i>boolean</i>
Tree	standby-forwarding
Description	When configured to true , the standby router forwards all traffic. When configured to false , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> telnet-reply <i>boolean</i>
Tree	telnet-reply
Description	When configured to true , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to false , the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> traceroute-reply <i>boolean</i>
Tree	traceroute-reply

Description	<p>When configured to true, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to false, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p>
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the ipv6 context
Context	configure <i>router string interface string ipv6</i>
Tree	<i>ipv6</i>
Introduced	16.0.R1
Platforms	All

address [*ipv6-address*] *string*

Synopsis	Enter the address list instance
Context	configure <i>router string interface string ipv6 address string</i>
Tree	<i>address</i>
Introduced	16.0.R1
Platforms	All

[*ipv6-address*] *string*

Synopsis	IPv6 address assigned to the interface
Context	configure <i>router string interface string ipv6 address string</i>
Tree	<i>address</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	configure <i>router string interface string ipv6 address string duplicate-address-detection boolean</i>
Tree	duplicate-address-detection
Description	When configured to true , the router enables Duplicate Address Detection (DAD). When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

eui-64 *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	configure <i>router string interface string ipv6 address string eui-64 boolean</i>
Tree	eui-64
Description	When configured to true , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	configure <i>router string interface string ipv6 address string prefix-length number</i>
Tree	prefix-length

Range	4 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

primary-preference *number*

Synopsis	Index assigned to the IPv6 address of the interface
Context	configure <i>router string interface string ipv6 address string primary-preference number</i>
Tree	primary-preference
Description	<p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP ID whose state is tracked on this IP address
Context	configure <i>router string interface string ipv6 address string track-srrp number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure <i>router string interface string ipv6 bfd</i>

Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure router <i>string</i> interface <i>string</i> ipv6 bfd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure router <i>string</i> interface <i>string</i> ipv6 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1

Platforms All

receive number

Synopsis BFD receive interval over this interface

Context **configure router** *string* **interface** *string* **ipv6 bfd receive number**

Tree **receive**

Description This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 16.0.R1

Platforms All

transmit-interval number

Synopsis BFD transmit interval over this interface

Context **configure router** *string* **interface** *string* **ipv6 bfd transmit-interval number**

Tree **transmit-interval**

Description This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 16.0.R1

Platforms All

type keyword

Synopsis Local termination point for the BFD session

Context **configure router** *string* **interface** *string* **ipv6 bfd type keyword**

Tree **type**

Description	<p>This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.</p> <p>The options to specify where the BFD session runs are:</p> <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Default	auto
Options	cpm-np, auto, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	configure <i>router string interface string ipv6 duplicate-address-detection boolean</i>
Tree	duplicate-address-detection
Description	<p>When configured to true, the router enables Duplicate Address Detection (DAD) on the interface.</p> <p>When configured to false, the router disables DAD on a per-interface basis. This prevents the router from performing a DAD check on the interface. All IPv6 addresses on an interface with DAD disabled, immediately enter a preferred state, without checking for uniqueness on the interface. This is useful for interfaces that enter a looped state during troubleshooting and are operationally disabled when the loop is detected, requiring manual intervention to clear the DAD violation.</p>
Default	true
Introduced	16.0.R1
Platforms	All

forward-ipv4-packets *boolean*

Synopsis	Forward unencapsulated IPv4 packets
Context	configure <i>router string interface string ipv6 forward-ipv4-packets boolean</i>
Tree	forward-ipv4-packets
Description	When configured to true , the router can use an IPv6-only interface, with no configured IPv4 addresses, to forward IPv4 packets that originate or terminate locally.

The interface reports that its IPv4 operational state is up if its IPv6 operational state is up. Not all protocols observe the interface as up from an IPv4 perspective. This command mostly supports BGP routing use cases; see RFC 5549 for details.

When configured to **false**, the router prevents IPv4 packets from being forwarded if there are no configured IPv4 subnets.

Default	false
Introduced	19.5.R1
Platforms	All

icmp6

Synopsis	Enter the icmp6 context
Context	configure <i>router string interface string ipv6 icmp6</i>
Tree	icmp6
Introduced	16.0.R1
Platforms	All

packet-too-big

Synopsis	Enter the packet-too-big context
Context	configure <i>router string interface string ipv6 icmp6 packet-too-big</i>
Tree	packet-too-big
Description	Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	configure <i>router string interface string ipv6 icmp6 packet-too-big admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number of Packet Too big Messages issued per time frame
Context	configure <i>router string interface string ipv6 icmp6 packet-too-big number number</i>
Tree	<i>number</i>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit Packet Too Big messages
Context	configure <i>router string interface string ipv6 icmp6 packet-too-big seconds number</i>
Tree	<i>seconds</i>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the param-problem context
Context	configure <i>router string interface string ipv6 icmp6 param-problem</i>
Tree	<i>param-problem</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	configure <i>router string interface string ipv6 icmp6 param-problem admin-state keyword</i>
Tree	<i>admin-state</i>
Default	enable
Options	enable, disable

Introduced 16.0.R1
Platforms All

number *number*

Synopsis Number used to limit ICMPv6 Parameter Problem messages
Context **configure** *router string interface string ipv6 icmp6 param-problem number number*
Tree *number*
Range 10 to 1000
Default 100
Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis Time used to limit ICMPv6 Parameter Problem messages
Context **configure** *router string interface string ipv6 icmp6 param-problem seconds number*
Tree *seconds*
Range 1 to 60
Default 10
Introduced 16.0.R1
Platforms All

redirects

Synopsis Enter the **redirects** context
Context **configure** *router string interface string ipv6 icmp6 redirects*
Tree *redirects*
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of Redirect message sends
Context **configure** *router string interface string ipv6 icmp6 redirects admin-state keyword*

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit ICMPv6 Redirect messages per time frame
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 redirects <i>number</i> <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Redirect messages
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 redirects <i>seconds</i> <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

time-exceeded

Synopsis	Enter the time-exceeded context
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded
Tree	time-exceeded
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Time Exceeded message sends
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the unreachables context
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 unreachables
Tree	unreachables
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of Unreachable message sends
Context **configure** *router string interface string ipv6 icmp6 unreachablees admin-state keyword*
Tree *admin-state*
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

number *number*

Synopsis Number to limit Unreachable messages per time frame
Context **configure** *router string interface string ipv6 icmp6 unreachablees number number*
Tree *number*
Range 10 to 2000
Default 100
Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis Time used to limit ICMPv6 Unreachable messages
Context **configure** *router string interface string ipv6 icmp6 unreachablees seconds number*
Tree *seconds*
Range 1 to 60
Default 10
Introduced 16.0.R1
Platforms All

link-local-address

Synopsis Enter the **link-local-address** context

Context	configure <i>router string interface string ipv6 link-local-address</i>
Tree	link-local-address
Description	<p>Commands in this context configure the IPv6 link-local address that is used as a virtual SRRP IPv6 address by the master SRRP node. This address is sent in the Router Advertisements initiated by the master SRRP node. Clients use this address as IPv6 default-gateway. Both SRRP nodes, master and backup, must be configured with the same link-local address.</p> <p>Only one link-local address is allowed per interface.</p> <p>Caution: Removing a manually configured link-local address may impact routing protocols or static routes that have a dependency on that address. Nokia does not recommend removing a link-local address when there are active IPv6 subscriber hosts on an IES or VPRN interface.</p>
Introduced	16.0.R1
Platforms	All

address string

Synopsis	IPv6 link-local address
Context	configure <i>router string interface string ipv6 link-local-address address string</i>
Tree	address
Introduced	16.0.R1
Platforms	All

duplicate-address-detection boolean

Synopsis	Enable Duplicate Address Detection
Context	configure <i>router string interface string ipv6 link-local-address duplicate-address-detection boolean</i>
Tree	duplicate-address-detection
Description	<p>When configured to true, the router enables Duplicate Address Detection (DAD) on the interface.</p> <p>When configured to false, the router disables DAD and sets the address to preferred, even if there is a duplicated address.</p>
Default	true
Introduced	16.0.R1
Platforms	All

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 local-dhcp-server <i>reference</i>
Tree	local-dhcp-server
Description	This command instantiates a local DHCP server. A local DHCP server can serve multiple interfaces but is limited to the routing context in which it was created.
Reference	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

learn-unsolicited *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery learn-unsolicited <i>keyword</i>
Tree	learn-unsolicited
Description	This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set. When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the limit context
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Context	configure <i>router string interface string ipv6 neighbor-discovery limit</i>
Tree	<i>limit</i>
Description	<p>Commands in this context configure the maximum amount of dynamic IPv6 neighbor entries that can be learned on an IP interface.</p> <p>When the number of dynamic neighbor entries reaches the configured percentage of this limit the system sends an SNMP trap. When the limit is exceeded, no new entries are learned until an entry expires and traffic to these destinations is dropped. Entries that have already been learned are refreshed.</p>
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Generate log entries when limit is reached
Context	configure <i>router string interface string ipv6 neighbor-discovery limit log-only boolean</i>
Tree	<i>log-only</i>
Description	<p>When configured to true, the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned.</p> <p>When configured to false, the router does not send the warning message.</p>
Default	false
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	configure <i>router string interface string ipv6 neighbor-discovery limit max-entries number</i>
Tree	<i>max-entries</i>
Description	<p>This command configures the maximum number of entries that can be learned on an IP interface.</p> <p>When unconfigured, no maximum limit is imposed.</p>
Range	0 to 102400
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold percentage that triggers a warning message
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery limit threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Units	percent
Introduced	16.0.R1
Platforms	All

local-proxy-nd *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery local-proxy-nd <i>boolean</i>
Tree	local-proxy-nd
Description	When configured to true , the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled. When configured to false , the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.
Default	false
Introduced	16.0.R1
Platforms	All

proactive-refresh *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery proactive-refresh <i>keyword</i>
Tree	proactive-refresh
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

proxy-nd-policy *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery proxy-nd-policy <i>reference</i>
Tree	proxy-nd-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery reachable-time <i>number</i>
Tree	reachable-time
Range	30 to 3600
Introduced	16.0.R1
Platforms	All

secure-nd

Synopsis	Enter the secure-nd context
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd
Tree	secure-nd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Secure Neighbor Discovery
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

allow-unsecured-msgs *boolean*

Synopsis	Accept unsecured messages
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd allow-unsecured-msgs <i>boolean</i>
Tree	allow-unsecured-msgs
Description	When configured to true , the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted. When configured to false , the router disables the acceptance of unsecured messages.
Default	true
Introduced	16.0.R1
Platforms	All

public-key-min-bits *number*

Synopsis	Minimum acceptable key length for public keys in CGA
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd public-key-min-bits <i>number</i>
Tree	public-key-min-bits
Range	512 to 1024
Default	1024
Introduced	16.0.R1
Platforms	All

security-parameter *number*

Synopsis	Security parameter used in the generation of a CGA
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd security-parameter <i>number</i>
Tree	security-parameter
Range	0 to 1

Default	1
Introduced	16.0.R1
Platforms	All

stale-time *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	configure <i>router string interface string ipv6 neighbor-discovery stale-time number</i>
Tree	<i>stale-time</i>
Range	60 to 65535
Introduced	16.0.R1
Platforms	All

static-neighbor [*ipv6-address*] *string*

Synopsis	Enter the static-neighbor list instance
Context	configure <i>router string interface string ipv6 neighbor-discovery static-neighbor string</i>
Tree	<i>static-neighbor</i>
Description	<p>Commands in this context configure an IPv6-to-MAC address mapping on the interface. Use this command if a directly attached IPv6 node does not support ICMPv6 neighbor discovery, or for some reason, a static address must be used. This command can only be used on Ethernet media.</p> <p>The IPv6 address must be on the subnet that was configured from the IPv6 address or a link-local-address commands.</p>
Introduced	16.0.R1
Platforms	All

[ipv6-address] *string*

Synopsis	IPv6 address corresponding to the physical address
Context	configure <i>router string interface string ipv6 neighbor-discovery static-neighbor string</i>
Tree	<i>static-neighbor</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

qos-route-lookup *keyword*

Synopsis	QoS route lookup of ingress IP packets
Context	configure router <i>string</i> interface <i>string</i> ipv6 qos-route-lookup <i>keyword</i>
Tree	qos-route-lookup
Description	This command enables QoS classification of the ingress IP packets on an interface based on the QoS information associated with routes in the forwarding table.
Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tcp-mss *number*

Synopsis	TCP maximum segment size for the IPv6 interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 tcp-mss <i>number</i>
Tree	tcp-mss
Range	1220 to 9726
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the urpf-check context
Context	configure router <i>string</i> interface <i>string</i> ipv6 urpf-check
Tree	urpf-check
Introduced	16.0.R1

Platforms All

ignore-default *boolean*

Synopsis Ignore default route when performing a uRPF check
 Context **configure** *router string interface string ipv6 urpf-check ignore-default boolean*
 Tree [ignore-default](#)
 Default false
 Introduced 16.0.R1
 Platforms All

mode *keyword*

Synopsis Unicast RPF check mode
 Context **configure** *router string interface string ipv6 urpf-check mode keyword*
 Tree [mode](#)
 Default strict
 Options strict, loose, strict-no-ecmp
 Introduced 16.0.R1
 Platforms All

vrrp [[virtual-router-id](#)] *number*

Synopsis Enter the **vrrp** list instance
 Context **configure** *router string interface string ipv6 vrrp number*
 Tree [vrrp](#)
 Description Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its virtual router identifier (VRID) and a set of IP addresses.
 Max. Instances 4
 Introduced 16.0.R1
 Platforms All

[virtual-router-id] *number*

Synopsis Virtual Router Identifier (VRID) for the IP interface

Context	configure <i>router string interface string ipv6 vrrp number</i>
Tree	<i>vrrp</i>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	configure <i>router string interface string ipv6 vrrp number admin-state keyword</i>
Tree	<i>admin-state</i>
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup *string*

Synopsis	Virtual router IP addresses for the interface
Context	configure <i>router string interface string ipv6 vrrp number backup string</i>
Tree	<i>backup</i>
Description	This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.

This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.

Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.

For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.

See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

Max. Instances	4
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> bfd-liveness
Tree	bfd-liveness
Description	<p>Commands in this context assign a bidirectional forwarding detect (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat mechanism for use in speeding up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP Advertisement message. In addition, the standby VRRP routers transition to a Master state to speed convergence.</p> <p>The normal VRRP election process takes place based on the Advertisement messages sent by all VRRP routers.</p> <p>There can be only one BFD session assigned to any specific VRRP or SRRP instance, but there can be multiple SRRP or VRRP sessions using the same BFD session.</p>
Introduced	16.0.R1
Platforms	All

dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for the BFD session
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> bfd-liveness dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

interface-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> bfd-liveness interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

service-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> bfd-liveness service-name <i>string</i>
Tree	service-name

String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay number

Synopsis	VRRP initialization delay timer
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> init-delay <i>number</i>
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

mac string

Synopsis	Virtual MAC address to use in ARP responses
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> mac <i>string</i>
Tree	mac
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p>
Introduced	16.0.R1
Platforms	All

master-int-inherit *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	configure <i>router string interface string ipv6 vrrp number</i> master-int-inherit <i>boolean</i>
Tree	master-int-inherit
Description	<p>When configured to true, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to false, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	16.0.R1
Platforms	All

message-interval *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	configure <i>router string interface string ipv6 vrrp number</i> message-interval <i>number</i>
Tree	message-interval
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the master-int-inherit command:</p> <ul style="list-style-type: none">• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The master-int-inherit command has no effect when operating as the master.• When a non-owner is in the backup state with master-int-inherit disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.• When a non-owner is in the backup state with master-int-inherit enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.
Range	10 to 4095
Default	100

Units	centiseconds
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure service oper-group <i>string</i>
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> ntp-reply <i>boolean</i>
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
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Context	configure <i>router string interface string ipv6 vrrp number oper-group reference</i>
Tree	<i>oper-group</i>
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure <i>service oper-group string</i>
Introduced	16.0.R1
Platforms	All

owner *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	configure <i>router string interface string ipv6 vrrp number owner boolean</i>
Tree	<i>owner</i>
Description	When configured to true , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router. When configured to false , this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

passive *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure <i>router string interface string ipv6 vrrp number passive boolean</i>
Tree	<i>passive</i>

Description	<p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure <i>router string interface string ipv6 vrrp number ping-reply boolean</i>
Tree	ping-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	VRRP priority control policy
Context	configure <i>router string interface string ipv6 vrrp number policy reference</i>
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with</p>

the **priority** command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.

For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.

Reference	configure vrrp policy number
Introduced	16.0.R1
Platforms	All

preempt boolean

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure router string interface string ipv6 vrrp number preempt boolean
Tree	preempt
Description	When configured to true , this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router. When configured to false , this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.
Default	true
Introduced	16.0.R1
Platforms	All

priority number

Synopsis	Base priority for the VRRP
Context	configure router string interface string ipv6 vrrp number priority number
Tree	priority
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process. The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	configure <i>router string interface string ipv6 vrrp number standby-forwarding boolean</i>
Tree	standby-forwarding
Description	When configured to true , the standby router forwards all traffic. When configured to false , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure <i>router string interface string ipv6 vrrp number telnet-reply boolean</i>
Tree	telnet-reply
Description	When configured to true , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to false , the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure <i>router string interface string ipv6 vrrp number traceroute-reply boolean</i>
Tree	traceroute-reply
Description	When configured to true , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to false , the router silently discards traceroute requests sent to non-owner master virtual IP addresses.

Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).

Default	false
Introduced	16.0.R1
Platforms	All

lag

Synopsis	Enter the lag context
Context	configure <i>router string interface string lag</i>
Tree	<i>lag</i>
Introduced	16.0.R1
Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	configure <i>router string interface string lag link-map-profile number</i>
Tree	<i>link-map-profile</i>
Description	<p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system reshapes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p>
Range	1 to 64
Introduced	16.0.R1
Platforms	All

per-link-hash

Synopsis	Enter the per-link-hash context
Context	configure <i>router string interface string lag per-link-hash</i>
Tree	<i>per-link-hash</i>
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	configure <i>router string interface string lag per-link-hash class number</i>
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	configure <i>router string interface string lag per-link-hash weight number</i>
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

ldp-sync-timer

Synopsis	Enter the ldp-sync-timer context
Context	configure <i>router string interface string ldp-sync-timer</i>
Tree	ldp-sync-timer
Description	This command enables the synchronization of an IGP and LDP and enters the context to set associated parameters.
Introduced	16.0.R1
Platforms	All

end-of-lib *boolean*

Synopsis	Terminate LDP synchronization timer
Context	configure <i>router string interface string ldp-sync-timer end-of-lib boolean</i>
Tree	end-of-lib

Description	This command configures the system to terminate the LDP synchronization timer early for a specific session to an LDP peer, if the IGP interface receives LDP End-of-LIB Typed Wildcard FEC messages for every FEC type negotiated.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time interval for the LDP synchronization timer
Context	configure <i>router string interface string ldp-sync-timer seconds number</i>
Tree	seconds
Range	1 to 1800
Introduced	16.0.R1
Platforms	All

load-balancing

Synopsis	Enter the load-balancing context
Context	configure <i>router string interface string load-balancing</i>
Tree	load-balancing
Description	Commands in this context configure interface per-flow load-balancing options that apply to traffic that enters this interface and that egresses over a LAG or ECMP. This is a per-interface setting. Load-balancing options enabled on the interface level overwrite options that can also be enabled on the system level.
Introduced	16.0.R1
Platforms	All

flow-label-load-balancing *boolean*

Synopsis	Enable flow label load balancing
Context	configure <i>router string interface string load-balancing flow-label-load-balancing boolean</i>
Tree	flow-label-load-balancing
Description	When configured to true , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface. When configured to false , the router disables load balancing in ECMP and LAG.

Default	false
Introduced	21.5.R1
Platforms	All

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	configure router <i>string</i> interface <i>string</i> load-balancing ip-load-balancing <i>keyword</i>
Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the l4-load-balancing command is enabled, this command also includes the source or destination port in the hash inputs.
Default	both
Options	both, destination, source, inner-ip
Introduced	16.0.R3
Platforms	All

lsr-load-balancing *keyword*

Synopsis	LSR load-balancing algorithm
Context	configure router <i>string</i> interface <i>string</i> load-balancing lsr-load-balancing <i>keyword</i>
Tree	lsr-load-balancing
Description	This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting.
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid
Introduced	16.0.R1
Platforms	All

spi-load-balancing *boolean*

Synopsis	Enable SPI use in hashing
Context	configure router <i>string</i> interface <i>string</i> load-balancing spi-load-balancing <i>boolean</i>
Tree	spi-load-balancing
Description	When configured to true , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.

Default	false
Introduced	16.0.R1
Platforms	All

teid-load-balancing *boolean*

Synopsis	Enable use of TEID in hashing
Context	configure router <i>string</i> interface <i>string</i> load-balancing teid-load-balancing <i>boolean</i>
Tree	teid-load-balancing
Default	false
Introduced	16.0.R1
Platforms	All

loopback

Synopsis	Use interface as a loopback interface
Context	configure router <i>string</i> interface <i>string</i> loopback
Tree	loopback
Description	When configured, this interface is used as a loopback interface. This command and the vas-if-type command are mutually exclusive.
Notes	The following elements are part of a choice: loopback or port .
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	MAC address of the interface
Context	configure router <i>string</i> interface <i>string</i> mac <i>string</i>
Tree	mac
Description	This command assigns a specific MAC address to an IP interface. Only one MAC address can be assigned to an IP interface. When multiple mac commands are entered, the last command overwrites the previous command.
Introduced	16.0.R1
Platforms	All

mac-accounting *boolean*

Synopsis	Enable MAC accounting functionality
Context	configure router <i>string</i> interface <i>string</i> mac-accounting <i>boolean</i>
Tree	mac-accounting
Description	When configured to true , the router enables MAC accounting functionality.
Default	false
Introduced	16.0.R1
Platforms	All

network-domains

Synopsis	Enter the network-domains context
Context	configure router <i>string</i> interface <i>string</i> network-domains
Tree	network-domains
Introduced	16.0.R4
Platforms	All

network-domain [*domain-name*] *reference*

Synopsis	Add a list entry for network-domain
Context	configure router <i>string</i> interface <i>string</i> network-domains network-domain <i>reference</i>
Tree	network-domain
Description	<p>Commands in this context assign an interface to a network domain. The router then takes the network domain into account during SAP ingress queue allocation for VPLS SAP.</p> <p>The network domain association can only be done in the base routing context. An operator can associate a network domain with an interface without a physical port being specified, but the configuration has no effect until a corresponding port, or LAG, is defined.</p> <p>Single interfaces can be associated with multiple network domains.</p>
Max. Instances	5
Introduced	16.0.R4
Platforms	All

[domain-name] *reference*

Synopsis	Network domain name
Context	configure router <i>string</i> interface <i>string</i> network-domains network-domain <i>reference</i>
Tree	network-domain
Reference	configure router <i>string</i> network-domains network-domain <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port (*port-and-encap* | *keyword*)

Synopsis	Port to bind to this interface
Context	configure router <i>string</i> interface <i>string</i> port (<i>port-and-encap</i> <i>keyword</i>)
Tree	port
Description	This command creates an association between a logical IP interface and a physical port. An operator can also associate an interface with the system (loopback address).
String Length	1 to 45
Options	system
Notes	The following elements are part of a choice: loopback or port .
Introduced	16.0.R1
Platforms	All

ptp-hw-assist

Synopsis	Enter the ptp-hw-assist context
Context	configure router <i>string</i> interface <i>string</i> ptp-hw-assist
Tree	ptp-hw-assist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PTP time stamping assist
Context	configure router <i>string</i> interface <i>string</i> ptp-hw-assist admin-state <i>keyword</i>
Tree	admin-state

Description	This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support. Only one interface per physical port can have <code>ptp-hw-assist</code> enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis	Enter the qos context
Context	configure <i>router string interface string qos</i>
Tree	<i>qos</i>
Description	Commands in this context associate a network QoS policy with a network IP interface. Only one network QoS policy can be associated with an IP interface at one time. Attempts to associate a second QoS policy return an error.
Introduced	16.0.R1
Platforms	All

egress-instance *number*

Synopsis	Port egress queue group instance for this interface
Context	configure <i>router string interface string qos egress-instance number</i>
Tree	<i>egress-instance</i>
Description	This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

egress-port-redirect-group *reference*

Synopsis	QoS queue group name
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Context	configure <i>router string interface string qos egress-port-redirect-group reference</i>
Tree	egress-port-redirect-group
Description	This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an egress queue group applied to the egress context of the port associated with the IP interface.
Reference	configure qos queue-group-templates egress queue-group string
Introduced	16.0.R1
Platforms	All

ingress-fp-redirect-group *reference*

Synopsis	Forwarding plane queue group policy for the interface
Context	configure <i>router string interface string qos ingress-fp-redirect-group reference</i>
Tree	ingress-fp-redirect-group
Description	This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface.
Reference	configure qos queue-group-templates ingress queue-group string
Introduced	16.0.R1
Platforms	All

ingress-instance *number*

Synopsis	Forwarding plane ingress queue group for this interface
Context	configure <i>router string interface string qos ingress-instance number</i>
Tree	ingress-instance
Description	This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

network-policy *reference*

Synopsis	Network policy name associated with a network interface
Context	configure router <i>string</i> interface <i>string</i> qos network-policy <i>reference</i>
Tree	network-policy
Description	This command associates an existing network policy name with the IP interface.
Reference	configure qos network <i>string</i>
Introduced	16.0.R1
Platforms	All

strip-label *boolean*

Synopsis	Strip all MPLS labels before PBR processing
Context	configure router <i>string</i> interface <i>string</i> strip-label <i>boolean</i>
Tree	strip-label
Description	When configured to true , the router forces packets to be stripped of all (maximum 5) MPLS labels before the packets are handed over for possible filter (PBR) processing. This command is supported on: <ul style="list-style-type: none">• optical ports for the 7750 SR and 7450 ESS• IOM3 XP cards for the 7750 SR and 7450 ESS• null/dot1q encaps• network ports• IPv4• IPv6
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	configure router <i>string</i> interface <i>string</i> tos-marking-state <i>keyword</i>
Tree	tos-marking-state
Description	This command configures the ToS marking state. This command is used to alter the default trusted state to a non-trusted state. When configured to trusted or default, the ToS field is not remarked by egress network IP interfaces unless the egress network IP interface has the remark-trusted state set, in

which case the egress network interface treats all VPRN and network IP interfaces as untrusted.

When configured to **untrusted**, all egress network IP interfaces remark IP packets received on the network interface according to the egress marking definitions on each network interface.

Default	trusted
Options	trusted, untrusted
Introduced	16.0.R1
Platforms	All

untrusted

Synopsis	Enable the untrusted context
Context	configure <i>router string interface string untrusted</i>
Tree	<i>untrusted</i>
Description	<p>Commands in this context configure the untrusted state for a network IP interface.</p> <p>The untrusted state identifies the participating interfaces in the label security feature for prefixes of a VPN family at an inter-AS boundary. The router supports a maximum of 15 network interfaces that can participate in this feature.</p> <p>The user normally applies this command to an inter-AS interface. PIP keeps track of the untrusted status of each interface.</p>
Introduced	16.0.R4
Platforms	All

default-forwarding *keyword*

Synopsis	Default action for selective ILM
Context	configure <i>router string interface string untrusted default-forwarding keyword</i>
Tree	<i>default-forwarding</i>
Description	<p>This command specifies the default forwarding behavior of labeled packets received on this interface.</p> <p>This command sets the default behavior for an untrusted interface in the datapath and for all ILMs. When enabling the label security for VPN IPv4 or VPN IPv6 prefixes, BGP programs the data path to provide an exception to the normal way of forwarding away from the default for those VPRN ILMs.</p> <p>When the default behavior is to forward packets, the router checks labeled packets in the normal way against the table of programmed ILMs to decide if packets are dropped or forwarded in a GRT, a VRF, or a L2 service context.</p>

When the specified behavior is to drop packets, all labeled packets received on the interface are automatically dropped.

Default	forward
Options	forward, drop
Introduced	16.0.R4
Platforms	All

urpf-selected-vprns *boolean*

Synopsis	Enable uRPF checking of incoming traffic on interface
Context	configure <i>router string interface string urpf-selected-vprns boolean</i>
Tree	urpf-selected-vprns
Description	<p>When configured to true, the router performs uRPF checks of incoming traffic on the network interface for the following:</p> <ul style="list-style-type: none"> • Packets associated with the global routing table (base router) context • Packets associated with VPRNs that have enabled the uRPF check using the configure service vprn network ingress urpf-check command <p>When configured to false, the router performs uRPF checks for all ingress traffic on the network interface (associated with the base router and all VPRNs) based on the IPv4 and IPv6 urpf-check command configuration options of the network interface.</p>
Default	false
Introduced	16.0.R1
Platforms	All

vas-if-type *keyword*

Synopsis	VAS interface type
Context	configure <i>router string interface string vas-if-type keyword</i>
Tree	vas-if-type
Description	This command configures the type of a Value Added Service (VAS) facing interface. This command and loopback command
Options	to-from-access, to-from-network, to-from-both
Introduced	16.0.R1
Platforms	All

ipsec

Synopsis	Enter the ipsec context
Context	configure <i>router string ipsec</i>
Tree	<i>ipsec</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-interface [*name*] *string*

Synopsis	Enter the multi-chassis-shunt-interface list instance
Context	configure <i>router string ipsec multi-chassis-shunt-interface string</i>
Tree	<i>multi-chassis-shunt-interface</i>
Description	This command configures the multi-chassis shunting interface name for the peer.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis	Multi-chassis shunt interface name
Context	configure <i>router string ipsec multi-chassis-shunt-interface string</i>
Tree	<i>multi-chassis-shunt-interface</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop

Synopsis	Enter the next-hop context
Context	configure <i>router string ipsec multi-chassis-shunt-interface string next-hop</i>
Tree	<i>next-hop</i>
Description	Commands in this context configure the next hop for shunting over the interface.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next hop address
Context	configure <i>router string ipsec multi-chassis-shunt-interface string next-hop address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	address
Description	This command configures the next-hop address for the shunting interface.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunting-profile [[name](#)] *string*

Synopsis	Enter the multi-chassis-shunting-profile list instance
Context	configure <i>router string ipsec multi-chassis-shunting-profile string</i>
Tree	multi-chassis-shunting-profile
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Multi-chassis shunting profile name
Context	configure <i>router string ipsec multi-chassis-shunting-profile string</i>
Tree	multi-chassis-shunting-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer [[ip-address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure <i>router string ipsec multi-chassis-shunting-profile string peer reference</i>
Tree	peer

Max. Instances	3
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-address] reference

Synopsis	Peer address
Context	configure router <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-interface reference

Synopsis	Multi-chassis shunt interface
Context	configure router <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> peer <i>reference</i> multi-chassis-shunt-interface <i>reference</i>
Tree	multi-chassis-shunt-interface
Description	This command configures the shunting interface name for the peer.
Reference	configure router <i>string</i> ipsec multi-chassis-shunt-interface <i>string</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

security-policy [id] number

Synopsis	Enter the security-policy list instance
Context	configure router <i>string</i> ipsec security-policy <i>number</i>
Tree	security-policy
Introduced	22.7.R1
Platforms	VSR

[id] *number*

Synopsis	IPsec security policy ID
Context	configure router <i>string ipsec security-policy number</i>
Tree	security-policy
Range	1 to 32768
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

entry [entry-id] *number*

Synopsis	Enter the entry list instance
Context	configure router <i>string ipsec security-policy number entry number</i>
Tree	entry
Introduced	22.7.R1
Platforms	VSR

[entry-id] *number*

Synopsis	IPsec security policy entry ID
Context	configure router <i>string ipsec security-policy number entry number</i>
Tree	entry
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

local-ip

Synopsis	Enter the local-ip context
Context	configure router <i>string ipsec security-policy number entry number local-ip</i>
Tree	local-ip
Description	Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry.

The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.

Introduced 22.7.R1

Platforms VSR

address string

Synopsis Destination IPv4 address of the aggregate route

Context **configure** [router string](#) [ipsec security-policy number entry number local-ip address string](#)

Tree [address](#)

Notes The following elements are part of a choice: **address** or **any**.

Introduced 22.7.R1

Platforms VSR

any boolean

Synopsis Use any IP address

Context **configure** [router string](#) [ipsec security-policy number entry number local-ip any boolean](#)

Tree [any](#)

Default false

Notes The following elements are part of a choice: **address** or **any**.

Introduced 22.7.R1

Platforms VSR

local-ipv6

Synopsis Enter the **local-ipv6** context

Context **configure** [router string](#) [ipsec security-policy number entry number local-ipv6](#)

Tree [local-ipv6](#)

Description Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry.

The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.

Introduced 22.7.R1

Platforms VSR

address string

Synopsis Destination IPv6 address of the aggregate route

Context **configure** [router string](#) [ipsec security-policy number entry number local-ipv6 address string](#)

Tree [address](#)

Notes The following elements are part of a choice: **address** or **any**.

Introduced 22.7.R1

Platforms VSR

any boolean

Synopsis Use any IP address

Context **configure** [router string](#) [ipsec security-policy number entry number local-ipv6 any boolean](#)

Tree [any](#)

Default false

Notes The following elements are part of a choice: **address** or **any**.

Introduced 22.7.R1

Platforms VSR

remote-ip

Synopsis Enter the **remote-ip** context

Context **configure** [router string](#) [ipsec security-policy number entry number remote-ip](#)

Tree [remote-ip](#)

Description Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry.
The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.

Introduced 22.7.R1

Platforms VSR

address string

Synopsis	Destination IPv4 address of the aggregate route
Context	configure router string ipsec security-policy number entry number remote-ip address string
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

any boolean

Synopsis	Use any IP address
Context	configure router string ipsec security-policy number entry number remote-ip any boolean
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

remote-ipv6

Synopsis	Enter the remote-ipv6 context
Context	configure router string ipsec security-policy number entry number remote-ipv6
Tree	remote-ipv6
Description	Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry. The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public.
Introduced	22.7.R1
Platforms	VSR

address string

Synopsis	Destination IPv6 address of the aggregate route
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Context	configure <i>router string ipsec security-policy number entry number remote-ipv6 address string</i>
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

any *boolean*

Synopsis	Use any IP address
Context	configure <i>router string ipsec security-policy number entry number remote-ipv6 any boolean</i>
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>router string ipv6</i>
Tree	ipv6
Introduced	16.0.R1
Platforms	All

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure <i>router string ipv6 neighbor-discovery</i>
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	configure router <i>string</i> ipv6 neighbor-discovery reachable-time <i>number</i>
Tree	reachable-time
Range	30 to 3600
Default	30
Introduced	16.0.R1
Platforms	All

stale-time *number*

Synopsis	Neighbor discovery cache entry stale time
Context	configure router <i>string</i> ipv6 neighbor-discovery stale-time <i>number</i>
Tree	stale-time
Range	60 to 65535
Default	14400
Introduced	16.0.R1
Platforms	All

router-advertisement

Synopsis	Enter the router-advertisement context
Context	configure router <i>string</i> ipv6 router-advertisement
Tree	router-advertisement
Introduced	16.0.R1
Platforms	All

dns-options

Synopsis	Enable the dns-options context
Context	configure router <i>string</i> ipv6 router-advertisement dns-options
Tree	dns-options
Introduced	16.0.R1
Platforms	All

rdnss-lifetime (*keyword | number*)

Synopsis	Maximum time over which the RDNSS address is valid
Context	configure <i>router string ipv6 router-advertisement dns-options rdnss-lifetime</i> (<i>keyword number</i>)
Tree	rdnss-lifetime
Description	This command specifies the maximum time that the RDNSS address is used for name resolution by the client.
Range	0 4 to 3600
Default	infinite
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

server *string*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	configure <i>router string ipv6 router-advertisement dns-options server string</i>
Tree	server
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [*ip-int-name*] *string*

Synopsis	Enter the interface list instance
Context	configure <i>router string ipv6 router-advertisement interface string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[ip-int-name] *string*

Synopsis	Router interface name
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of router advertisement
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

current-hop-limit *number*

Synopsis	Hop limit advertised in RA messages
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> current-hop-limit <i>number</i>
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	All

dns-options

Synopsis	Enable the dns-options context
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> dns-options
Tree	dns-options

Introduced 16.0.R1
Platforms All

include-rdnss *boolean*

Synopsis Include the RDNSS option in the RA
Context **configure** *router* *string* *ipv6* *router-advertisement* *interface* *string* *dns-options* *include-rdnss* *boolean*
Tree [include-rdnss](#)
Default true
Introduced 16.0.R1
Platforms All

rdnss-lifetime (*number* | *keyword*)

Synopsis Maximum time over which the RDNSS address 25 is valid
Context **configure** *router* *string* *ipv6* *router-advertisement* *interface* *string* *dns-options* *rdnss-lifetime* (*number* | *keyword*)
Tree [rdnss-lifetime](#)
Range 0 | 4 to 3600
Units seconds
Options infinite
Introduced 16.0.R1
Platforms All

server *string*

Synopsis RAs that are forwarded to IPv6 DNS servers
Context **configure** *router* *string* *ipv6* *router-advertisement* *interface* *string* *dns-options* *server* *string*
Tree [server](#)
Max. Instances 4
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

managed-configuration *boolean*

Synopsis	Set the managed address configuration flag
Context	configure <i>router</i> <i>string</i> <i>ipv6</i> <i>router-advertisement</i> <i>interface</i> <i>string</i> <i>managed-configuration</i> <i>boolean</i>
Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	All

max-advertisement-interval *number*

Synopsis	Maximum time between sending advertisement messages
Context	configure <i>router</i> <i>string</i> <i>ipv6</i> <i>router-advertisement</i> <i>interface</i> <i>string</i> <i>max-advertisement-interval</i> <i>number</i>
Tree	max-advertisement-interval
Range	4 to 1800
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	All

min-advertisement-interval *number*

Synopsis	Minimum interval between router advertisement messages
Context	configure <i>router</i> <i>string</i> <i>ipv6</i> <i>router-advertisement</i> <i>interface</i> <i>string</i> <i>min-advertisement-interval</i> <i>number</i>
Tree	min-advertisement-interval
Range	3 to 1350
Default	200
Units	seconds
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	MTU for sending packets to the router
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> mtu <i>number</i>
Tree	mtu
Range	1280 to 9800
Introduced	16.0.R1
Platforms	All

other-stateful-configuration *boolean*

Synopsis	Set the other configuration flag
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> other-stateful-configuration <i>boolean</i>
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	All

prefix [**ipv6-prefix**] *string*

Synopsis	Enter the prefix list instance
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> prefix <i>string</i>
Tree	prefix
Max. Instances	254
Introduced	16.0.R1
Platforms	All

[ipv6-prefix] *string*

Synopsis	IPv6 address prefix
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> prefix <i>string</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

autonomous *boolean*

Synopsis Set the autonomous flag value
Context **configure** **router** *string ipv6 router-advertisement interface string prefix string autonomous boolean*
Tree **autonomous**
Default true
Introduced 16.0.R1
Platforms All

on-link *boolean*

Synopsis Use prefix for on-link determination
Context **configure** **router** *string ipv6 router-advertisement interface string prefix string on-link boolean*
Tree **on-link**
Default true
Introduced 16.0.R1
Platforms All

preferred-lifetime (*keyword | number*)

Synopsis Remaining time that the prefix remains preferred
Context **configure** **router** *string ipv6 router-advertisement interface string prefix string preferred-lifetime (keyword | number)*
Tree **preferred-lifetime**
Range 0 to 4294967294
Default 604800
Units seconds
Options infinite
Introduced 16.0.R1
Platforms All

valid-lifetime (*keyword | number*)

Synopsis	Remaining time in which the prefix is still valid
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> prefix <i>string</i> valid-lifetime (<i>keyword number</i>)
Tree	valid-lifetime
Range	0 to 4294967294
Default	2592000
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Time the router is reachable by other hosts or nodes
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> reachable-time <i>number</i>
Tree	reachable-time
Range	0 to 3600000
Default	0
Units	milliseconds
Introduced	16.0.R1
Platforms	All

retransmit-time *number*

Synopsis	Time to advertise neighbor advertisement messages
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> retransmit-time <i>number</i>
Tree	retransmit-time
Range	0 to 1800000
Default	0
Units	milliseconds
Introduced	16.0.R1
Platforms	All

router-lifetime *number*

Synopsis	Lifetime value in neighbor advertisement messages
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> router-lifetime <i>number</i>
Tree	router-lifetime
Range	0 4 to 9000
Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	All

use-virtual-mac *boolean*

Synopsis	Use VRRP virtual MAC address for advertisement message
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> use-virtual-mac <i>boolean</i>
Tree	use-virtual-mac
Default	false
Introduced	16.0.R1
Platforms	All

ipv6-te-router-id

Synopsis	Enter the ipv6-te-router-id context
Context	configure router <i>string</i> ipv6-te-router-id
Tree	ipv6-te-router-id
Introduced	19.10.R1
Platforms	All

interface *reference*

Synopsis	Network IP interface name to obtain IP address
Context	configure router <i>string</i> ipv6-te-router-id interface <i>reference</i>
Tree	interface

Description	This command specifies the interface name from which to obtain the IP address to use as the IPv6 TE Router ID. This router ID uniquely identifies the router to other routers as IPv6 TE capable in an IGP TE domain. IS-IS advertises this information using the IPv6 TE Router ID TLV.
Reference	configure router <i>string</i> interface <i>string</i>
Introduced	19.10.R1
Platforms	All

isa-service-chaining

Synopsis	Enable the isa-service-chaining context
Context	configure router <i>string</i> isa-service-chaining
Tree	isa-service-chaining
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group [*id*] *number*

Synopsis	Add a list entry for nat-group
Context	configure router <i>string</i> isa-service-chaining nat-group <i>number</i>
Tree	nat-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*id*] *number*

Synopsis	ISA NAT group/ISA WLAN GW group ID for the EVPN pools
Context	configure router <i>string</i> isa-service-chaining nat-group <i>number</i>
Tree	nat-group
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan-vtep-range

Synopsis	Enable the vxlan-vtep-range context
Context	configure router <i>string</i> isa-service-chaining vxlan-vtep-range
Tree	vxlan-vtep-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	End address of the VXLAN VTEP range
Context	configure router <i>string</i> isa-service-chaining vxlan-vtep-range end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	end
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Start address of the VXLAN VTEP range
Context	configure router <i>string</i> isa-service-chaining vxlan-vtep-range start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	start
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isis [**isis-instance**] *number*

Synopsis	Enter the isis list instance
Context	configure router <i>string</i> isis <i>number</i>
Tree	isis
Introduced	16.0.R1
Platforms	All

[isis-instance] number

Synopsis	Instance ID for the IS-IS instance
Context	configure router string isis number
Tree	isis
Range	0 to 127
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the IS-IS instance
Context	configure router string isis number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-passive-only boolean

Synopsis	Advertise prefixes that belong to passive interfaces
Context	configure router string isis number advertise-passive-only boolean
Tree	advertise-passive-only
Default	false
Introduced	16.0.R1
Platforms	All

advertise-router-capability keyword

Synopsis	Router capabilities advertisement to neighbors
Context	configure router string isis number advertise-router-capability keyword
Tree	advertise-router-capability
Options	area, as
Introduced	16.0.R1

Platforms All

advertise-tunnel-link *boolean*

Synopsis Allow use of forwarding adjacency
Context **configure** *router string isis number advertise-tunnel-link boolean*
Tree [advertise-tunnel-link](#)
Default false
Introduced 16.0.R1
Platforms All

all-l1isis *string*

Synopsis Destination MAC address for all L1 IS-IS routers
Context **configure** *router string isis number all-l1isis string*
Tree [all-l1isis](#)
Default 01:80:C2:00:00:14
Introduced 16.0.R1
Platforms All

all-l2isis *string*

Synopsis Destination MAC address for all L2 IS-IS routers
Context **configure** *router string isis number all-l2isis string*
Tree [all-l2isis](#)
Default 01:80:C2:00:00:15
Introduced 16.0.R1
Platforms All

area-address *string*

Synopsis Area address portion of the NSAP address
Context **configure** *router string isis number area-address string*
Tree [area-address](#)
String Length 2 to 38

Max. Instances	3
Introduced	16.0.R1
Platforms	All

authentication-check *boolean*

Synopsis	Perform authentication check to reject mismatch PDUs
Context	configure router <i>string</i> isis <i>number</i> authentication-check <i>boolean</i>
Tree	authentication-check
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key to verify PDUs sent from neighbors
Context	configure router <i>string</i> isis <i>number</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	configure router <i>string</i> isis <i>number</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
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Context	configure router string isis number authentication-type keyword
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

csnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS packets of the CSNP type
Context	configure router string isis number csnp-authentication boolean
Tree	csnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

database-export

Synopsis	Enable the database-export context
Context	configure router string isis number database-export
Tree	database-export
Introduced	16.0.R1
Platforms	All

bgp-ls-identifier

Synopsis	Enable the bgp-ls-identifier context
Context	configure router string isis number database-export bgp-ls-identifier
Tree	bgp-ls-identifier
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	BGP-LS identifier sent in the BGP-LS NLRI
Context	configure router string isis number database-export bgp-ls-identifier value number

Tree	value
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

igp-identifier *number*

Synopsis	Unique ID of the IGP instance in the BGP-LS NLRI
Context	configure router <i>string</i> isis <i>number</i> database-export igp-identifier <i>number</i>
Tree	igp-identifier
Max. Range	0 to 18446744073709551615
Introduced	16.0.R1
Platforms	All

default-route-tag *number*

Synopsis	Route tag for the default route
Context	configure router <i>string</i> isis <i>number</i> default-route-tag <i>number</i>
Tree	default-route-tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enter the entropy-label context
Context	configure router <i>string</i> isis <i>number</i> entropy-label
Tree	entropy-label
Introduced	16.0.R1
Platforms	All

override-tunnel-elc *boolean*

Synopsis	Enable override of received ELC advertisements
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Context	configure <i>router string isis number entropy-label override-tunnel-elc boolean</i>
Tree	<i>override-tunnel-elc</i>
Default	false
Introduced	16.0.R1
Platforms	All

export-limit

Synopsis	Enable the export-limit context
Context	configure <i>router string isis number export-limit</i>
Tree	<i>export-limit</i>
Introduced	16.0.R1
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure <i>router string isis number export-limit log-percent number</i>
Tree	<i>log-percent</i>
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure <i>router string isis number export-limit number number</i>
Tree	<i>number</i>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure router <i>string</i> <i>isis</i> <i>number</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p>
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

flexible-algorithms

Synopsis	Enter the flexible-algorithms context
Context	configure router <i>string</i> <i>isis</i> <i>number</i> flexible-algorithms
Tree	flexible-algorithms
Description	Commands in this context configure IS-IS parameters for flexible algorithm participation.
Introduced	20.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	configure router <i>string</i> <i>isis</i> <i>number</i> flexible-algorithms admin-state <i>keyword</i>
Tree	admin-state
Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.

Default	disable
Options	enable, disable
Introduced	20.7.R1
Platforms	All

flex-algo [**flex-algo-id**] *number*

Synopsis	Enter the flex-algo list instance
Context	configure router <i>string</i> isis <i>number</i> flexible-algorithms flex-algo <i>number</i>
Tree	flex-algo
Description	Commands in this context configure an IS-IS flexible algorithm. When flexible algorithm is configured in an IS-IS instance, the IS-IS instance is configured for all levels (Level 1 and Level 2).
Max. Instances	7
Introduced	20.7.R1
Platforms	All

[flex-algo-id] *number*

Synopsis	Flexible algorithm ID
Context	configure router <i>string</i> isis <i>number</i> flexible-algorithms flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

advertise *reference*

Synopsis	Flexible Algorithm Definition advertisement
Context	configure router <i>string</i> isis <i>number</i> flexible-algorithms flex-algo <i>number</i> advertise <i>reference</i>
Tree	advertise
Description	This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD).

The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.

Reference	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i>
Introduced	20.7.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure router <i>string isis number flexible-algorithms flex-algo number loopfree-alternate</i>
Tree	loopfree-alternate
Introduced	20.7.R1
Platforms	All

micro-loop-avoidance

Synopsis	Enable the micro-loop-avoidance context
Context	configure router <i>string isis number flexible-algorithms flex-algo number micro-loop-avoidance</i>
Tree	micro-loop-avoidance
Introduced	21.7.R1
Platforms	All

participate *boolean*

Synopsis	Allow participation in the Flexible Algorithm
Context	configure router <i>string isis number flexible-algorithms flex-algo number participate boolean</i>
Tree	participate
Description	When configured to true , the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support. When configured to false , flexible algorithm participation is not enabled.
Default	false

Introduced 20.7.R1
Platforms All

graceful-restart

Synopsis Enable the **graceful-restart** context
Context **configure** [router](#) *string* [isis](#) *number* [graceful-restart](#)
Tree [graceful-restart](#)
Introduced 16.0.R1
Platforms All

helper-mode *boolean*

Synopsis Enable the Graceful Restart helper for IS-IS
Context **configure** [router](#) *string* [isis](#) *number* [graceful-restart](#) [helper-mode](#) *boolean*
Tree [helper-mode](#)
Default true
Introduced 16.0.R1
Platforms All

hello-authentication *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets
Context **configure** [router](#) *string* [isis](#) *number* [hello-authentication](#) *boolean*
Tree [hello-authentication](#)
Default true
Introduced 16.0.R1
Platforms All

hello-padding *keyword*

Synopsis IS-IS Hello message padding
Context **configure** [router](#) *string* [isis](#) *number* [hello-padding](#) *keyword*
Tree [hello-padding](#)
Options adaptive, loose, strict, none

Introduced 16.0.R1
Platforms All

ignore-attached-bit *boolean*

Synopsis Ignore attached bit on received Layer 1 LSPs
Context **configure** **router** *string isis number* **ignore-attached-bit** *boolean*
Tree [ignore-attached-bit](#)
Default false
Introduced 16.0.R1
Platforms All

ignore-lsp-errors *boolean*

Synopsis Ignore LSP packets with errors
Context **configure** **router** *string isis number* **ignore-lsp-errors** *boolean*
Tree [ignore-lsp-errors](#)
Default false
Introduced 16.0.R1
Platforms All

ignore-narrow-metric *boolean*

Synopsis Ignore links with narrow metrics
Context **configure** **router** *string isis number* **ignore-narrow-metric** *boolean*
Tree [ignore-narrow-metric](#)
Default false
Introduced 16.0.R1
Platforms All

igp-shortcut

Synopsis Enter the **igp-shortcut** context
Context **configure** **router** *string isis number* **igp-shortcut**
Tree [igp-shortcut](#)

Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of RSVP-TE or SR-TE shortcut
Context **configure** *router string isis number igp-shortcut admin-state keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

tunnel-next-hop



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **tunnel-next-hop** context
Context **configure** *router string isis number igp-shortcut tunnel-next-hop*
Tree [tunnel-next-hop](#)
Introduced 16.0.R1
Platforms All

family [*family-type*] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **family** list instance
Context **configure** *router string isis number igp-shortcut tunnel-next-hop family keyword*
Tree [family](#)
Introduced 16.0.R1
Platforms All

[family-type] keyword

Synopsis	Address family type for tunnel next hop
Context	configure router <i>string</i> isis <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i>
Tree	family
Options	ipv4, ipv6, srv4, srv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

resolution keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Resolution mode for IGP shortcut tunnels
Context	configure router <i>string</i> isis <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i> resolution <i>keyword</i>
Tree	resolution
Default	none
Options	none, filter, any, match-family-ip
Introduced	16.0.R1
Platforms	All

resolution-filter



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the resolution-filter context
Context	configure router <i>string</i> isis <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i> resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

rsvp *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure <i>router string isis number igp-shortcut tunnel-next-hop family keyword resolution-filter rsvp boolean</i>
Tree	rsvp
Default	false
Introduced	16.0.R1
Platforms	All

sr-te *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure <i>router string isis number igp-shortcut tunnel-next-hop family keyword resolution-filter sr-te boolean</i>
Tree	sr-te
Default	false
Introduced	16.0.R1
Platforms	All

iid-tlv *boolean*

Synopsis	Use IID TLVs with IS-IS multi-instance
Context	configure <i>router string isis number iid-tlv boolean</i>
Tree	iid-tlv
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure router <i>string</i> <i>isis</i> <i>number</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [**interface-name**] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> <i>isis</i> <i>number</i> interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Router interface name
Context	configure router <i>string</i> <i>isis</i> <i>number</i> interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adjacency-set [**id**] *reference*

Synopsis	Add a list entry for adjacency-set
Context	configure router <i>string</i> <i>isis</i> <i>number</i> interface <i>string</i> adjacency-set <i>reference</i>
Tree	adjacency-set
Introduced	16.0.R1

Platforms All

[id] reference

Synopsis Adjacency set ID

Context **configure** **router** *string* **isis** *number* **interface** *string* **adjacency-set** *reference*

Tree [adjacency-set](#)

Reference **configure** **router** *string* **isis** *number* **segment-routing** **adjacency-set** *number*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state keyword

Synopsis Administrative state of the IS-IS interface

Context **configure** **router** *string* **isis** *number* **interface** *string* **admin-state** *keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms All

bfd-liveness

Synopsis Enter the **bfd-liveness** context

Context **configure** **router** *string* **isis** *number* **interface** *string* **bfd-liveness**

Tree [bfd-liveness](#)

Description Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface.

Introduced 16.0.R1

Platforms All

ipv4

Synopsis	Enable the ipv4 context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> bfd-liveness ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> bfd-liveness ipv4 include-bfd-tlv <i>boolean</i>
Tree	include-bfd-tlv
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the ipv6 context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> bfd-liveness ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> bfd-liveness ipv6 include-bfd-tlv <i>boolean</i>
Tree	include-bfd-tlv
Default	false
Introduced	16.0.R1
Platforms	All

csnp-interval *number*

Synopsis	Time interval between successive CSN PDUs sent
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> csnp-interval <i>number</i>
Tree	csnp-interval
Range	1 to 65535
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

default-instance *boolean*

Synopsis	Allow non-MI capable router to establish an adjacency
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> default-instance <i>boolean</i>
Tree	default-instance
Default	false
Introduced	16.0.R1
Platforms	All

flex-algo [**flex-algo-id**] *number*

Synopsis	Enter the flex-algo list instance
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> flex-algo <i>number</i>
Tree	flex-algo
Max. Instances	7
Introduced	20.7.R1
Platforms	All

[flex-algo-id] *number*

Synopsis	Flexible algorithm ID
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255

Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

ipv4-node-sid

Synopsis	Enable the ipv4-node-sid context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> flex-algo <i>number</i> ipv4-node-sid
Tree	ipv4-node-sid
Introduced	20.7.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> flex-algo <i>number</i> ipv4-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	20.7.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> flex-algo <i>number</i> ipv4-node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	20.7.R1
Platforms	All

ipv6-node-sid

Synopsis	Enable the ipv6-node-sid context
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>interface</i> <i>string</i> <i>flex-algo</i> <i>number</i> ipv6-node-sid
Tree	ipv6-node-sid
Introduced	20.7.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>interface</i> <i>string</i> <i>flex-algo</i> <i>number</i> ipv6-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	20.7.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>interface</i> <i>string</i> <i>flex-algo</i> <i>number</i> ipv6-node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	20.7.R1
Platforms	All

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>interface</i> <i>string</i> hello-authentication <i>boolean</i>
Tree	hello-authentication
Default	true

Introduced 16.0.R1
Platforms All

hello-authentication-key *string*

Synopsis Authentication key or hash string for Hello PDUs
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication-key** *string*
Tree [hello-authentication-key](#)
String Length 1 to 366
Introduced 16.0.R1
Platforms All

hello-authentication-keychain *reference*

Synopsis Authentication keychain to use for the session
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication-keychain** *reference*
Tree [hello-authentication-keychain](#)
Reference **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string*
Introduced 16.0.R3
Platforms All

hello-authentication-type *keyword*

Synopsis Hello authentication type
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication-type** *keyword*
Tree [hello-authentication-type](#)
Options password, message-digest
Introduced 16.0.R1
Platforms All

hello-padding *keyword*

Synopsis Padding on IS-IS Hello packets
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* **hello-padding** *keyword*

Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

interface-type *keyword*

Synopsis	Interface type to broadcast, point-to-point, or to be default
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> interface-type <i>keyword</i>
Tree	interface-type
Options	point-to-point, broadcast
Introduced	16.0.R1
Platforms	All

ipv4-adjacency-sid

Synopsis	Enable the ipv4-adjacency-sid context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-adjacency-sid
Tree	ipv4-adjacency-sid
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-adjacency-sid label <i>number</i>
Tree	label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

ipv4-multicast *boolean*

Synopsis	Enable IPv4 multicast routing for the interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-multicast <i>boolean</i>

Tree	ipv4-multicast
Default	true
Introduced	16.0.R1
Platforms	All

ipv4-node-sid

Synopsis	Enable the ipv4-node-sid context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-node-sid
Tree	ipv4-node-sid
Introduced	16.0.R1
Platforms	All

clear-n-flag *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-node-sid clear-n-flag <i>boolean</i>
Tree	clear-n-flag
Default	false
Introduced	16.0.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
----------	------------------------------

Context	configure router <i>string isis number interface string ipv4-node-sid label number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1
Platforms	All

ipv6-adjacency-sid

Synopsis	Enable the ipv6-adjacency-sid context
Context	configure router <i>string isis number interface string ipv6-adjacency-sid</i>
Tree	ipv6-adjacency-sid
Introduced	16.0.R1
Platforms	All

label number

Synopsis	
Context	configure router <i>string isis number interface string ipv6-adjacency-sid label number</i>
Tree	label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

ipv6-multicast boolean

Synopsis	Enable IPv6 multicast routing for the interface
Context	configure router <i>string isis number interface string ipv6-multicast boolean</i>
Tree	ipv6-multicast
Default	true
Introduced	16.0.R1
Platforms	All

ipv6-node-sid

Synopsis	Enable the ipv6-node-sid context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv6-node-sid
Tree	ipv6-node-sid
Introduced	16.0.R1
Platforms	All

clear-n-flag *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv6-node-sid clear-n-flag <i>boolean</i>
Tree	clear-n-flag
Default	false
Introduced	16.0.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv6-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv6-node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1

Platforms All

ipv6-unicast *boolean*

Synopsis Enable IPv6 unicast routing for the interface
Context **configure** *router string isis number interface string ipv6-unicast boolean*
Tree [ipv6-unicast](#)
Default true
Introduced 16.0.R1
Platforms All

level [[level-number](#)] *keyword*

Synopsis Enter the **level** list instance
Context **configure** *router string isis number interface string level keyword*
Tree [level](#)
Max. Instances 2
Introduced 16.0.R1
Platforms All

[level-number] *keyword*

Synopsis ISIS protocol level number
Context **configure** *router string isis number interface string level keyword*
Tree [level](#)
Options 1, 2
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

hello-authentication-key *string*

Synopsis Authentication key for Hello PDUs
Context **configure** *router string isis number interface string level keyword hello-authentication-key string*

Tree	hello-authentication-key
Description	This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match. If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

hello-authentication-keychain *reference*

Synopsis	Authentication keychain to use for the session
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-authentication-keychain <i>reference</i>
Tree	hello-authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

hello-authentication-type *keyword*

Synopsis	Hello authentication enabled on the context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-authentication-type <i>keyword</i>
Tree	hello-authentication-type
Description	This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello authentication-key statement must also be included.
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Interval between Hello messages sent on this level
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-interval <i>number</i>

Tree	hello-interval
Range	1 to 20000
Default	9
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-multiplier *number*

Synopsis	Hello messages missed from neighbor before router declares adjacency down
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-multiplier <i>number</i>
Tree	hello-multiplier
Range	2 to 100
Default	3
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

ipv4-multicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv4 multicast
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> ipv4-multicast-metric <i>number</i>
Tree	ipv4-multicast-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv6-multicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv6 multicast
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> ipv6-multicast-metric <i>number</i>
Tree	ipv6-multicast-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv6-unicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv6 unicast
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> ipv6-unicast-metric <i>number</i>
Tree	ipv6-unicast-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	IS-IS interface metric applied for IPv4 unicast
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> metric <i>number</i>
Tree	metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Passive interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> passive <i>boolean</i>
Tree	passive
Default	false
Introduced	16.0.R1

Platforms All

priority *number*

Synopsis Router to become the designated router on a multi-access network
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [priority](#) *number*
Tree [priority](#)
Range 0 to 127
Default 64
Introduced 16.0.R1
Platforms All

sd-offset *number*

Synopsis Value of the signal degrade offset
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [sd-offset](#) *number*
Tree [sd-offset](#)
Range 1 to 16777215
Introduced 16.0.R1
Platforms All

sf-offset *number*

Synopsis Value of the signal fail offset
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [sf-offset](#) *number*
Tree [sf-offset](#)
Range 1 to 16777215
Introduced 16.0.R1
Platforms All

level-capability *keyword*

Synopsis IS-IS levels for this interface
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [level-capability](#) *keyword*
Tree [level-capability](#)

Default	1/2
Options	1, 2, 1/2
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Max. Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable/disable Loopfree Alternative at interface level.
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the policy-map context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate policy-map

Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template that is applied to interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate policy-map route-nh-template <i>reference</i>
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

lsp-pacing-interval *number*

Synopsis	Interval for sending LSPs from interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> lsp-pacing-interval <i>number</i>
Tree	lsp-pacing-interval
Range	0 to 65535
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

mesh-group

Synopsis	Enable the mesh-group context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> mesh-group
Tree	mesh-group
Introduced	16.0.R1
Platforms	All

blocked

Synopsis	Prevent the interface from flooding LSPs
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> mesh-group blocked
Tree	blocked
Notes	The following elements are part of a choice: blocked or value .
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Mesh group for the interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> mesh-group value <i>number</i>
Tree	value
Range	1 to 2000000000
Notes	The following elements are part of a choice: blocked or value .
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Passive interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> passive <i>boolean</i>
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Minimum time between LSP PDU retransmissions on point-to-point interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 65535
Default	5
Units	seconds

Introduced 16.0.R1
Platforms All

sid-protection *boolean*

Synopsis Allow adjacency SID protection by LFA and remote LFA
Context **configure** *router string isis number interface string sid-protection boolean*
Tree [sid-protection](#)
Default true
Introduced 16.0.R1
Platforms All

tag *number*

Synopsis Route tag for IP address of interface
Context **configure** *router string isis number interface string tag number*
Tree [tag](#)
Range 1 to 4294967295
Introduced 16.0.R1
Platforms All

ipv4-multicast-routing *keyword*

Synopsis IS-IS topology for IPv4 multicast routing
Context **configure** *router string isis number ipv4-multicast-routing keyword*
Tree [ipv4-multicast-routing](#)
Default native
Options false, native, mt
Introduced 16.0.R1
Platforms All

ipv4-routing *boolean*

Synopsis Support IPv4 routing for IS-IS instance
Context **configure** *router string isis number ipv4-routing boolean*

Tree	ipv4-routing
Default	true
Introduced	16.0.R1
Platforms	All

ipv6-multicast-routing *keyword*

Synopsis	Topology to populate the IPv6 multicast RTM
Context	configure router <i>string</i> isis <i>number</i> ipv6-multicast-routing <i>keyword</i>
Tree	ipv6-multicast-routing
Options	false, native, mt
Introduced	16.0.R1
Platforms	All

ipv6-routing *keyword*

Synopsis	Routing topology for IPv6
Context	configure router <i>string</i> isis <i>number</i> ipv6-routing <i>keyword</i>
Tree	ipv6-routing
Default	false
Options	false, native, mt
Introduced	16.0.R1
Platforms	All

ldp-over-rsvp *boolean*

Synopsis	Allow LDP over RSVP processing
Context	configure router <i>string</i> isis <i>number</i> ldp-over-rsvp <i>boolean</i>
Tree	ldp-over-rsvp
Default	false
Introduced	16.0.R1
Platforms	All

ldp-sync *boolean*

Synopsis	Use IGP-LDP synchronization feature on all interfaces participating in IS-IS routing protocol
Context	configure router <i>string</i> isis <i>number</i> ldp-sync <i>boolean</i>
Tree	ldp-sync
Default	true
Introduced	16.0.R1
Platforms	All

level [*level-number*] *keyword*

Synopsis	Enter the level list instance
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i>
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[*level-number*] *keyword*

Synopsis	ISIS protocol level number
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true

Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key to verify PDUs sent on the interface
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> authentication-key <i>string</i>
Tree	authentication-key
Description	This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface. Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The authentication-type command must also be included.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type to be used
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

bier

Synopsis	Enter the bier context
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> bier
Tree	bier
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> bier admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

template *reference*

Synopsis	BIER template name
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> bier template <i>reference</i>
Tree	template
Reference	configure router <i>string</i> bier template <i>string</i>
Introduced	16.0.R4
Platforms	All

csnp-authentication *boolean*

Synopsis	Enable authentication of CSNP IS-IS protocol packets
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> csnp-authentication <i>boolean</i>
Tree	csnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

database-export-exclude *boolean*

Synopsis	Exclude IGP link-state information of a specific IS-IS level from being exported into extended TE-DB
Context	configure <i>router string isis number level keyword database-export-exclude boolean</i>
Tree	database-export-exclude
Default	false
Introduced	16.0.R1
Platforms	All

default-ipv4-multicast-metric *number*

Synopsis	Default metric for IPv4 unicast
Context	configure <i>router string isis number level keyword default-ipv4-multicast-metric number</i>
Tree	default-ipv4-multicast-metric
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

default-ipv6-multicast-metric *number*

Synopsis	Default metric for IPv6 unicast
Context	configure <i>router string isis number level keyword default-ipv6-multicast-metric number</i>
Tree	default-ipv6-multicast-metric
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

default-ipv6-unicast-metric *number*

Synopsis	Default metric for IPv6 unicast
Context	configure <i>router string isis number level keyword default-ipv6-unicast-metric number</i>
Tree	default-ipv6-unicast-metric

Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

default-metric *number*

Synopsis	Default metric
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> default-metric <i>number</i>
Tree	default-metric
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	External route preference for IS-IS level
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> external-preference <i>number</i>
Tree	external-preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> hello-authentication <i>boolean</i>
Tree	hello-authentication
Default	true
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interface participating in specific IS-IS level in SPF LFA computation
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> loopfree-alternate-exclude <i>boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

lsp-mtu-size *number*



WARNING:

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> lsp-mtu-size <i>number</i>
Tree	lsp-mtu-size
Range	490 to 9778
Default	1492
Units	bytes
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	External route preference at level
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> preference <i>number</i>

Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

psnp-authentication *boolean*

Synopsis	Enable authentication on PSNP IS-IS protocol packets
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> psnp-authentication <i>boolean</i>
Tree	psnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

wide-metrics-only *boolean*

Synopsis	Use wide metrics advertisements in the LSPs
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> wide-metrics-only <i>boolean</i>
Tree	wide-metrics-only
Default	false
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	Routing level for instance
Context	configure router <i>string</i> isis <i>number</i> level-capability <i>keyword</i>
Tree	level-capability
Default	1/2
Options	1, 2, 1/2
Introduced	16.0.R1
Platforms	All

link-group [[link-group-name](#)] *string*

Synopsis	Enter the link-group list instance
Context	configure router <i>string</i> isis <i>number</i> link-group <i>string</i>
Tree	link-group
Introduced	16.0.R1
Platforms	All

[link-group-name] *string*

Synopsis	Link group name for the IS-IS protocol
Context	configure router <i>string</i> isis <i>number</i> link-group <i>string</i>
Tree	link-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> isis <i>number</i> link-group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

level [[level-number](#)] *keyword*

Synopsis	Enter the level list instance
Context	configure router <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i>
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[level-number] *keyword*

Synopsis	ISIS protocol level number
Context	configure router <i>string isis number link-group string level keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ipv4-multicast-metric-offset *number*

Synopsis	Offset value for the IPv4 multicast address family
Context	configure router <i>string isis number link-group string level keyword ipv4-multicast-metric-offset number</i>
Tree	ipv4-multicast-metric-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv4-unicast-metric-offset *number*

Synopsis	Offset value for the IPv4 unicast address family
Context	configure router <i>string isis number link-group string level keyword ipv4-unicast-metric-offset number</i>
Tree	ipv4-unicast-metric-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv6-multicast-metric-offset *number*

Synopsis	Offset value for the IPv6 multicast address family
Context	configure router <i>string isis number link-group string level keyword ipv6-multicast-metric-offset number</i>
Tree	ipv6-multicast-metric-offset

Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv6-unicast-metric-offset *number*

Synopsis	Offset value for the IPv6 unicast address family
Context	configure router <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> ipv6-unicast-metric-offset <i>number</i>
Tree	ipv6-unicast-metric-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

member [[interface-name](#)] *reference*

Synopsis	Add a list entry for member
Context	configure router <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> member <i>reference</i>
Tree	member
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[\[interface-name\]](#) *reference*

Synopsis	Router interface name for this link group
Context	configure router <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> member <i>reference</i>
Tree	member
Reference	configure router <i>string</i> isis <i>number</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

oper-members *number*

Synopsis	Minimum number of operational links
Context	configure router <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> oper-members <i>number</i>
Tree	oper-members
Range	1 to 8
Introduced	16.0.R1
Platforms	All

revert-members *number*

Synopsis	Minimum number of operational links to return link group to normal state and remove offsets
Context	configure router <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> revert-members <i>number</i>
Tree	revert-members
Range	1 to 8
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

augment-route-table *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate augment-route-table <i>boolean</i>
Tree	augment-route-table
Description	When configured to true , this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP. When configured to false , rLFA-specific information is not added to RTM entries.

Default	false
Introduced	19.10.R1
Platforms	All

exclude

Synopsis	Enter the exclude context
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate exclude
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate exclude prefix-policy <i>reference</i>
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

multi-homed-prefix

Synopsis	Enable the multi-homed-prefix context
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate multi-homed-prefix
Tree	multi-homed-prefix
Description	Commands in this context enable multihomed prefix LFA for IS-IS routes (IP FRR), SR-ISIS tunnels, and SRv6-ISIS tunnels.

This feature uses the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes.

This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of intra-area anycast prefixes.

The computed IP next hop-based backup path is added to IS-IS routes of external /32 prefixes or /128 prefixes and intra-area /32 or /128 anycast prefixes in the RTM if the prefix is not protected by the base LFA or if the user set leaf preference command option is configured to all. The user must enable the **configure routing-options ip-fast-reroute** command to have these backup paths programmed into the FIB in the datapath.

The computed IP next hop or repair tunnel-based backup path is also programmed for:

- SR-ISIS node SID tunnels of external /32 IPv4 prefixes and /128 IPv6 prefixes, and node SID tunnels of intra-area /32 IPv4 anycast prefixes and /128 anycast IPv6 prefixes, in both algorithm 0 and flexible-algorithms
- SRv6-ISIS locator routes and tunnels of external prefixes and of intra-area anycast prefixes of any size, in both algorithm 0 and flexible algorithm numbers.

As a result, an SR-TE LSP, an SR-MPLS policy, or an SRv6 policy which uses an SR-ISIS SID or an SRv6-ISIS SID of those same prefixes in its configured or computed SID list benefits from the multihomed prefix LFA protection.

Once the IP next-hop based multihomed prefix LFA is enabled, the extensions to compute an SR-TE repair tunnel for the multihomed prefix LFA in the case of SR-ISIS and SRv6-ISIS are automatically enabled if the user also enabled TI-LFA or Remote LFA. The computation reuses the SID list of the primary path or of the TI-LFA or Remote LFA backup path of the alternate ABR or ASBR or alternate owner router.

Introduced	22.7.R1
Platforms	All

preference *keyword*

Synopsis	Multihomed prefix LFA backup path preference
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate multi-homed-prefix preference <i>keyword</i>
Tree	preference
Default	none
Options	none, all
Introduced	22.7.R1
Platforms	All

remote-lfa

Synopsis	Enable the remote-lfa context
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate remote-lfa
Tree	remote-lfa
Introduced	16.0.R1
Platforms	All

max-pq-cost *number*

Synopsis	Maximum cost of destination node during reverse SPF calculation
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate remote-lfa max-pq-cost <i>number</i>
Tree	max-pq-cost
Max. Range	0 to 4294967295
Default	4261412864
Introduced	16.0.R1
Platforms	All

node-protect

Synopsis	Enable the node-protect context
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate remote-lfa node-protect
Tree	node-protect
Introduced	16.0.R4
Platforms	All

max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF's
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate remote-lfa node-protect max-pq-nodes <i>number</i>
Tree	max-pq-nodes
Range	1 to 32
Default	16
Introduced	16.0.R4
Platforms	All

ti-lfa

Synopsis	Enable the ti-lfa context
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate ti-lfa
Tree	ti-lfa
Description	Commands in this context enable the use of the Topology-Independent LFA algorithm in the LFA SPF calculation for this IS-IS instance.
Introduced	16.0.R1
Platforms	All

max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate ti-lfa max-sr-frr-labels <i>number</i>
Tree	max-sr-frr-labels
Range	0 to 3
Default	2
Introduced	16.0.R1
Platforms	All

max-srv6-frr-sids *number*

Synopsis	Maximum number of SIDs the TI-LFA backup path can use
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate ti-lfa max-srv6-frr-sids <i>number</i>
Tree	max-srv6-frr-sids
Description	This command configures the maximum number of SIDs that the TI-LFA backup next-hop can use. The TI-LFA algorithm uses this value to limit the search for the Q node from the P node on the post-convergence path.
Range	0 to 3
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

node-protect

Synopsis	Enable the node-protect context
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Context	configure <i>router string isis number loopfree-alternate ti-lfa node-protect</i>
Tree	node-protect
Introduced	16.0.R5
Platforms	All

Isp-lifetime *number*



WARNING:

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	Amount of time during which an LSP is considered valid
Context	configure <i>router string isis number lsp-lifetime number</i>
Tree	lsp-lifetime
Range	350 to 65535
Default	1200
Units	seconds
Introduced	16.0.R1
Platforms	All

Isp-minimum-remaining-lifetime *number*

Synopsis	Minimum value for the Remaining Lifetime of an LSP
Context	configure <i>router string isis number lsp-minimum-remaining-lifetime number</i>
Tree	lsp-minimum-remaining-lifetime
Range	350 to 65535
Units	seconds
Introduced	19.7.R1
Platforms	All

Isp-mtu-size *number*



WARNING:

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
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Context	configure router <i>string isis number lsp-mtu-size number</i>
Tree	lsp-mtu-size
Range	490 to 9778
Default	1492
Units	bytes
Introduced	16.0.R1
Platforms	All

lsp-refresh

Synopsis	Enter the lsp-refresh context
Context	configure router <i>string isis number lsp-refresh</i>
Tree	lsp-refresh
Introduced	16.0.R1
Platforms	All

half-lifetime *boolean*

Synopsis	Set the refresh interval to always be half the LSP lifetime
Context	configure router <i>string isis number lsp-refresh half-lifetime boolean</i>
Tree	half-lifetime
Default	true
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Refresh timer interval
Context	configure router <i>string isis number lsp-refresh interval number</i>
Tree	interval
Range	150 to 65535
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	All

mru-mismatch-detection *boolean*

Synopsis	Enable detection of MRU mismatch
Context	configure <i>router string isis number mru-mismatch-detection boolean</i>
Tree	mru-mismatch-detection
Description	<p>When configured to true, this command verifies that the received IS-IS Hello (IIH) packet size does not exceed the configured maximum port MTU size. The received IIH packet is dropped when its size exceeds the maximum port MTU size.</p> <p>When configured to false, the IS-IS router instance will not drop oversized IIH packets.</p> <p>By default, FP-based hardware can receive oversized packets but it will not originate them.</p>
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multi-topology

Synopsis	Enable the multi-topology context
Context	configure <i>router string isis number multi-topology</i>
Tree	multi-topology
Introduced	16.0.R1
Platforms	All

ipv4-multicast *boolean*

Synopsis	Support IPv4 topology (MT3)
Context	configure <i>router string isis number multi-topology ipv4-multicast boolean</i>
Tree	ipv4-multicast
Default	false
Introduced	16.0.R1
Platforms	All

ipv6-multicast *boolean*

Synopsis	Support IPv6 topology (MT4)
Context	configure <i>router string isis number multi-topology ipv6-multicast boolean</i>

Tree	ipv6-multicast
Default	false
Introduced	16.0.R1
Platforms	All

ipv6-unicast *boolean*

Synopsis	Support multi-topology TLVs
Context	configure router <i>string</i> isis <i>number</i> multi-topology ipv6-unicast <i>boolean</i>
Tree	ipv6-unicast
Default	false
Introduced	16.0.R1
Platforms	All

multicast-import

Synopsis	Enter the multicast-import context
Context	configure router <i>string</i> isis <i>number</i> multicast-import
Tree	multicast-import
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Submit IPv4 routes into the multicast RPF of the RTM
Context	configure router <i>string</i> isis <i>number</i> multicast-import ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Submit IPv6 routes into the multicast RPF of the RTM
Context	configure router <i>string</i> isis <i>number</i> multicast-import ipv6 <i>boolean</i>

Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

overload

Synopsis	Enable the overload context
Context	configure router <i>string</i> isis <i>number</i> overload
Tree	overload
Introduced	16.0.R1
Platforms	All

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	configure router <i>string</i> isis <i>number</i> overload max-metric <i>boolean</i>
Tree	max-metric
Default	false
Introduced	16.0.R1
Platforms	All

overload-export-external *boolean*

Synopsis	Advertise the external routes when router is in overloaded
Context	configure router <i>string</i> isis <i>number</i> overload-export-external <i>boolean</i>
Tree	overload-export-external
Default	false
Introduced	16.0.R1
Platforms	All

overload-export-interlevel *boolean*

Synopsis	Advertise the inter-level routes when router is overloaded
Context	configure router <i>string</i> isis <i>number</i> overload-export-interlevel <i>boolean</i>

Tree	overload-export-interlevel
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure router <i>string</i> isis <i>number</i> overload-on-boot
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	configure router <i>string</i> isis <i>number</i> overload-on-boot max-metric <i>boolean</i>
Tree	max-metric
Default	false
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state after reboot
Context	configure router <i>string</i> isis <i>number</i> overload-on-boot timeout <i>number</i>
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

poi-tlv *boolean*

Synopsis	Purge Originator Identification TLV
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Context	configure <i>router string isis number poi-tlv boolean</i>
Tree	<i>poi-tlv</i>
Default	false
Introduced	16.0.R1
Platforms	All

prefix-attributes-tlv *boolean*

Synopsis	Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information
Context	configure <i>router string isis number prefix-attributes-tlv boolean</i>
Tree	<i>prefix-attributes-tlv</i>
Default	false
Introduced	16.0.R1
Platforms	All

prefix-limit

Synopsis	Enable the prefix-limit context
Context	configure <i>router string isis number prefix-limit</i>
Tree	<i>prefix-limit</i>
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Maximum number of prefixes for IS-IS instance
Context	configure <i>router string isis number prefix-limit limit number</i>
Tree	<i>limit</i>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Send warning message when the prefix limit is reached
Context	configure router <i>string</i> isis <i>number</i> prefix-limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

overload-timeout (*number* | *keyword*)

Synopsis	Time router remains in overload after prefix limit is exceeded before restarting
Context	configure router <i>string</i> isis <i>number</i> prefix-limit overload-timeout (<i>number</i> <i>keyword</i>)
Tree	overload-timeout
Range	1 to 1800
Default	forever
Units	seconds
Options	forever
Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Threshold value to trigger a warning message to be sent
Context	configure router <i>string</i> isis <i>number</i> prefix-limit warning-threshold <i>number</i>
Tree	warning-threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

psnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type
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Context	configure router string isis number psnp-authentication boolean
Tree	psnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

reference-bandwidth number

Synopsis	Reference bandwidth for bandwidth relative costing
Context	configure router string isis number reference-bandwidth number
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the rib-priority context
Context	configure router string isis number rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the high context
Context	configure router string isis number rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list reference

Synopsis	List used to select routes processed at higher priority through OSPF route calculation process
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Context	configure router string isis number rib-priority high prefix-list reference
Tree	prefix-list
Reference	configure policy-options prefix-list string
Notes	The following elements are part of a choice: prefix-list or tag .
Introduced	16.0.R1
Platforms	All

tag number

Synopsis	Tag value that is used to match IS-IS routes
Context	configure router string isis number rib-priority high tag number
Tree	tag
Range	1 to 4294967295
Notes	The following elements are part of a choice: prefix-list or tag .
Introduced	16.0.R1
Platforms	All

router-id string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the ISIS instance
Context	configure router string isis number router-id string
Tree	router-id
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router string isis number segment-routing
Tree	segment-routing
Introduced	16.0.R1

Platforms All

adj-sid-hold (*number* | *keyword*)

Synopsis Adjacency SID hold time

Context **configure** **router** *string* **isis** *number* **segment-routing** **adj-sid-hold** (*number* | *keyword*)

Tree **adj-sid-hold**

Range 1 to 300

Default 15

Units seconds

Options none

Introduced 16.0.R1

Platforms All

adjacency-set [*id*] *number*

Synopsis Enter the **adjacency-set** list instance

Context **configure** **router** *string* **isis** *number* **segment-routing** **adjacency-set** *number*

Tree **adjacency-set**

Introduced 16.0.R1

Platforms All

[id] *number*

Synopsis Identifier for specified adjacency set

Context **configure** **router** *string* **isis** *number* **segment-routing** **adjacency-set** *number*

Tree **adjacency-set**

Range 1 to 4294967295

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

advertise *boolean*

Synopsis Advertise the adjacency set when all links terminate on the same neighboring node

Context	configure <i>router string isis number segment-routing adjacency-set number advertise boolean</i>
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

family *keyword*

Synopsis	Address family for the adjacency set
Context	configure <i>router string isis number segment-routing adjacency-set number family keyword</i>
Tree	family
Default	ipv4
Options	ipv4, ipv6
Introduced	16.0.R1
Platforms	All

parallel *boolean*

Synopsis	Require all members of the adjacency set to terminate on the same neighboring node
Context	configure <i>router string isis number segment-routing adjacency-set number parallel boolean</i>
Tree	parallel
Default	true
Introduced	16.0.R1
Platforms	All

sid

Synopsis	Enable the sid context
Context	configure <i>router string isis number segment-routing adjacency-set number sid</i>
Tree	sid
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis

Context **configure** *router string isis number segment-routing adjacency-set number sid label number*

Tree **label**

Range 1 to 1048575

Introduced 16.0.R1

Platforms All

adjacency-sid

Synopsis Enter the **adjacency-sid** context

Context **configure** *router string isis number segment-routing adjacency-sid*

Tree **adjacency-sid**

Introduced 22.7.R1

Platforms All

allocate-dual-sids *boolean*

Synopsis Allocate dual adjacency SIDs per interface

Context **configure** *router string isis number segment-routing adjacency-sid allocate-dual-sids boolean*

Tree **allocate-dual-sids**

Description When configured to **true**, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.

When configured to **false**, the router disables the support of two SR-MPLS adjacency SIDs per interface.

Default false

Introduced 22.7.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of segment routing

Context	configure router <i>string</i> <i>isis number</i> <i>segment-routing admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

class-forwarding *boolean*

Synopsis	Allow CBF with ECMP over RSVP-TE LSPs as IGP shortcuts
Context	configure router <i>string</i> <i>isis number</i> <i>segment-routing class-forwarding boolean</i>
Tree	class-forwarding
Description	<p>When configured to true, this command enables Class-Based Forwarding (CBF) with ECMP for SR-ISIS resolved to RSVP-TE LSPs as IGP shortcuts.</p> <p>For CBF with ECMP to be effective, a class forwarding policy must be defined, as well as FC to set associations and RSVP-TE LSPs to set associations.</p> <p>When configured to false, CBF over IGP shortcuts is disabled.</p>
Default	false
Introduced	20.2.R1
Platforms	All

egress-statistics

Synopsis	Enter the egress-statistics context
Context	configure router <i>string</i> <i>isis number</i> <i>segment-routing egress-statistics</i>
Tree	egress-statistics
Introduced	19.10.R1
Platforms	All

adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	configure router <i>string</i> <i>isis number</i> <i>segment-routing egress-statistics adj-set boolean</i>
Tree	adj-set
Description	When configured to true , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a

statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.

Default	false
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	configure <i>router string isis number segment-routing egress-statistics adj-sid boolean</i>
Tree	adj-sid
Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure <i>router string isis number segment-routing egress-statistics node-sid boolean</i>
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

entropy-label *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	configure <i>router string isis number segment-routing entropy-label boolean</i>
Tree	entropy-label
Introduced	16.0.R1

Platforms All

export-tunnel-table *keyword*

Synopsis Tunnel table export policies to export tunneled routes
Context **configure** [router](#) *string* [isis](#) *number* [segment-routing](#) [export-tunnel-table](#) *keyword*
Tree [export-tunnel-table](#)
Options ldp
Introduced 16.0.R1
Platforms All

ingress-statistics

Synopsis Enter the **ingress-statistics** context
Context **configure** [router](#) *string* [isis](#) *number* [segment-routing](#) [ingress-statistics](#)
Tree [ingress-statistics](#)
Introduced 19.10.R1
Platforms All

adj-set *boolean*

Synopsis Enable the allocation of statistics on adjacency sets
Context **configure** [router](#) *string* [isis](#) *number* [segment-routing](#) [ingress-statistics](#) [adj-set](#) *boolean*
Tree [adj-set](#)
Description When configured to **true**, this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default false
Introduced 19.10.R1
Platforms All

adj-sid *boolean*

Synopsis Enable the allocation of statistics on adjacency SIDs

Context	configure router string isis number segment-routing ingress-statistics adj-sid boolean
Tree	adj-sid
Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid boolean

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure router string isis number segment-routing ingress-statistics node-sid boolean
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

mapping-server

Synopsis	Enter the mapping-server context
Context	configure router string isis number segment-routing mapping-server
Tree	mapping-server
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the IS-IS mapping server
Context	configure router string isis number segment-routing mapping-server admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
Platforms All

node-sid-map [[sid-index](#)] *number*

Synopsis Enter the **node-sid-map** list instance
Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [mapping-server](#) [node-sid-map](#) *number*
Tree [node-sid-map](#)
Introduced 16.0.R1
Platforms All

[sid-index] *number*

Synopsis SID index of a mapping server Prefix-SID
Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [mapping-server](#) [node-sid-map](#) *number*
Tree [node-sid-map](#)
Max. Range 0 to 4294967295
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

clear-n-flag *boolean*

Synopsis Clear the node-sid flag (N-flag)
Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [mapping-server](#) [node-sid-map](#) *number* [clear-n-flag](#) *boolean*
Tree [clear-n-flag](#)
Default false
Introduced 16.0.R1
Platforms All

ip-prefix *string*

Synopsis Prefix of a mapping server Prefix-SID

Context	configure <i>router string isis number segment-routing mapping-server node-sid-map number ip-prefix string</i>
Tree	ip-prefix
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	Flags to assign in SID Label Binding TLV advertised by Segment Routing Mapping Server
Context	configure <i>router string isis number segment-routing mapping-server node-sid-map number level-capability keyword</i>
Tree	level-capability
Default	1/2
Options	1, 2, 1/2
Introduced	16.0.R1
Platforms	All

range *number*

Synopsis	Range of addresses and their associated prefix SIDs
Context	configure <i>router string isis number segment-routing mapping-server node-sid-map number range number</i>
Tree	range
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

set-flags

Synopsis	Enter the set-flags context
Context	configure <i>router string isis number segment-routing mapping-server node-sid-map number set-flags</i>
Tree	set-flags

Introduced 16.0.R1
Platforms All

bit-s *boolean*

Synopsis SID Label Binding TLV to be flooded across the entire routing domain
Context **configure** *router string isis number segment-routing mapping-server node-sid-map number set-flags bit-s boolean*
Tree [bit-s](#)
Default false
Introduced 16.0.R1
Platforms All

maximum-sid-depth

Synopsis Enter the **maximum-sid-depth** context
Context **configure** *router string isis number segment-routing maximum-sid-depth*
Tree [maximum-sid-depth](#)
Introduced 20.2.R1
Platforms All

override-bmi *number*

Synopsis Value to override the announced node MSD-BMI value
Context **configure** *router string isis number segment-routing maximum-sid-depth override-bmi number*
Tree [override-bmi](#)
Description This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.
When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.
Range 0 to 12
Introduced 20.2.R1
Platforms All

override-erld *number*

Synopsis	Value to override the announced node MSD-ERLD value
Context	configure router string isis number segment-routing maximum-sid-depth override-erld number
Tree	override-erld
Description	This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing. When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.
Range	0 to 15
Introduced	20.2.R1
Platforms	All

micro-loop-avoidance

Synopsis	Enable the micro-loop-avoidance context
Context	configure router string isis number segment-routing micro-loop-avoidance
Tree	micro-loop-avoidance
Introduced	19.10.R1
Platforms	All

fib-delay *number*

Synopsis	FIB delay before programming new primary next-hops
Context	configure router string isis number segment-routing micro-loop-avoidance fib-delay number
Tree	fib-delay
Description	This command specifies the delay time before programming the new next-hops for the SR tunnel.
Range	1 to 300
Default	15
Units	deciseconds
Introduced	19.10.R1
Platforms	All

prefix-sid-range

Synopsis	Enable the prefix-sid-range context
Context	configure router string isis number segment-routing prefix-sid-range
Tree	prefix-sid-range
Description	Commands in this context configure the label block BGP segment routing can use.
Introduced	16.0.R1
Platforms	All

global

Synopsis	BGP global SR range allocation
Context	configure router string isis number segment-routing prefix-sid-range global
Tree	global
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the configure router mpls-labels sr-labels context.
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R1
Platforms	All

max-index *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	configure router string isis number segment-routing prefix-sid-range max-index <i>number</i>
Tree	max-index
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R1
Platforms	All

start-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	configure <i>router string isis number segment-routing prefix-sid-range start-label number</i>
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R1
Platforms	All

srlb *reference*

Synopsis	Segment routing local block
Context	configure <i>router string isis number segment-routing srlb reference</i>
Tree	srlb
Reference	configure <i>router string mpls-labels reserved-label-block string</i>
Introduced	16.0.R1
Platforms	All

tunnel-mtu *number*

Synopsis	Tunnel MTU size
Context	configure <i>router string isis number segment-routing tunnel-mtu number</i>
Tree	tunnel-mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

tunnel-table-pref *number*

Synopsis	Preference of SR tunnels created by the IGP instance
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Context	configure router <i>string isis number segment-routing tunnel-table-pref number</i>
Tree	tunnel-table-pref
Description	<p>This command configures the TTM preference of SR tunnels created by the IGP instance. This is used in the case of BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the new tunnel binding commands are configured to the any value which parses the TTM for tunnels in the protocol preference order. The user can choose to either go with the global TTM preference or list explicitly the tunnel types they want to use. When they list the tunnel types explicitly, the TTM preference will still be used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected one fails. Also, a reversion to a more preferred tunnel type is performed as soon as one is available.</p> <p>The segment routing module adds to TTM a SR tunnel entry for each resolved remote node SID prefix and programs the data path with the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.</p> <p>The default preference for SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the setting of the default preference of the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).</p> <p>The global default TTM preference for the tunnel types is as follows:</p> <ul style="list-style-type: none">• ROUTE_PREF_RSVP 7• ROUTE_PREF_SR_TE 8• ROUTE_PREF_LDP 9• ROUTE_PREF_OSPF_TTM 10• ROUTE_PREF_ISIS_TTM 11• ROUTE_PREF_BGP_TTM 12• ROUTE_PREF_GRE 255 <p>The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-ISIS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on lowest IGP instance-id.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	11
Introduced	16.0.R1
Platforms	All

segment-routing-v6

Synopsis Enter the **segment-routing-v6** context

Context	configure <i>router string isis number segment-routing-v6</i>
Tree	segment-routing-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

adj-sid-hold (*number | keyword*)

Synopsis	Adjacency SID hold time
Context	configure <i>router string isis number segment-routing-v6 adj-sid-hold (number keyword)</i>
Tree	adj-sid-hold
Description	<p>This command specifies the length of time the system holds the SRv6 adjacency LFA, Remote LFA, or TI-LFA backup path while the adjacency is down. The recommendation is to set the timer to the time it takes for the network IGP processes to converge, which allows the PCE to compute a new path for SR-TE LSPs and SR policies impacted by the adjacency failure.</p> <p>Each IS-IS instance runs a single timer per adjacency that IPv4 SR-MPLS, IPv6 SR-MPLS, and SRv6 adjacency SIDs share. When you enable both SR-MPLS (configure router isis segment-routing) and SRv6 (configure router isis segment-routing-v6) in the IS-IS instance, the system programs the higher of the two timer values for all SIDs on the adjacency.</p>
Range	1 to 300
Default	15
Units	seconds
Options	none
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of segment routing SRv6
Context	configure <i>router string isis number segment-routing-v6 admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [*locator-name*] *reference*

Synopsis	Enter the locator list instance
Context	configure <i>router string isis number segment-routing-v6 locator reference</i>
Tree	<i>locator</i>
Description	This command adds a reference to a locator for each algorithm in this IS-IS instance. The same algorithm locator can be shared with other IGP instances and BGP instances in IP-VPN or EVPN.
Max. Instances	8
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis	Locator name
Context	configure <i>router string isis number segment-routing-v6 locator reference</i>
Tree	<i>locator</i>
Reference	configure <i>router string segment-routing segment-routing-v6 locator string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level [*level-number*] *keyword*

Synopsis	Enter the level list instance
Context	configure <i>router string isis number segment-routing-v6 locator reference level keyword</i>
Tree	<i>level</i>
Max. Instances	2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[level-number] *keyword*

Synopsis	ISIS protocol level number
Context	configure <i>router string isis number segment-routing-v6 locator reference level keyword</i>

Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

metric number

Synopsis	IS-IS metric to advertise in the locator level list
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 locator <i>reference</i> level <i>keyword</i> metric <i>number</i>
Tree	metric
Range	1 to 16777215
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level-capability keyword

Synopsis	IS-IS routing level capability
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 locator <i>reference</i> level-capability <i>keyword</i>
Tree	level-capability
Description	This command configures the routing level capability for an instance of the IS-IS routing process. The level capability configured on the instance must match the level capability on the interface to form an adjacency.
Default	1/2
Options	1, 2, 1/2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

multi-topology

Synopsis	Enter the multi-topology context
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 locator <i>reference</i> multi-topology
Tree	multi-topology

Description	<p>Commands in this context enable the use of a local SRv6 locator in an IS-IS IPv6 topology. A user can enable one or more locators in an IS-IS instance. Each locator can be enabled in a single topology of an IS-IS instance, topology 0 (MT0) or topology 2 (MT2). A local locator can be used in multiple IS-IS instances, but can only be assigned to at most one IPv6 topology independently within each IS-IS instance.</p> <p>Use the configure router isis segment-routing-v6 admin-state command to enable the processing of local and remote IPv6 prefixes and SRv6 locators in MT0 and MT2. In addition, to enable SRv6 forwarding in the MT0, MT2, or both topologies, set the configure router isis ipv6-routing command to native, the configure router isis multi-topology ipv6-unicast command to true, or both.</p>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt0 boolean

Synopsis	Support standard topology (MT0)
Context	configure router string isis number segment-routing-v6 locator reference multi-topology mt0 boolean
Tree	mt0
Default	true
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt2 boolean

Synopsis	Support IPv6 routing topology (MT2)
Context	configure router string isis number segment-routing-v6 locator reference multi-topology mt2 boolean
Tree	mt2
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

tag number

Synopsis	Route tag to advertise in the locator
Context	configure router string isis number segment-routing-v6 locator reference tag number
Tree	tag

Range	1 to 4294967295
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [[locator-name](#)] *reference*

Synopsis	Enter the micro-segment-locator list instance
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 micro-segment-locator <i>reference</i>
Tree	micro-segment-locator
Max. Instances	8
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis	Micro-segment SRv6 locator name
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 micro-segment-locator <i>reference</i>
Tree	micro-segment-locator
Reference	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level [[level-number](#)] *keyword*

Synopsis	Enter the level list instance
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 micro-segment-locator <i>reference</i> level <i>keyword</i>
Tree	level
Max. Instances	2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[level-number] *keyword*

Synopsis	ISIS protocol level number
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 micro-segment-locator <i>reference</i> level <i>keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

metric *number*

Synopsis	IS-IS metric to advertise in the locator level list
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 micro-segment-locator <i>reference</i> level <i>keyword</i> metric <i>number</i>
Tree	metric
Range	1 to 16777215
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level-capability *keyword*

Synopsis	IS-IS routing level capability
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 micro-segment-locator <i>reference</i> level-capability <i>keyword</i>
Tree	level-capability
Description	This command configures the routing level capability for an instance of the IS-IS routing process. The level capability configured on the instance must match the level capability on the interface to form an adjacency.
Default	1/2
Options	1, 2, 1/2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

multi-topology

Synopsis	Enter the multi-topology context
Context	configure router <i>string</i> <i>isis number</i> segment-routing-v6 micro-segment-locator reference multi-topology
Tree	multi-topology
Description	<p>Commands in this context enable the use of a local SRv6 locator in an IS-IS IPv6 topology. A user can enable one or more locators in an IS-IS instance. Each locator can be enabled in a single topology of an IS-IS instance, topology 0 (MT0) or topology 2 (MT2). A local locator can be used in multiple IS-IS instances, but can only be assigned to at most one IPv6 topology independently within each IS-IS instance.</p> <p>Use the configure router isis segment-routing-v6 admin-state command to enable the processing of local and remote IPv6 prefixes and SRv6 locators in MT0 and MT2. In addition, to enable SRv6 forwarding in the MT0, MT2, or both topologies, set the configure router isis ipv6-routing command to native, the configure router isis multi-topology ipv6-unicast command to true, or both.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt0 boolean

Synopsis	Support standard topology (MT0)
Context	configure router <i>string</i> <i>isis number</i> segment-routing-v6 micro-segment-locator reference multi-topology mt0 boolean
Tree	mt0
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt2 boolean

Synopsis	Support IPv6 routing topology (MT2)
Context	configure router <i>string</i> <i>isis number</i> segment-routing-v6 micro-segment-locator reference multi-topology mt2 boolean
Tree	mt2
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

tag number

Synopsis	Route tag to advertise in the locator
Context	configure router string isis number segment-routing-v6 micro-segment-locator reference tag number
Tree	tag
Range	1 to 4294967295
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

standard-multi-instance boolean

Synopsis	Enable RFC standards compliant multi-instance behavior
Context	configure router string isis number standard-multi-instance boolean
Tree	standard-multi-instance
Default	false
Introduced	16.0.R1
Platforms	All

strict-adjacency-check boolean

Synopsis	Enable strict checking of address families for IS-IS adjacencies
Context	configure router string isis number strict-adjacency-check boolean
Tree	strict-adjacency-check
Default	false
Introduced	16.0.R1
Platforms	All

summary-address [ip-prefix] (ipv4-prefix | ipv6-prefix)

Synopsis	Enter the summary-address list instance
Context	configure router string isis number summary-address (ipv4-prefix ipv6-prefix)
Tree	summary-address
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for the summary address
Context	configure router <i>string</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	summary-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

algorithm *number*

Synopsis	Algorithm topology for the summary address
Context	configure router <i>string</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) algorithm <i>number</i>
Tree	algorithm
Range	0 128 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level-capability *keyword*

Synopsis	IS-IS level for the summary address
Context	configure router <i>string</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) level-capability <i>keyword</i>
Tree	level-capability
Default	1/2
Options	1, 2, 1/2
Introduced	16.0.R1
Platforms	All

route-tag *number*

Synopsis	Route tag assigned to the summary address
Context	configure router <i>string</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-tag <i>number</i>
Tree	route-tag
Range	1 to 4294967295

Introduced 16.0.R1
Platforms All

suppress-attached-bit *boolean*

Synopsis Allow IS-IS to suppress setting attached bit on LSPs
Context **configure** *router string isis number suppress-attached-bit boolean*
Tree [suppress-attached-bit](#)
Default false
Introduced 16.0.R1
Platforms All

system-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis System ID
Context **configure** *router string isis number system-id string*
Tree [system-id](#)
String Length 14
Default 0000.0000.0000
Introduced 16.0.R1
Platforms All

timers

Synopsis Enter the **timers** context
Context **configure** *router string isis number timers*
Tree [timers](#)
Introduced 16.0.R1
Platforms All

lsp-wait

Synopsis	Enter the lsp-wait context
Context	configure router string isis number timers lsp-wait
Tree	lsp-wait
Introduced	16.0.R1
Platforms	All

lsp-initial-wait number

Synopsis	Initial LSP generation delay
Context	configure router string isis number timers lsp-wait lsp-initial-wait number
Tree	lsp-initial-wait
Range	10 to 100000
Default	10
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsp-max-wait number

Synopsis	Maximum time between two consecutive LSP occurrences
Context	configure router string isis number timers lsp-wait lsp-max-wait number
Tree	lsp-max-wait
Range	10 to 120000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsp-second-wait number

Synopsis	Delay between first and second LSP generation
Context	configure router string isis number timers lsp-wait lsp-second-wait number
Tree	lsp-second-wait

Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the spf-wait context
Context	configure router <i>string</i> isis <i>number</i> timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after topology change
Context	configure router <i>string</i> isis <i>number</i> timers spf-wait spf-initial-wait <i>number</i>
Tree	spf-initial-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Maximum interval amid two consecutive SPF calculations
Context	configure router <i>string</i> isis <i>number</i> timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Default	10000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between first and second SPF calculations
Context	configure router string isis number timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

traffic-engineering *boolean*

Synopsis	Enable traffic engineering for the router
Context	configure router string isis number traffic-engineering <i>boolean</i>
Tree	traffic-engineering
Default	false
Introduced	16.0.R1
Platforms	All

traffic-engineering-options

Synopsis	Enter the traffic-engineering-options context
Context	configure router string isis number traffic-engineering-options
Tree	traffic-engineering-options
Introduced	19.10.R1
Platforms	All

advertise-delay *boolean*

Synopsis	Enable the advertisement of link delay for TE
Context	configure router string isis number traffic-engineering-options advertise-delay <i>boolean</i>
Tree	advertise-delay
Description	When configured to true , the router advertises link delay in the IGP LSDB within legacy Traffic Engineering (TE) attributes in IS-IS or within the Application-Specific Link Attribute (ASLA) when ASLA is enabled for SR-TE or RSVP-TE applications.

When the **application-link-attributes legacy** command is configured for SR-TE or RSVP-TE, link delay is advertised as a legacy TE TLV with the ASLA legacy bit set.

When configured to **false**, the router disables link delay advertisement.

Default	false
Introduced	22.10.R1
Platforms	All

application-link-attributes

Synopsis	Enable the application-link-attributes context
Context	configure router string isis number traffic-engineering-options application-link-attributes
Tree	application-link-attributes
Introduced	19.10.R1
Platforms	All

legacy *boolean*

Synopsis	Advertise legacy TE attributes
Context	configure router string isis number traffic-engineering-options application-link-attributes legacy <i>boolean</i>
Tree	legacy
Description	When configured to true , the router supports the legacy mode of advertising TE attributes. When configured to false , legacy mode is disabled.
Default	false
Introduced	19.10.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise IS-IS IPv6 Traffic Engineering
Context	configure router string isis number traffic-engineering-options ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.10.R1
Platforms	All

unicast-import

Synopsis	Enter the unicast-import context
Context	configure router string isis number unicast-import
Tree	unicast-import
Introduced	16.0.R1
Platforms	All

ipv4 boolean

Synopsis	Submit IPv4 routes into unicast RTM
Context	configure router string isis number unicast-import ipv4 boolean
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 boolean

Synopsis	Submit IPv6 routes into unicast RTM
Context	configure router string isis number unicast-import ipv6 boolean
Tree	ipv6
Default	true
Introduced	16.0.R1
Platforms	All

l2tp

Synopsis	Enter the l2tp context
Context	configure router string l2tp
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of L2TP
Context	configure router <i>string</i> l2tp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding *keyword*

Synopsis	Attribute of the Value Pair (AVP) hiding algorithm
Context	configure router <i>string</i> l2tp avp-hiding <i>keyword</i>
Tree	avp-hiding
Options	sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *boolean*

Synopsis	Use challenge-response authentication
Context	configure router <i>string</i> l2tp challenge <i>boolean</i>
Tree	challenge
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	configure router <i>string</i> l2tp destruct-timeout <i>number</i>
Tree	destruct-timeout
Range	60 to 86400
Default	60
Units	seconds

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-tunnel

Synopsis Enter the **ethernet-tunnel** context
Context **configure** [router](#) [string](#) [l2tp](#) [ethernet-tunnel](#)
Tree [ethernet-tunnel](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reconnect-timeout (*number* | *keyword*)

Synopsis Timeout for a session setup retry
Context **configure** [router](#) [string](#) [l2tp](#) [ethernet-tunnel](#) [reconnect-timeout](#) (*number* | *keyword*)
Tree [reconnect-timeout](#)
Range 10 to 3600
Default infinite
Units seconds
Options infinite
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-avps

Synopsis Enter the **exclude-avps** context
Context **configure** [router](#) [string](#) [l2tp](#) [exclude-avps](#)
Tree [exclude-avps](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-number *boolean*

Synopsis Calling Number AVP to exclude
Context **configure** [router](#) [string](#) [l2tp](#) [exclude-avps](#) [calling-number](#) *boolean*

Tree	calling-number
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial-rx-lcp-conf-req *boolean*

Synopsis	Exclude the Initial Received LCP CONFREQ AVP
Context	configure router <i>string</i> l2tp exclude-avps initial-rx-lcp-conf-req <i>boolean</i>
Tree	initial-rx-lcp-conf-req
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure router <i>string</i> l2tp failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-max-session-lifetime *number*

Synopsis	Subset of sessions that this system attempts to synchronize in the Session State Synchronization phase
Context	configure router <i>string</i> l2tp failover recovery-max-session-lifetime <i>number</i>
Tree	recovery-max-session-lifetime
Range	2 to 4294967295
Default	2
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	configure router <i>string</i> l2tp failover recovery-method <i>keyword</i>
Tree	recovery-method
Default	mcs
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	configure router <i>string</i> l2tp failover recovery-time <i>number</i>
Tree	recovery-time
Range	0 to 900
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp [*id*] *reference*

Synopsis	Enter the track-srrp list instance
Context	configure router <i>string</i> l2tp failover track-srrp <i>reference</i>
Tree	track-srrp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*id*] *reference*

Synopsis	SRRP instance ID for multi-chassis redundancy failover
Context	configure router <i>string</i> l2tp failover track-srrp <i>reference</i>
Tree	track-srrp
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync track-srrp <i>number</i>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer reference

Synopsis	Multi-chassis peer address
Context	configure router string l2tp failover track-srrp reference peer reference
Tree	peer
Reference	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone)
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag string

Synopsis	Synchronization tag on the multi-chassis peer
Context	configure router string l2tp failover track-srrp reference sync-tag string
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group [tunnel-group-name] string

Synopsis	Enter the group list instance
Context	configure router string l2tp group string
Tree	group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[tunnel-group-name] string

Synopsis	Tunnel group name
Context	configure router <i>string</i> l2tp group <i>string</i>
Tree	group
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the L2TP tunnel group
Context	configure router <i>string</i> l2tp group <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding keyword

Synopsis	The AVP hiding algorithm
Context	configure router <i>string</i> l2tp group <i>string</i> avp-hiding <i>keyword</i>
Tree	avp-hiding
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge keyword

Synopsis	Enable use of challenge-response authentication
Context	configure router <i>string</i> l2tp group <i>string</i> challenge <i>keyword</i>
Tree	challenge
Options	false, true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [router](#) *string* [l2tp group](#) *string* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis Destruction timeout
Context **configure** [router](#) *string* [l2tp group](#) *string* **destruct-timeout** *number*
Tree [destruct-timeout](#)
Range 60 to 86400
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-tunnel

Synopsis Enter the **ethernet-tunnel** context
Context **configure** [router](#) *string* [l2tp group](#) *string* **ethernet-tunnel**
Tree [ethernet-tunnel](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reconnect-timeout (*number* | *keyword*)

Synopsis Timeout for a session setup retry at group level
Context **configure** [router](#) *string* [l2tp group](#) *string* **ethernet-tunnel** **reconnect-timeout** (*number* | *keyword*)
Tree [reconnect-timeout](#)
Range 10 to 3600

Units	seconds
Options	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure <i>router string l2tp group string failover</i>
Tree	<i>failover</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	configure <i>router string l2tp group string failover recovery-method keyword</i>
Tree	<i>recovery-method</i>
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	configure <i>router string l2tp group string failover recovery-time number</i>
Tree	<i>recovery-time</i>
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval (*number* | *keyword*)

Synopsis	Hello interval
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Context	configure <i>router</i> <i>string</i> l2tp <i>group</i> <i>string</i> hello-interval (<i>number</i> <i>keyword</i>)
Tree	hello-interval
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout (*number* | *keyword*)

Synopsis	Idle timeout
Context	configure <i>router</i> <i>string</i> l2tp <i>group</i> <i>string</i> idle-timeout (<i>number</i> <i>keyword</i>)
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the l2tpv3 context
Context	configure <i>router</i> <i>string</i> l2tp <i>group</i> <i>string</i> l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookie-length (*number* | *keyword*)

Synopsis	Cookie field length
Context	configure <i>router</i> <i>string</i> l2tp <i>group</i> <i>string</i> l2tpv3 cookie-length (<i>number</i> <i>keyword</i>)
Tree	cookie-length
Range	4 8
Options	disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

digest-type *keyword*

Synopsis Hashing algorithm that calculates the message digest
Context **configure** **router** *string l2tp group string l2tpv3 digest-type keyword*
Tree [digest-type](#)
Options none, md5, sha1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nonce-length *number*

Synopsis Length for the local L2TPv3 nonce (random number)
Context **configure** **router** *string l2tp group string l2tpv3 nonce-length number*
Tree [nonce-length](#)
Range 0 | 16 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis L2TPv3 password
Context **configure** **router** *string l2tp group string l2tpv3 password string*
Tree [password](#)
String Length 1 to 115
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust (*number* | *keyword*)

Synopsis TCP maximum segment size (MSS) on private network
Context **configure** **router** *string l2tp group string l2tpv3 private-tcp-mss-adjust (number | keyword)*
Tree [private-tcp-mss-adjust](#)
Range 512 to 9000

Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust (*number* | *keyword*)

Synopsis	TCP Maximum Segment Size (MSS) on public network
Context	configure router <i>string</i> l2tp group <i>string</i> l2tpv3 public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pw-cap-list

Synopsis	Enter the pw-cap-list context
Context	configure router <i>string</i> l2tp group <i>string</i> l2tpv3 pw-cap-list
Tree	pw-cap-list
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise Ethernet pseudowire type
Context	configure router <i>string</i> l2tp group <i>string</i> l2tpv3 pw-cap-list ethernet <i>boolean</i>
Tree	ethernet
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-vlan *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Advertise Ethernet VLAN pseudowire type
Context **configure** [router](#) [string](#) [l2tp](#) [group](#) [string](#) [l2tpv3](#) [pw-cap-list](#) [ethernet-vlan](#) *boolean*
Tree [ethernet-vlan](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rem-router-id *string*

Synopsis Filter on remote router ID
Context **configure** [router](#) [string](#) [l2tp](#) [group](#) [string](#) [l2tpv3](#) [rem-router-id](#) *string*
Tree [rem-router-id](#)
Default 0.0.0.0
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-password-change *boolean*

Synopsis Enable tracking of password changes
Context **configure** [router](#) [string](#) [l2tp](#) [group](#) [string](#) [l2tpv3](#) [track-password-change](#) *boolean*
Tree [track-password-change](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis Enter the **lac** context

Context	configure router <i>string</i> l2tp group <i>string</i> lac
Tree	lac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	configure router <i>string</i> l2tp group <i>string</i> lac df-bit <i>keyword</i>
Tree	df-bit
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

Ins

Synopsis	Enter the Ins context
Context	configure router <i>string</i> l2tp group <i>string</i> ins
Tree	ins
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

Ins-group *reference*

Synopsis	ISA LNS group
Context	configure router <i>string</i> l2tp group <i>string</i> ins Ins-group <i>reference</i>
Tree	ins-group
Reference	configure isa ins-group <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	configure router <i>string</i> l2tp group <i>string</i> ins load-balance-method <i>keyword</i>

Tree	load-balance-method
Default	per-session
Options	per-session, per-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the mlppp context
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel group
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns mlppp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the endpoint context
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns mlppp endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ip (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
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Context	configure router <i>string l2tp group string lns mlppp endpoint ip (ipv4-address keyword)</i>
Tree	ip
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mac (*mac-address | keyword*)

Synopsis	Endpoint ID as a MAC address
Context	configure router <i>string l2tp group string lns mlppp endpoint mac (mac-address keyword)</i>
Tree	mac
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

interleave *boolean*

Synopsis	Enable link fragmentation and interleaving
Context	configure router <i>string l2tp group string lns mlppp interleave boolean</i>
Tree	interleave
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-fragment-delay (*number | keyword*)

Synopsis	Maximum fragment delay caused by transmission on a link
Context	configure router <i>string l2tp group string lns mlppp max-fragment-delay (number keyword)</i>
Tree	max-fragment-delay
Range	5 to 1000
Default	no-fragmentation

Units	milliseconds
Options	no-fragmentation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-links *number*

Synopsis	Maximum MLPPP links
Context	configure router <i>string</i> l2tp group <i>string</i> lns mlppp max-links <i>number</i>
Tree	max-links
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

reassemble-timeout *number*

Synopsis	Reassembly timeout
Context	configure router <i>string</i> l2tp group <i>string</i> lns mlppp reassemble-timeout <i>number</i>
Tree	reassemble-timeout
Range	100 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

short-sequence-numbers *boolean*

Synopsis	Request a peer to send short sequence numbers
Context	configure router <i>string</i> l2tp group <i>string</i> lns mlppp short-sequence-numbers <i>boolean</i>
Tree	short-sequence-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ppp

Synopsis	Enter the ppp context
Context	configure router string l2tp group string lns ppp
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	configure router string l2tp group string lns ppp authentication <i>keyword</i>
Tree	authentication
Default	pref-chap
Options	pap, chap, pref-chap, pref-pap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	configure router string l2tp group string lns ppp authentication-policy <i>string</i>
Tree	authentication-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

chap-challenge-length

Synopsis	Enter the chap-challenge-length context
Context	configure router string l2tp group string lns ppp chap-challenge-length
Tree	chap-challenge-length
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the PPP CHAP challenge length
Context	configure <i>router string l2tp group string lns ppp chap-challenge-length end number</i>
Tree	end
Range	8 to 64
Default	64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the PPP CHAP challenge length
Context	configure <i>router string l2tp group string lns ppp chap-challenge-length start number</i>
Tree	start
Range	8 to 64
Default	32
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-group-interface

Synopsis	Enter the default-group-interface context
Context	configure <i>router string l2tp group string lns ppp default-group-interface</i>
Tree	default-group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface string

Synopsis	Group interface
Context	configure <i>router string l2tp group string lns ppp default-group-interface interface string</i>
Tree	interface

String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

Synopsis Administrative service name
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [lns](#) [ppp](#) [default-group-interface](#) [service-name](#) *string*
Tree [service-name](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *boolean*

Synopsis Allow IPCP subnet negotiation for PPPoE hosts
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [lns](#) [ppp](#) [ipcp-subnet-negotiation](#) *boolean*
Tree [ipcp-subnet-negotiation](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis Enter the **keepalive** context
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [lns](#) [ppp](#) [keepalive](#)
Tree [keepalive](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis PPP keepalive interval
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [lns](#) [ppp](#) [keepalive](#) [interval](#) *number*
Tree [interval](#)

Range	10 to 300
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	PPP keepalive multiplier
Context	configure router <i>string l2tp group string lns ppp keepalive multiplier number</i>
Tree	multiplier
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-force-ack-accm *boolean*

Synopsis	Force acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	configure router <i>string l2tp group string lns ppp lcp-force-ack-accm boolean</i>
Tree	lcp-force-ack-accm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-magic-numbers *boolean*

Synopsis	Check magic number in echo request and reply messages
Context	configure router <i>string l2tp group string lns ppp lcp-ignore-magic-numbers boolean</i>
Tree	lcp-ignore-magic-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu number

Synopsis	Maximum PPP MTU size
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns ppp mtu <i>number</i>
Tree	mtu
Range	512 to 9212
Default	1500
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-authentication boolean

Synopsis	Use authentication AVPs that are received from LAC
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns ppp proxy-authentication <i>boolean</i>
Tree	proxy-authentication
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-lcp boolean

Synopsis	Proxy LCP AVPs that are received from LAC
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns ppp proxy-lcp <i>boolean</i>
Tree	proxy-lcp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reject-disabled-ncp boolean

Synopsis	Force LCP Protocol Reject for IPv6CP Configure Request
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns ppp reject-disabled-ncp <i>boolean</i>
Tree	reject-disabled-ncp
Default	false
Introduced	16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db string

Synopsis Local user database for PPP PAP and CHAP authentication
Context **configure** [router string](#) [l2tp group string](#) [lns ppp user-db string](#)
Tree [user-db](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address string

Synopsis Local address
Context **configure** [router string](#) [l2tp group string](#) [local-address string](#)
Tree [local-address](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name string

Synopsis Local host name used to distinguish tunnels
Context **configure** [router string](#) [l2tp group string](#) [local-name string](#)
Tree [local-name](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab number

Synopsis Maximum retries for established tunnels
Context **configure** [router string](#) [l2tp group string](#) [max-retries-estab number](#)
Tree [max-retries-estab](#)
Range 2 to 7
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis Maximum retries for unestablished tunnels
Context **configure** *router string l2tp group string max-retries-not-estab number*
Tree [max-retries-not-estab](#)
Range 2 to 7
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis Password between L2TP LAC and LNS
Context **configure** *router string l2tp group string password string*
Tree [password](#)
String Length 1 to 115
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Protocol version
Context **configure** *router string l2tp group string protocol keyword*
Tree [protocol](#)
Default v2
Options v2, v3, v3draft
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	configure router <i>string</i> l2tp group <i>string</i> radius-accounting-policy <i>reference</i>
Tree	radius-accounting-policy
Reference	configure aaa radius l2tp-accounting-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	configure router <i>string</i> l2tp group <i>string</i> receive-window-size <i>number</i>
Tree	receive-window-size
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-assign-method *keyword*

Synopsis	Session assignment method
Context	configure router <i>string</i> l2tp group <i>string</i> session-assign-method <i>keyword</i>
Tree	session-assign-method
Options	existing-first, weighted, weighted-random
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit (*number* | *keyword*)

Synopsis	Session limit
Context	configure router <i>string</i> l2tp group <i>string</i> session-limit (<i>number</i> <i>keyword</i>)
Tree	session-limit
Range	1 to 250000
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel [**tunnel-name**] *string*

Synopsis	Enter the tunnel list instance
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i>
Tree	tunnel
Max. Instances	31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[tunnel-name] *string*

Synopsis	Tunnel name
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i>
Tree	tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the L2TP tunnel
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-establish *boolean*

Synopsis	Allow the tunnel to be automatically set up by the system
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> auto-establish <i>boolean</i>
Tree	auto-establish

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding *keyword*

Synopsis	The AVP hiding algorithm
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> avp-hiding <i>keyword</i>
Tree	avp-hiding
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *keyword*

Synopsis	Enable use of challenge-response authentication
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> challenge <i>keyword</i>
Tree	challenge
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> destruct-timeout <i>number</i>

Tree	destruct-timeout
Range	60 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> failover recovery-method <i>keyword</i>
Tree	recovery-method
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> failover recovery-time <i>number</i>
Tree	recovery-time
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval (*number* | *keyword*)

Synopsis	Hello interval
Context	configure router <i>string</i> I2tp group <i>string</i> tunnel <i>string</i> hello-interval (<i>number</i> <i>keyword</i>)
Tree	hello-interval
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout (*number* | *keyword*)

Synopsis	Idle timeout
Context	configure router <i>string</i> I2tp group <i>string</i> tunnel <i>string</i> idle-timeout (<i>number</i> <i>keyword</i>)
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

I2tpv3

Synopsis	Enter the I2tpv3 context
Context	configure router <i>string</i> I2tp group <i>string</i> tunnel <i>string</i> I2tpv3
Tree	I2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust (*number* | *keyword*)

Synopsis	TCP maximum segment size (MSS) on private network
Context	configure router <i>string</i> I2tp group <i>string</i> tunnel <i>string</i> I2tpv3 private-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	private-tcp-mss-adjust

Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust (*number | keyword*)

Synopsis	TCP maximum segment size (MSS) on public network
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> tunnel <i>string</i> l2tpv3 public-tcp-mss-adjust (<i>number keyword</i>)
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis	Enter the lac context
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> tunnel <i>string</i> lac
Tree	lac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> tunnel <i>string</i> lac df-bit <i>keyword</i>
Tree	df-bit
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

Ins

Synopsis	Enter the Ins context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins
Tree	Ins
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

Ins-group *reference*

Synopsis	ISA LNS group
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins Ins-group reference
Tree	Ins-group
Reference	configure isa Ins-group <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins load-balance-method <i>keyword</i>
Tree	load-balance-method
Options	per-session, per-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the mlppp context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the endpoint context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ip (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint ip (<i>ipv4-address</i> <i>keyword</i>)
Tree	ip
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mac (*mac-address* | *keyword*)

Synopsis	Endpoint ID as a MAC address
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint mac (<i>mac-address</i> <i>keyword</i>)
Tree	mac
Options	system
Notes	The following elements are part of a choice: ip or mac .

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

interleave *keyword*

Synopsis Use of Link fragmentation and interleaving
Context **configure** *router string l2tp group string tunnel string lns mlppp interleave keyword*
Tree [interleave](#)
Options false, true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-fragment-delay *number*

Synopsis Maximum fragment delay caused by transmission on a link
Context **configure** *router string l2tp group string tunnel string lns mlppp max-fragment-delay number*
Tree [max-fragment-delay](#)
Range 5 to 1000
Units milliseconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-links *number*

Synopsis Maximum MLPPP links
Context **configure** *router string l2tp group string tunnel string lns mlppp max-links number*
Tree [max-links](#)
Range 1 to 8
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

reassembly-timeout *number*

Synopsis Reassembly timeout

Context	configure <i>router string l2tp group string tunnel string lns mlppp reassembly-timeout number</i>
Tree	reassembly-timeout
Range	100 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

short-sequence-numbers *keyword*

Synopsis	Request a peer to send short sequence numbers
Context	configure <i>router string l2tp group string tunnel string lns mlppp short-sequence-numbers keyword</i>
Tree	short-sequence-numbers
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ppp

Synopsis	Enter the ppp context
Context	configure <i>router string l2tp group string tunnel string lns ppp</i>
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	configure <i>router string l2tp group string tunnel string lns ppp authentication keyword</i>
Tree	authentication
Options	pap, chap, pref-chap, pref-pap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp authentication-policy <i>string</i>
Tree	authentication-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

chap-challenge-length

Synopsis	Enter the chap-challenge-length context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length
Tree	chap-challenge-length
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the PPP CHAP challenge length
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length end <i>number</i>
Tree	end
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the PPP CHAP challenge length
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length start <i>number</i>
Tree	start
Range	8 to 64
Units	octets

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-group-interface

Synopsis Enter the **default-group-interface** context
Context **configure** [router](#) [string](#) [l2tp](#) [group](#) [string](#) [tunnel](#) [string](#) [lns](#) [ppp](#) [default-group-interface](#)
Tree [default-group-interface](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *string*

Synopsis Group interface
Context **configure** [router](#) [string](#) [l2tp](#) [group](#) [string](#) [tunnel](#) [string](#) [lns](#) [ppp](#) [default-group-interface](#) [interface](#) [string](#)
Tree [interface](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

Synopsis Administrative service name
Context **configure** [router](#) [string](#) [l2tp](#) [group](#) [string](#) [tunnel](#) [string](#) [lns](#) [ppp](#) [default-group-interface](#) [service-name](#) [string](#)
Tree [service-name](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *keyword*

Synopsis Use of IPCP subnet negotiation for PPPoE hosts
Context **configure** [router](#) [string](#) [l2tp](#) [group](#) [string](#) [tunnel](#) [string](#) [lns](#) [ppp](#) [ipcp-subnet-negotiation](#) [keyword](#)

Tree	ipcp-subnet-negotiation
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the keepalive context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPP keepalive interval
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp keepalive <i>interval</i> <i>number</i>
Tree	interval
Range	10 to 300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	PPP keepalive multiplier
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp keepalive <i>multiplier</i> <i>number</i>
Tree	multiplier
Range	1 to 5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-force-ack-accm *keyword*

Synopsis	Forced acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> tunnel <i>string</i> lns ppp lcp-force-ack-accm <i>keyword</i>
Tree	lcp-force-ack-accm
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-magic-numbers *keyword*

Synopsis	Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> tunnel <i>string</i> lns ppp lcp-ignore-magic-numbers <i>keyword</i>
Tree	lcp-ignore-magic-numbers
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	Maximum PPP MTU size
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> tunnel <i>string</i> lns ppp mtu <i>number</i>
Tree	mtu
Range	512 to 9212
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-authentication *keyword*

Synopsis	Authentication AVPs that are received from LAC
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> tunnel <i>string</i> lns ppp proxy-authentication <i>keyword</i>

Tree	proxy-authentication
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-lcp *keyword*

Synopsis	Use the Proxy LCP AVPs that are received from the LAC
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp proxy-lcp <i>keyword</i>
Tree	proxy-lcp
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reject-disabled-ncp *keyword*

Synopsis	Force LCP Project Reject for IPv6CP Configure Request
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp reject-disabled-ncp <i>keyword</i>
Tree	reject-disabled-ncp
Options	false, true
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis	Local user database for PPP PAP and CHAP authentication
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp user-db <i>string</i>
Tree	user-db
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis	Local address
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Context **configure** *router string l2tp group string tunnel string local-address string*
Tree [local-address](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis Local host name used to distinguish tunnels
Context **configure** *router string l2tp group string tunnel string local-name string*
Tree [local-name](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis Maximum retries for established tunnels
Context **configure** *router string l2tp group string tunnel string max-retries-estab number*
Tree [max-retries-estab](#)
Range 2 to 7
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis Maximum retries for unestablished tunnels
Context **configure** *router string l2tp group string tunnel string max-retries-not-estab number*
Tree [max-retries-not-estab](#)
Range 2 to 7
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis Password between L2TP LAC and LNS

Context **configure** *router string l2tp group string tunnel string password string*
Tree [password](#)
String Length 1 to 115
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer string

Synopsis Peer address
Context **configure** *router string l2tp group string tunnel string peer string*
Tree [peer](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference number

Synopsis Tunnel preference number with its group
Context **configure** *router string l2tp group string tunnel string preference number*
Tree [preference](#)
Range 0 to 16777215
Default 50
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy reference

Synopsis RADIUS accounting policy
Context **configure** *router string l2tp group string tunnel string radius-accounting-policy reference*
Tree [radius-accounting-policy](#)
Reference **configure** *aaa radius l2tp-accounting-policy string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> receive-window-size <i>number</i>
Tree	receive-window-size
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-name *string*

Synopsis	Remote tunnel host name
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> remote-name <i>string</i>
Tree	remote-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit (*number* | *keyword*)

Synopsis	L2TP session limit for each tunnel of this router
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> session-limit (<i>number</i> <i>keyword</i>)
Tree	session-limit
Range	1 to 65534
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-session-limit *number*

Synopsis	L2TP session limit for each group of this router
Context	configure router <i>string</i> l2tp group-session-limit <i>number</i>
Tree	group-session-limit
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval (*number* | *keyword*)

Synopsis	Hello interval
Context	configure router <i>string</i> l2tp hello-interval (<i>number</i> <i>keyword</i>)
Tree	hello-interval
Range	10 to 3600
Default	300
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout (*number* | *keyword*)

Synopsis	Idle timeout
Context	configure router <i>string</i> l2tp idle-timeout (<i>number</i> <i>keyword</i>)
Tree	idle-timeout
Range	0 to 3600
Default	infinite
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-avps

Synopsis	Enter the ignore-avps context
Context	configure router <i>string</i> l2tp ignore-avps
Tree	ignore-avps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sequencing-required *boolean*

Synopsis	Ignore Sequencing Required AVP
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Context	configure <i>router</i> <i>string</i> <i>l2tp ignore-avps sequencing-required</i> <i>boolean</i>
Tree	<i>sequencing-required</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the l2tpv3 context
Context	configure <i>router</i> <i>string</i> <i>l2tp l2tpv3</i>
Tree	<i>l2tpv3</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookie-length *number*

Synopsis	Cookie field length
Context	configure <i>router</i> <i>string</i> <i>l2tp l2tpv3 cookie-length</i> <i>number</i>
Tree	<i>cookie-length</i>
Range	4 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

digest-type *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	configure <i>router</i> <i>string</i> <i>l2tp l2tpv3 digest-type</i> <i>keyword</i>
Tree	<i>digest-type</i>
Options	md5, sha1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nonce-length *number*

Synopsis	Length of the local L2TPv3 nonce (random number)
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Context	configure router <i>string</i> l2tp l2tpv3 nonce-length <i>number</i>
Tree	nonce-length
Range	0 16 to 64
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	L2TPv3 password
Context	configure router <i>string</i> l2tp l2tpv3 password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*

Synopsis	TCP maximum segment size (MSS) on private network
Context	configure router <i>string</i> l2tp l2tpv3 private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust *number*

Synopsis	TCP maximum segment size (MSS) on public network
Context	configure router <i>string</i> l2tp l2tpv3 public-tcp-mss-adjust <i>number</i>
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transport-type

Synopsis	Enter the transport-type context
Context	configure router string l2tp l2tpv3 transport-type
Tree	transport-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip *boolean*

Synopsis	Use IP as the transport type for the L2TPv3 tunnel
Context	configure router string l2tp l2tpv3 transport-type ip boolean
Tree	ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis	Enter the lac context
Context	configure router string l2tp lac
Tree	lac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-number-format *string*

Synopsis	Calling Number AVP for L2TP control messages
Context	configure router string l2tp lac calling-number-format string
Tree	calling-number-format
String Length	1 to 255
Default	%S %s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cisco-nas-port

Synopsis	Enter the cisco-nas-port context
Context	configure router string l2tp lac cisco-nas-port
Tree	cisco-nas-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet string

Synopsis	L2TP Cisco NAS port AVP with binary patterns for Ethernet
Context	configure router string l2tp lac cisco-nas-port ethernet string
Tree	ethernet
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit boolean

Synopsis	Send all L2TP packets with DF bit set to 1
Context	configure router string l2tp lac df-bit boolean
Tree	df-bit
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address string

Synopsis	Local address
Context	configure router string l2tp local-address string
Tree	local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis	Local host name
Context	configure router <i>string</i> l2tp local-name <i>string</i>
Tree	local-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis	Maximum retries for established tunnels
Context	configure router <i>string</i> l2tp max-retries-estab <i>number</i>
Tree	max-retries-estab
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis	Maximum retries for unestablished tunnels
Context	configure router <i>string</i> l2tp max-retries-not-estab <i>number</i>
Tree	max-retries-not-estab
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-attempt *keyword*

Synopsis	Tunnel that is selected when previous session setup failed
Context	configure router <i>string</i> l2tp next-attempt <i>keyword</i>
Tree	next-attempt
Default	next-preference-level
Options	same-preference-level, next-preference-level

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis L2TP password
Context **configure** [router](#) *string* [l2tp](#) [password](#) *string*
Tree [password](#)
String Length 1 to 115
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer-address-change-policy *keyword*

Synopsis Reaction for L2TP response from a different address
Context **configure** [router](#) *string* [l2tp](#) [peer-address-change-policy](#) *keyword*
Tree [peer-address-change-policy](#)
Default reject
Options accept, ignore, reject
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis RADIUS accounting policy
Context **configure** [router](#) *string* [l2tp](#) [radius-accounting-policy](#) *reference*
Tree [radius-accounting-policy](#)
Reference **configure** [aaa](#) [radius](#) [l2tp-accounting-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis L2TP receive window size
Context **configure** [router](#) *string* [l2tp](#) [receive-window-size](#) *number*

Tree	receive-window-size
Range	4 to 1024
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

replace-result-code

Synopsis	Enter the replace-result-code context
Context	configure router <i>string</i> l2tp replace-result-code
Tree	replace-result-code
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-invalid-dst *boolean*

Synopsis	Replace result code with general error code
Context	configure router <i>string</i> l2tp replace-result-code cdn-invalid-dst <i>boolean</i>
Tree	cdn-invalid-dst
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-permanent-no-facilities *boolean*

Synopsis	Replace result code with general error
Context	configure router <i>string</i> l2tp replace-result-code cdn-permanent-no-facilities <i>boolean</i>
Tree	cdn-permanent-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-temporary-no-facilities *boolean*

Synopsis	Replace result code with general error
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Context	configure router <i>string</i> l2tp replace-result-code cdn-temporary-no-facilities <i>boolean</i>
Tree	cdn-temporary-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rtm-debounce-time (*number* | *keyword*)

Synopsis	Debounce timer that declares L2TP action for route table management events
Context	configure router <i>string</i> l2tp rtm-debounce-time (<i>number</i> <i>keyword</i>)
Tree	rtm-debounce-time
Range	0 to 5000
Default	infinite
Units	milliseconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-assign-method *keyword*

Synopsis	Session assignment method
Context	configure router <i>string</i> l2tp session-assign-method <i>keyword</i>
Tree	session-assign-method
Default	existing-first
Options	existing-first, weighted, weighted-random
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	L2TP session limit of this router
Context	configure router <i>string</i> l2tp session-limit <i>number</i>
Tree	session-limit
Range	1 to 250000
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-selection-blacklist

Synopsis Enter the **tunnel-selection-blacklist** context
Context **configure** [router](#) *string* [l2tp tunnel-selection-blacklist](#)
Tree [tunnel-selection-blacklist](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

add-tunnel-on

Synopsis Enter the **add-tunnel-on** context
Context **configure** [router](#) *string* [l2tp tunnel-selection-blacklist add-tunnel-on](#)
Tree [add-tunnel-on](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-change-timeout *boolean*

Synopsis Enable a timed-out tunnel to be forced to the denylist
Context **configure** [router](#) *string* [l2tp tunnel-selection-blacklist add-tunnel-on address-change-timeout](#) *boolean*
Tree [address-change-timeout](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-err-code *boolean*

Synopsis Add to deny if CDN is received with code: General error
Context **configure** [router](#) *string* [l2tp tunnel-selection-blacklist add-tunnel-on cdn-err-code](#) *boolean*
Tree [cdn-err-code](#)
Default false
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-invalid-dst *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 6

Context **configure** **router** *string* [l2tp](#) [tunnel-selection-blacklist](#) [add-tunnel-on](#) [cdn-invalid-dst](#) *boolean*

Tree [cdn-invalid-dst](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-permanent-no-facilities *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 5

Context **configure** **router** *string* [l2tp](#) [tunnel-selection-blacklist](#) [add-tunnel-on](#) [cdn-permanent-no-facilities](#) *boolean*

Tree [cdn-permanent-no-facilities](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-temporary-no-facilities *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 4

Context **configure** **router** *string* [l2tp](#) [tunnel-selection-blacklist](#) [add-tunnel-on](#) [cdn-temporary-no-facilities](#) *boolean*

Tree [cdn-temporary-no-facilities](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop-ccn-err-code *boolean*

Synopsis Add to denylist if received with general error code

Context **configure** **router** *string* [l2tp](#) [tunnel-selection-blacklist](#) [add-tunnel-on](#) [stop-ccn-err-code](#) *boolean*

Tree	stop-ccn-err-code
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop-ccn-other *boolean*

Synopsis	Add to denylist if StopCCN received with general error
Context	configure router <i>string</i> l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-other <i>boolean</i>
Tree	stop-ccn-other
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-cdn-not-established-in-time *boolean*

Synopsis	Add to denylist if CDN transmitted with result code
Context	configure router <i>string</i> l2tp tunnel-selection-blacklist add-tunnel-on tx-cdn-not-established-in-time <i>boolean</i>
Tree	tx-cdn-not-established-in-time
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-list-length (*number* | *keyword*)

Synopsis	Number of tunnels or peers in the denylist
Context	configure router <i>string</i> l2tp tunnel-selection-blacklist max-list-length (<i>number</i> <i>keyword</i>)
Tree	max-list-length
Range	1 to 65535
Default	infinite
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-time *number*

Synopsis	Time that a tunnel or peer can remain in the denylist
Context	configure router <i>string</i> l2tp tunnel-selection-blacklist max-time <i>number</i>
Tree	max-time
Range	1 to 60
Default	5
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout-action *keyword*

Synopsis	Action when a tunnel or peer exceeds time in denylist
Context	configure router <i>string</i> l2tp tunnel-selection-blacklist timeout-action <i>keyword</i>
Tree	timeout-action
Default	remove-from-blacklist
Options	remove-from-blacklist, try-one-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-session-limit *number*

Synopsis	L2TP session limit for each tunnel of this router
Context	configure router <i>string</i> l2tp tunnel-session-limit <i>number</i>
Tree	tunnel-session-limit
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ldp

Synopsis	Enable the ldp context
Context	configure router <i>string</i> ldp
Tree	ldp

Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of LDP
Context **configure** *router string ldp admin-state keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

aggregate-prefix-match

Synopsis Enable the **aggregate-prefix-match** context
Context **configure** *router string ldp aggregate-prefix-match*
Tree [aggregate-prefix-match](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the LDP aggregate prefix match
Context **configure** *router string ldp aggregate-prefix-match admin-state keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

prefix-exclude *reference*

Synopsis Import policies to filter LDP label bindings received from LDP peers
Context **configure** *router string ldp aggregate-prefix-match prefix-exclude reference*

Tree	prefix-exclude
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

class-forwarding *keyword*

Synopsis	Allow class-based forwarding for LDP over RSVP
Context	configure router <i>string</i> ldp class-forwarding <i>keyword</i>
Tree	class-forwarding
Options	lsr, ler, lsr-and-ler
Introduced	16.0.R1
Platforms	All

consider-system-ip-in-gep *boolean*

Synopsis	Apply global export policy for system IP FEC creation
Context	configure router <i>string</i> ldp consider-system-ip-in-gep <i>boolean</i>
Tree	consider-system-ip-in-gep
Default	false
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enter the egress-statistics context
Context	configure router <i>string</i> ldp egress-statistics
Tree	egress-statistics
Introduced	16.0.R1
Platforms	All

fec-prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the fec-prefix list instance
Context	configure router <i>string</i> ldp egress-statistics fec-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	fec-prefix
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
Context	configure router <i>string</i> ldp egress-statistics fec-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	fec-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure router <i>string</i> ldp egress-statistics fec-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP egress statistics
Context	configure router <i>string</i> ldp egress-statistics fec-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms All

collect-stats *boolean*

Synopsis Collect statistics
Context **configure** **router** *string ldp egress-statistics fec-prefix (ipv4-prefix | ipv6-prefix) collect-stats boolean*
Tree [collect-stats](#)
Default false
Introduced 16.0.R1
Platforms All

entropy-label-capability *boolean*

Synopsis Enable entropy label capability on the LDP instance
Context **configure** **router** *string ldp entropy-label-capability boolean*
Tree [entropy-label-capability](#)
Default false
Introduced 16.0.R1
Platforms All

export-policy *reference*

Synopsis Export policies to determine routes exported to LDP
Context **configure** **router** *string ldp export-policy reference*
Tree [export-policy](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

export-tunnel-table *reference*

Synopsis Tunnel table export policies to export tunneled routes

Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>export-tunnel-table</i> <i>reference</i>
Tree	export-tunnel-table
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

fast-reroute

Synopsis	Enable the fast-reroute context
Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>fast-reroute</i>
Tree	fast-reroute
Introduced	16.0.R1
Platforms	All

backup-sr-tunnel *boolean*

Synopsis	Use SR tunnel as a remote LFA backup tunnel next-hop by an LDP FEC
Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>fast-reroute</i> <i>backup-sr-tunnel</i> <i>boolean</i>
Tree	backup-sr-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

fec-originate [[fec-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the fec-originate list instance
Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>fec-originate</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	fec-originate
Introduced	16.0.R1
Platforms	All

[fec-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Static FEC IP prefix
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	fec-originate
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-label *number*

Synopsis	Label that is advertised to upstream peer
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) advertised-label <i>number</i>
Tree	advertised-label
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

interface *string*

Synopsis	Interface name for this static FEC prefix
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) interface <i>string</i>
Tree	interface
String Length	0 to 32
Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	16.0.R1
Platforms	All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the next hop
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop

Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	16.0.R1
Platforms	All

pop *boolean*

Synopsis	Pop the label and transmit without the label
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) pop <i>boolean</i>
Tree	pop
Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	16.0.R1
Platforms	All

swap-label *number*

Synopsis	Value mapped to egress label associated with next-hop entry that LSR uses to swap incoming label
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) swap-label <i>number</i>
Tree	swap-label
Range	6 to 1048575
Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	16.0.R1
Platforms	All

generate-basic-fec-only *boolean*

Synopsis	Enable mLDP to generate a basic FEC
Context	configure router <i>string</i> ldp generate-basic-fec-only <i>boolean</i>
Tree	generate-basic-fec-only
Default	false
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enter the graceful-restart context
Context	configure router <i>string</i> ldp graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable graceful restart helper
Context	configure router <i>string</i> ldp graceful-restart helper-mode <i>boolean</i>
Tree	helper-mode
Default	false
Introduced	16.0.R1
Platforms	All

maximum-recovery-time *number*

Synopsis	Value for the local maximum recovery time
Context	configure router <i>string</i> ldp graceful-restart maximum-recovery-time <i>number</i>
Tree	maximum-recovery-time
Range	15 to 1800
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	All

neighbor-liveness-time *number*

Synopsis	Value for the neighbor liveness timer
Context	configure router <i>string</i> ldp graceful-restart neighbor-liveness-time <i>number</i>
Tree	neighbor-liveness-time
Range	5 to 300
Default	120

Units	seconds
Introduced	16.0.R1
Platforms	All

implicit-null-label *boolean*

Synopsis	Signal the implicit null label value for all LDP FECs for which the node is the egress LER
Context	configure router <i>string</i> ldp implicit-null-label <i>boolean</i>
Tree	implicit-null-label
Default	false
Introduced	16.0.R1
Platforms	All

import-mcast-policy *reference*

Synopsis	Import policy for mLDP FECs arriving on the node
Context	configure router <i>string</i> ldp import-mcast-policy <i>reference</i>
Tree	import-mcast-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

import-pmsi-routes

Synopsis	Enter the import-pmsi-routes context
Context	configure router <i>string</i> ldp import-pmsi-routes
Tree	import-pmsi-routes
Introduced	19.5.R1
Platforms	All

mvpn *boolean*

Synopsis	Import BGP MVPN inter-AS routes
Context	configure router <i>string</i> ldp import-pmsi-routes mvpn <i>boolean</i>
Tree	mvpn
Default	false
Introduced	19.5.R1
Platforms	All

mvpn-no-export-community *boolean*

Synopsis	Import BGP MVPN intra-AS routes
Context	configure router <i>string</i> ldp import-pmsi-routes mvpn-no-export-community <i>boolean</i>
Tree	mvpn-no-export-community
Default	false
Introduced	19.5.R1
Platforms	All

import-policy *reference*

Synopsis	Import policies to filter LDP label bindings received from LDP peers
Context	configure router <i>string</i> ldp import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import-tunnel-table *reference*

Synopsis	Tunnel table import policies to control the insertion of non-host prefixes resolved by LDP
Context	configure router <i>string</i> ldp import-tunnel-table <i>reference</i>
Tree	import-tunnel-table
Reference	configure policy-options policy-statement <i>string</i>

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface-parameters

Synopsis	Enter the interface-parameters context
Context	configure router <i>string</i> ldp interface-parameters
Tree	interface-parameters
Introduced	16.0.R1
Platforms	All

interface [[ip-int-name](#)] *reference*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[ip-int-name] *reference*

Synopsis	Interface name
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i>
Tree	interface
Reference	configure router <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP interface
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Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

ipv4 boolean

Synopsis	Allow BFD tracking of IPv4 LDP Session for interface
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> bfd-liveness ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 boolean

Synopsis	Allow BFD tracking of IPv6 LDP session for interface
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> bfd-liveness ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enable the ipv4 context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP interface
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

fec-type-capability

Synopsis	Enter the fec-type-capability context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 fec-type-capability
Tree	fec-type-capability
Introduced	16.0.R1
Platforms	All

p2mp-ipv4 *boolean*

Synopsis	Enable IPv4 P2MP FEC capability
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 fec-type-capability p2mp-ipv4 <i>boolean</i>
Tree	p2mp-ipv4
Default	true
Introduced	16.0.R1

Platforms All

p2mp-ipv6 *boolean*

Synopsis Enable IPv6 P2MP FEC capability
Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv4](#) [fec-type-capability](#) [p2mp-ipv6](#) *boolean*
Tree [p2mp-ipv6](#)
Default true
Introduced 16.0.R1
Platforms All

prefix-ipv4 *boolean*

Synopsis Enable IPv4 prefix FEC capability
Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv4](#) [fec-type-capability](#) [prefix-ipv4](#) *boolean*
Tree [prefix-ipv4](#)
Default true
Introduced 16.0.R1
Platforms All

prefix-ipv6 *boolean*

Synopsis Enable IPv6 prefix FEC capability
Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv4](#) [fec-type-capability](#) [prefix-ipv6](#) *boolean*
Tree [prefix-ipv6](#)
Default true
Introduced 16.0.R1
Platforms All

hello

Synopsis Enable the **hello** context
Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv4](#) [hello](#)

Tree [hello](#)
Introduced 16.0.R1
Platforms All

factor number

Synopsis Factor value for Hello
Context **configure** [router](#) [string](#) [ldp](#) [interface-parameters](#) [interface](#) [reference](#) [ipv4](#) [hello](#) [factor](#) [number](#)
Tree [factor](#)
Range 1 to 255
Introduced 16.0.R1
Platforms All

timeout number

Synopsis Timeout value for Hello
Context **configure** [router](#) [string](#) [ldp](#) [interface-parameters](#) [interface](#) [reference](#) [ipv4](#) [hello](#) [timeout](#) [number](#)
Tree [timeout](#)
Range 3 to 65535
Units seconds
Introduced 16.0.R1
Platforms All

keepalive

Synopsis Enable the **keepalive** context
Context **configure** [router](#) [string](#) [ldp](#) [interface-parameters](#) [interface](#) [reference](#) [ipv4](#) [keepalive](#)
Tree [keepalive](#)
Introduced 16.0.R1
Platforms All

factor number

Synopsis Factor value for keepalive

Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 keepalive timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the local-lsr-id context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 local-lsr-id
Tree	local-lsr-id
Introduced	16.0.R1
Platforms	All

interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 local-lsr-id interface-name <i>reference</i>
Tree	interface-name
Reference	configure router <i>string</i> interface <i>string</i>
Introduced	16.0.R1
Platforms	All

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 transport-address <i>keyword</i>
Tree	transport-address
Options	interface, system
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the ipv6 context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP interface
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

fec-type-capability

Synopsis	Enter the fec-type-capability context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 fec-type-capability
Tree	fec-type-capability
Introduced	16.0.R1

Platforms All

p2mp-ipv4 *boolean*

Synopsis Enable IPv4 P2MP FEC capability

Context **configure** **router** *string* **ldp** **interface-parameters** **interface** *reference* **ipv6** **fec-type-capability** **p2mp-ipv4** *boolean*

Tree [p2mp-ipv4](#)

Default true

Introduced 16.0.R1

Platforms All

p2mp-ipv6 *boolean*

Synopsis Enable IPv6 P2MP FEC capability

Context **configure** **router** *string* **ldp** **interface-parameters** **interface** *reference* **ipv6** **fec-type-capability** **p2mp-ipv6** *boolean*

Tree [p2mp-ipv6](#)

Default true

Introduced 16.0.R1

Platforms All

prefix-ipv4 *boolean*

Synopsis Enable IPv4 prefix FEC capability

Context **configure** **router** *string* **ldp** **interface-parameters** **interface** *reference* **ipv6** **fec-type-capability** **prefix-ipv4** *boolean*

Tree [prefix-ipv4](#)

Default true

Introduced 16.0.R1

Platforms All

prefix-ipv6 *boolean*

Synopsis Enable IPv6 prefix FEC capability

Context **configure** **router** *string* **ldp** **interface-parameters** **interface** *reference* **ipv6** **fec-type-capability** **prefix-ipv6** *boolean*

Tree	prefix-ipv6
Default	true
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enable the hello context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for Hello
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 hello factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 hello timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enable the keepalive context
Context	configure router string ldp interface-parameters interface reference ipv6 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor number

Synopsis	Factor value for keepalive
Context	configure router string ldp interface-parameters interface reference ipv6 keepalive factor number
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout number

Synopsis	Time that LDP waits before tearing down session
Context	configure router string ldp interface-parameters interface reference ipv6 keepalive timeout number
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the local-lsr-id context
Context	configure router string ldp interface-parameters interface reference ipv6 local-lsr-id
Tree	local-lsr-id
Introduced	16.0.R1
Platforms	All

format-32bit *boolean*

Synopsis	Use IPv4 address of local LSR-ID interface as LSR-ID of the LDP LSR
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 local-lsr-id format-32bit <i>boolean</i>
Tree	format-32bit
Default	false
Introduced	16.0.R1
Platforms	All

interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 local-lsr-id interface-name <i>reference</i>
Tree	interface-name
Reference	configure router <i>string</i> interface <i>string</i>
Introduced	16.0.R1
Platforms	All

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 transport-address <i>keyword</i>
Tree	transport-address
Options	interface, system
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight for the LDP interface
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight

Max. Range	0 to 4294967295
Introduced	20.2.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> ldp interface-parameters ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enter the hello context
Context	configure router <i>string</i> ldp interface-parameters ipv4 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Value for the Hello factor
Context	configure router <i>string</i> ldp interface-parameters ipv4 hello <i>factor</i> <i>number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	configure router <i>string</i> ldp interface-parameters ipv4 hello <i>timeout</i> <i>number</i>
Tree	timeout

Range	3 to 65535
Default	15
Units	seconds
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enter the keepalive context
Context	configure router <i>string</i> ldp interface-parameters ipv4 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Value for the keep-alive factor
Context	configure router <i>string</i> ldp interface-parameters ipv4 keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for keepalive
Context	configure router <i>string</i> ldp interface-parameters ipv4 keepalive timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	configure router <i>string</i> ldp interface-parameters ipv4 transport-address <i>keyword</i>
Tree	transport-address
Default	system
Options	interface, system
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>string</i> ldp interface-parameters ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enter the hello context
Context	configure router <i>string</i> ldp interface-parameters ipv6 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Value for the Hello factor
Context	configure router <i>string</i> ldp interface-parameters ipv6 hello factor <i>number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	configure router <i>string</i> ldp interface-parameters ipv6 hello <i>timeout</i> <i>number</i>
Tree	timeout
Range	3 to 65535
Default	15
Units	seconds
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enter the keepalive context
Context	configure router <i>string</i> ldp interface-parameters ipv6 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Value for the keep-alive factor
Context	configure router <i>string</i> ldp interface-parameters ipv6 keepalive <i>factor</i> <i>number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for keepalive
Context	configure router <i>string</i> ldp interface-parameters ipv6 keepalive <i>timeout</i> <i>number</i>
Tree	timeout
Range	3 to 65535

Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	configure router <i>string</i> ldp interface-parameters ipv6 transport-address <i>keyword</i>
Tree	transport-address
Default	system
Options	interface, system
Introduced	16.0.R1
Platforms	All

label-withdrawal-delay *number*

Synopsis	Time interval during which LDP delays for the withdrawal of FEC-label binding
Context	configure router <i>string</i> ldp label-withdrawal-delay <i>number</i>
Tree	label-withdrawal-delay
Range	3 to 120
Units	seconds
Introduced	16.0.R1
Platforms	All

ldp-shortcut

Synopsis	Enter the ldp-shortcut context
Context	configure router <i>string</i> ldp ldp-shortcut
Tree	ldp-shortcut
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Forward IPv4 packets by using LDP shortcuts
Context	configure router <i>string ldp ldp-shortcut ipv4 boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Forward IPv6 packets by using LDP shortcuts
Context	configure router <i>string ldp ldp-shortcut ipv6 boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

legacy-ipv4-lsr-interop *boolean*

Synopsis	Allow interoperability with legacy IPv4 LSR implementations
Context	configure router <i>string ldp legacy-ipv4-lsr-interop boolean</i>
Tree	legacy-ipv4-lsr-interop
Default	false
Introduced	16.0.R1
Platforms	All

lsp-bfd [[prefix-list](#)] *reference*

Synopsis	Enter the lsp-bfd list instance
Context	configure router <i>string ldp lsp-bfd reference</i>
Tree	lsp-bfd
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[prefix-list] reference

Synopsis	Name of a router policy options prefix list
Context	configure router <i>string</i> ldp lsp-bfd <i>reference</i>
Tree	lsp-bfd
Reference	configure policy-options prefix-list <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bfd-liveness boolean

Synopsis	Enable BFD on LDP LSPs with FECs that match the prefix list
Context	configure router <i>string</i> ldp lsp-bfd <i>reference</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

bfd-template reference

Synopsis	BFD template to apply to BFD sessions associated with the prefix list
Context	configure router <i>string</i> ldp lsp-bfd <i>reference</i> bfd-template <i>reference</i>
Tree	bfd-template
Reference	configure bfd bfd-template <i>string</i>
Introduced	16.0.R1
Platforms	All

failure-action keyword

Synopsis	Reaction to BFD session failure for the prefix list
Context	configure router <i>string</i> ldp lsp-bfd <i>reference</i> failure-action <i>keyword</i>
Tree	failure-action
Options	down
Introduced	16.0.R1

Platforms All

lsp-ping-interval (*number | keyword*)

Synopsis LSP ping transmit interval for periodic verification
 Context **configure** **router** *string* **ldp** **lsp-bfd** *reference* **lsp-ping-interval** (*number | keyword*)
 Tree **lsp-ping-interval**
 Range 60 to 300
 Default 60
 Units seconds
 Options none
 Introduced 16.0.R1
 Platforms All

priority *number*

Synopsis Prefix list to control the search order
 Context **configure** **router** *string* **ldp** **lsp-bfd** *reference* **priority** *number*
 Tree **priority**
 Range 1 to 99
 Default 1
 Introduced 16.0.R1
 Platforms All

source-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Source address in LSP ping packets and BFD control packets associated with prefix list
 Context **configure** **router** *string* **ldp** **lsp-bfd** *reference* **source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 Tree **source-address**
 Introduced 16.0.R1
 Platforms All

max-ecmp-routes *number*

Synopsis Maximum ECMP value for LDP

Context	configure router <i>string ldp max-ecmp-routes number</i>
Tree	max-ecmp-routes
Description	<p>This command sets the maximum number of ECMP routes that LDP may use to resolve the next hop for a FEC as permitted by the RTM or TTM.</p> <p>The system-wide maximum number of ECMP routes is set by the configure router ecmp command; therefore, the operational maximum number used by LDP is set to the lesser of the values configured by this command and the configure router ecmp command.</p>
Range	1 to 64
Default	32
Introduced	19.10.R1
Platforms	All

mcast-upstream-asbr-frr *boolean*

Synopsis	Enable ASBR MoFRR to allow local leaf to perform MoFRR for multiple ASBRs
Context	configure router <i>string ldp mcast-upstream-asbr-frr boolean</i>
Tree	mcast-upstream-asbr-frr
Default	false
Introduced	16.0.R1
Platforms	All

mcast-upstream-frr *boolean*

Synopsis	Use fast upstream switchover for mLDP FECs
Context	configure router <i>string ldp mcast-upstream-frr boolean</i>
Tree	mcast-upstream-frr
Default	false
Introduced	16.0.R1
Platforms	All

mp-mbb-time *number*

Synopsis	MP MBB time
Context	configure router <i>string ldp mp-mbb-time number</i>
Tree	mp-mbb-time

Range	0 to 10
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	All

prefer-mcast-tunnel-in-tunnel *boolean*

Synopsis	Use T-LDP session to the peer for FEC resolution
Context	configure router <i>string</i> ldp prefer-mcast-tunnel-in-tunnel <i>boolean</i>
Tree	prefer-mcast-tunnel-in-tunnel
Default	true
Introduced	21.2.R1
Platforms	All

prefer-protocol-stitching *boolean*

Synopsis	Stitch LDP ILM to SR NHLFE even if LDP NHLFE exists
Context	configure router <i>string</i> ldp prefer-protocol-stitching <i>boolean</i>
Tree	prefer-protocol-stitching
Description	When configured to true , an LDP ILM stitches to an SR NHLFE, even if an LDP NHLFE exists. When configured to false , the stitching preference of an LDP ILM is to an LDP NHLFE.
Default	false
Introduced	21.7.R1
Platforms	All

prefer-tunnel-in-tunnel *boolean*

Synopsis	Preference tunnel-in-tunnel over a simple LDP tunnel
Context	configure router <i>string</i> ldp prefer-tunnel-in-tunnel <i>boolean</i>
Tree	prefer-tunnel-in-tunnel
Default	true
Introduced	16.0.R1
Platforms	All

resolve-root-using *keyword*

Synopsis	Resolution route table for multicast FECs
Context	configure <i>router string ldp resolve-root-using keyword</i>
Tree	resolve-root-using
Default	ucast-rtm
Options	ucast-rtm, mcast-rtm
Introduced	16.0.R1
Platforms	All

session-parameters

Synopsis	Enter the session-parameters context
Context	configure <i>router string ldp session-parameters</i>
Tree	session-parameters
Introduced	16.0.R1
Platforms	All

peer [[ip-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
Context	configure <i>router string ldp session-parameters peer (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	peer
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the LDP peer
Context	configure <i>router string ldp session-parameters peer (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

adv-adj-addr-only *boolean*

Synopsis Distribute only the local addresses used to establish the Hello adjacencies with a peer

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **adv-adj-addr-only** *boolean*

Tree [adv-adj-addr-only](#)

Default false

Introduced 16.0.R1

Platforms All

adv-local-lsr-id *boolean*

Synopsis Advertise local LSR ID over a specified LDP session

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **adv-local-lsr-id** *boolean*

Tree [adv-local-lsr-id](#)

Default false

Introduced 16.0.R1

Platforms All

community *string*

Synopsis Community string associated with a session to a specified peer

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **community** *string*

Tree [community](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

dod-label-distribution *boolean*

Synopsis Use LDP Downstream-on-Demand (DoD) label distribution procedures

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **dod-label-distribution** *boolean*

Tree	dod-label-distribution
Default	false
Introduced	16.0.R1
Platforms	All

export-addresses *reference*

Synopsis	Export policies to determine which local addresses should be distributed to this peer
Context	configure router <i>string</i> ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) export-addresses <i>reference</i>
Tree	export-addresses
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

export-prefixes *reference*

Synopsis	Export policies to determine which FEC prefixes are redistributed to LDP and TLDP peers
Context	configure router <i>string</i> ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) export-prefixes <i>reference</i>
Tree	export-prefixes
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

fec-limit

Synopsis	Enter the fec-limit context
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Context	configure router string ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fec-limit
Tree	fec-limit
Introduced	16.0.R1
Platforms	All

limit number

Synopsis	Maximum number of FECs to be accepted from this peer LSR
Context	configure router string ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fec-limit limit number
Tree	limit
Range	0 1 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

log-only boolean

Synopsis	Trap and syslog message to generate when reaching the threshold and limit
Context	configure router string ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fec-limit log-only boolean
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

threshold number

Synopsis	Threshold that generates trap and warning when reached
Context	configure router string ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fec-limit threshold number
Tree	threshold
Range	1 to 100
Default	90
Introduced	16.0.R1

Platforms All

fec-type-capability

Synopsis Enter the **fec-type-capability** context

Context **configure** **router** *string* **ldp** **session-parameters** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **fec-type-capability**

Tree [fec-type-capability](#)

Introduced 16.0.R1

Platforms All

p2mp *boolean*

Synopsis Enable P2MP FEC capability for the session

Context **configure** **router** *string* **ldp** **session-parameters** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **fec-type-capability** **p2mp** *boolean*

Tree [p2mp](#)

Default true

Introduced 16.0.R1

Platforms All

prefix-ipv4 *boolean*

Synopsis Enable IPv4 prefix FEC capability for the session

Context **configure** **router** *string* **ldp** **session-parameters** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **fec-type-capability** **prefix-ipv4** *boolean*

Tree [prefix-ipv4](#)

Default true

Introduced 16.0.R1

Platforms All

prefix-ipv6 *boolean*

Synopsis Enable IPv6 prefix FEC capability

Context **configure** **router** *string* **ldp** **session-parameters** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **fec-type-capability** **prefix-ipv6** *boolean*

Tree [prefix-ipv6](#)

Default	true
Introduced	16.0.R1
Platforms	All

fec129-cisco-interop *boolean*

Synopsis	Allow translation between non-compliant FEC 129 formats of Cisco
Context	configure router <i>string</i> ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fec129-cisco-interop <i>boolean</i>
Tree	fec129-cisco-interop
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-prefixes *reference*

Synopsis	FEC prefixes to be redistributed to this LDP peer
Context	configure router <i>string</i> ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) import-prefixes <i>reference</i>
Tree	import-prefixes
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

pe-id-mac-flush-interop *boolean*

Synopsis	Send PE-ID TLV in LDP MAC withdrawal message
Context	configure router <i>string</i> ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) pe-id-mac-flush-interop <i>boolean</i>
Tree	pe-id-mac-flush-interop
Default	false
Introduced	16.0.R1
Platforms	All

shortcut-local-ttl-propagate *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	configure router <i>string</i> ldp shortcut-local-ttl-propagate <i>boolean</i>
Tree	shortcut-local-ttl-propagate
Default	true
Introduced	16.0.R1
Platforms	All

shortcut-transit-ttl-propagate *boolean*

Synopsis	Enable TTL propagation over LSP shortcut
Context	configure router <i>string</i> ldp shortcut-transit-ttl-propagate <i>boolean</i>
Tree	shortcut-transit-ttl-propagate
Default	true
Introduced	16.0.R1
Platforms	All

targeted-session

Synopsis	Enter the targeted-session context
Context	configure router <i>string</i> ldp targeted-session
Tree	targeted-session
Introduced	16.0.R1
Platforms	All

auto-rx

Synopsis	Enter the auto-rx context
Context	configure router <i>string</i> ldp targeted-session auto-rx
Tree	auto-rx
Description	Commands in this context specify the LDP session configuration to accept targeted Hello messages from any peer.
Introduced	20.10.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>router string ldp targeted-session auto-rx ipv4</i>
Tree	ipv4
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	configure <i>router string ldp targeted-session auto-rx ipv4 admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

tunneling *boolean*

Synopsis	Enable tunneling for targeted peers
Context	configure <i>router string ldp targeted-session auto-rx ipv4 tunneling boolean</i>
Tree	tunneling
Description	<p>When configured to true, this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination.</p> <p>If the auto-rx and auto-tx contexts are both administratively enabled, this command must be set to true for LDP rLFA to function properly.</p> <p>When configured to false, FEC label bindings are not sent via the LDP session.</p>
Default	false
Introduced	20.10.R1
Platforms	All

auto-tx

Synopsis	Enter the auto-tx context
Context	configure router <i>string</i> ldp targeted-session auto-tx
Tree	auto-tx
Description	Commands in this context specify the LDP session configuration to send targeted Hello messages toward PQ nodes determined by the rLFA algorithm.
Introduced	20.10.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> ldp targeted-session auto-tx ipv4
Tree	ipv4
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	configure router <i>string</i> ldp targeted-session auto-tx ipv4 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

tunneling *boolean*

Synopsis	Enable tunneling for targeted peers
Context	configure router <i>string</i> ldp targeted-session auto-tx ipv4 tunneling <i>boolean</i>
Tree	tunneling
Description	When configured to true , this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination.

If the **auto-rx** context is administratively disabled, this command should be set to **true** for LDP rLFA to function properly.

When configured to **false**, FEC label bindings are not sent via the LDP session.

Default	false
Introduced	20.10.R1
Platforms	All

export-prefixes *reference*

Synopsis	Export route policy to determine which routes are exported to this targeted LDP session
Context	configure router <i>string</i> ldp targeted-session export-prefixes <i>reference</i>
Tree	export-prefixes
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import-prefixes *reference*

Synopsis	Import route policy to determine which routes are accepted from targeted LDP neighbors
Context	configure router <i>string</i> ldp targeted-session import-prefixes <i>reference</i>
Tree	import-prefixes
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> ldp targeted-session ipv4
Tree	ipv4

Introduced 16.0.R1
Platforms All

hello

Synopsis Enter the **hello** context
Context **configure** *router string ldp targeted-session ipv4 hello*
Tree *hello*
Introduced 16.0.R1
Platforms All

factor number

Synopsis Factor value for Hello
Context **configure** *router string ldp targeted-session ipv4 hello factor number*
Tree *factor*
Range 1 to 255
Default 3
Introduced 16.0.R1
Platforms All

timeout number

Synopsis Timeout value for Hello
Context **configure** *router string ldp targeted-session ipv4 hello timeout number*
Tree *timeout*
Range 3 to 65535
Default 45
Units seconds
Introduced 16.0.R1
Platforms All

hello-reduction

Synopsis Enter the **hello-reduction** context

Context	configure router <i>string</i> ldp targeted-session ipv4 hello-reduction
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	configure router <i>string</i> ldp targeted-session ipv4 hello-reduction admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R3
Platforms	All

factor *number*

Synopsis	Hello reduction dampening factor
Context	configure router <i>string</i> ldp targeted-session ipv4 hello-reduction factor <i>number</i>
Tree	factor
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enter the keepalive context
Context	configure router <i>string</i> ldp targeted-session ipv4 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor number

Synopsis	Factor value for keepalive
Context	configure router string ldp targeted-session ipv4 keepalive factor number
Tree	factor
Range	1 to 255
Default	4
Introduced	16.0.R1
Platforms	All

timeout number

Synopsis	Timeout value for keepalive
Context	configure router string ldp targeted-session ipv4 keepalive timeout number
Tree	timeout
Range	3 to 65535
Default	40
Units	seconds
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure router string ldp targeted-session ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enter the hello context
Context	configure router string ldp targeted-session ipv6 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for Hello
Context	configure <i>router string ldp targeted-session ipv6 hello factor number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	configure <i>router string ldp targeted-session ipv6 hello timeout number</i>
Tree	timeout
Range	3 to 65535
Default	45
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-reduction

Synopsis	Enter the hello-reduction context
Context	configure <i>router string ldp targeted-session ipv6 hello-reduction</i>
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	configure <i>router string ldp targeted-session ipv6 hello-reduction admin-state keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R3
Platforms	All

factor number

Synopsis	Hello reduction dampening factor
Context	configure router string ldp targeted-session ipv6 hello-reduction factor number
Tree	factor
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enter the keepalive context
Context	configure router string ldp targeted-session ipv6 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor number

Synopsis	Factor value for keepalive
Context	configure router string ldp targeted-session ipv6 keepalive factor number
Tree	factor
Range	1 to 255
Default	4
Introduced	16.0.R1
Platforms	All

timeout number

Synopsis	Timeout value for keepalive
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Context	configure <i>router string ldp targeted-session ipv6 keepalive timeout number</i>
Tree	timeout
Range	3 to 65535
Default	40
Units	seconds
Introduced	16.0.R1
Platforms	All

peer [[ip-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
Context	configure <i>router string ldp targeted-session peer (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	peer
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the LDP peer
Context	configure <i>router string ldp targeted-session peer (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP peer
Context	configure <i>router string ldp targeted-session peer (ipv4-address-no-zone ipv6-address-no-zone) admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD tracking of LDP session for the peer

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **bfd-liveness** *boolean*

Tree [bfd-liveness](#)

Default false

Introduced 16.0.R1

Platforms All

hello

Synopsis Enable the **hello** context

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello**

Tree [hello](#)

Introduced 16.0.R1

Platforms All

factor *number*

Synopsis Factor value for Hello

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello** **factor** *number*

Tree [factor](#)

Range 1 to 255

Introduced 16.0.R1

Platforms All

timeout *number*

Synopsis Timeout value for Hello

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello** **timeout** *number*

Tree [timeout](#)

Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-reduction

Synopsis	Enable the hello-reduction context
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello-reduction
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello-reduction admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R3
Platforms	All

factor *number*

Synopsis	Hello reduction dampening factor
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello-reduction factor <i>number</i>
Tree	factor
Range	3 to 20
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enable the keepalive context
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for keepalive
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the local-lsr-id context
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) local-lsr-id
Tree	local-lsr-id
Introduced	16.0.R1

Platforms All

format-32bit *boolean*

Synopsis Use IPv4 address of local LSR-ID interface as LSR-ID of the LDP LSR

Context **configure** *router* *string* *ldp* *targeted-session* *peer* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *local-lsr-id* **format-32bit** *boolean*

Tree [format-32bit](#)

Default false

Introduced 16.0.R1

Platforms All

interface-name *reference*

Synopsis Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP

Context **configure** *router* *string* *ldp* *targeted-session* *peer* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *local-lsr-id* **interface-name** *reference*

Tree [interface-name](#)

Reference **configure** *router* *string* *interface* *string*

Introduced 16.0.R1

Platforms All

mcast-tunneling

Synopsis Enable the **mcast-tunneling** context

Context **configure** *router* *string* *ldp* *targeted-session* *peer* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **mcast-tunneling**

Tree [mcast-tunneling](#)

Introduced 21.2.R1

Platforms All

lsp [*lsp-name*] *string*

Synopsis Add a list entry for **lsp**

Context **configure** *router* *string* *ldp* *targeted-session* *peer* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **mcast-tunneling** **lsp** *string*

Tree	lsp
Max. Instances	4
Introduced	21.2.R1
Platforms	All

[lsp-name] *string*

Synopsis	LSP name
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mcast-tunneling lsp <i>string</i>
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

tunneling

Synopsis	Enable the tunneling context
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunneling
Tree	tunneling
Introduced	16.0.R1
Platforms	All

lsp [[lsp-name](#)] *string*

Synopsis	Add a list entry for lsp
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunneling lsp <i>string</i>
Tree	lsp
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[lsp-name] *string*

Synopsis	LSP name
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunneling lsp <i>string</i>
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

peer-template [template-name] *string*

Synopsis	Enter the peer-template list instance
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i>
Tree	peer-template
Max. Instances	500
Introduced	16.0.R1
Platforms	All

[template-name] *string*

Synopsis	Name for the targeted peer template
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i>
Tree	peer-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the peer template
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

adv-local-lsr-id *boolean*

Synopsis	Advertise local LSR ID over a specified LDP session
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> adv-local-lsr-id <i>boolean</i>
Tree	adv-local-lsr-id
Default	false
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD tracking of LDP session for sessions created by peer template
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community string associated with a session to a specified peer
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> community <i>string</i>
Tree	community
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enable the hello context
Context	configure <i>router string ldp targeted-session peer-template string</i> hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for Hello
Context	configure <i>router string ldp targeted-session peer-template string</i> hello <i>factor number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	configure <i>router string ldp targeted-session peer-template string</i> hello <i>timeout number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-reduction

Synopsis	Enable the hello-reduction context
Context	configure <i>router string ldp targeted-session peer-template string</i> hello-reduction
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> hello-reduction admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R3
Platforms	All

factor *number*

Synopsis	Hello reduction dampening factor
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> hello-reduction factor <i>number</i>
Tree	factor
Range	3 to 20
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enable the keepalive context
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for keepalive
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	configure <i>router string ldp targeted-session peer-template string keepalive timeout number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the local-lsr-id context
Context	configure <i>router string ldp targeted-session peer-template string local-lsr-id</i>
Tree	local-lsr-id
Introduced	16.0.R1
Platforms	All

interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	configure <i>router string ldp targeted-session peer-template string local-lsr-id interface-name reference</i>
Tree	interface-name
Reference	configure <i>router string interface string</i>
Introduced	16.0.R1
Platforms	All

mcast-tunneling *boolean*

Synopsis	Enable MLDP over RSVP-TE tunnels for the template
Context	configure <i>router string ldp targeted-session peer-template string mcast-tunneling boolean</i>
Tree	mcast-tunneling

Default	false
Introduced	21.2.R1
Platforms	All

tunneling *boolean*

Synopsis	Allow LDP over tunnels
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> tunneling <i>boolean</i>
Tree	tunneling
Default	false
Introduced	16.0.R1
Platforms	All

peer-template-map [**template-map-name**] *reference*

Synopsis	Enter the peer-template-map list instance
Context	configure router <i>string</i> ldp targeted-session peer-template-map <i>reference</i>
Tree	peer-template-map
Max. Instances	500
Introduced	16.0.R1
Platforms	All

[template-map-name] *reference*

Synopsis	Name to identify the targeted peer template
Context	configure router <i>string</i> ldp targeted-session peer-template-map <i>reference</i>
Tree	peer-template-map
Reference	configure router <i>string</i> ldp targeted-session peer-template <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

policy-map *reference*

Synopsis	Targeted peer template to apply to the given policies
Context	configure router <i>string</i> ldp targeted-session peer-template-map <i>reference</i> policy-map <i>reference</i>
Tree	policy-map
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

resolve-v6-prefix-over-shortcut *boolean*

Synopsis	Resolve IPv6 prefix over IGP shortcuts
Context	configure router <i>string</i> ldp targeted-session resolve-v6-prefix-over-shortcut <i>boolean</i>
Tree	resolve-v6-prefix-over-shortcut
Description	When configured to true , the system enables the resolution of IPv6 LDP unicast prefix FECs over IGP shortcuts. When configured to false , the resolution is not allowed.
Default	false
Introduced	22.7.R1
Platforms	All

sdp-auto-targeted-session *boolean*

Synopsis	Allow auto-creation of targeted sessions by SDP
Context	configure router <i>string</i> ldp targeted-session sdp-auto-targeted-session <i>boolean</i>
Tree	sdp-auto-targeted-session
Default	true
Introduced	16.0.R1
Platforms	All

tcp-session-parameters

Synopsis	Enter the tcp-session-parameters context
Context	configure router <i>string</i> ldp tcp-session-parameters
Tree	tcp-session-parameters
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key between LDP peers
Context	configure router <i>string</i> ldp tcp-session-parameters authentication-key <i>string</i>
Tree	authentication-key
Description	This command specifies the authentication key used to establish a session between LDP peers.

Authentication uses the MD-5 message-based digest. The peer address used in authentication must be the TCP session transport address. If one or more transport addresses used in the Hello adjacencies to the same peer LSR are different from the LSR ID value, the user must add each transport address to the authentication key configuration as a separate peer. As a result, when the TCP connection is bootstrapped by a specific Hello adjacency, the authentication can operate over that TCP connection by using its specific transport address.

The per-peer authentication configuration takes precedence over global authentication configuration, and authentication keychain configuration takes precedence over authentication key configuration.

String Length	1 to 370
Introduced	21.2.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Authentication keychain to use for the TCP session
Context	configure router <i>string</i> ldp tcp-session-parameters authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	This command configures the authentication keychain to use for the TCP session. The per-peer authentication configuration takes precedence over the global authentication configuration.
Reference	configure system security keychains keychain <i>string</i>
Introduced	21.2.R1

Platforms All

peer-transport [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **peer-transport** list instance

Context **configure** [router](#) *string* [ldp](#) [tcp-session-parameters](#) [peer-transport](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [peer-transport](#)

Introduced 16.0.R1

Platforms All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the TCP connection to the LDP peer

Context **configure** [router](#) *string* [ldp](#) [tcp-session-parameters](#) [peer-transport](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [peer-transport](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

authentication-key *string*

Synopsis Authentication key for the peer

Context **configure** [router](#) *string* [ldp](#) [tcp-session-parameters](#) [peer-transport](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [authentication-key](#) *string*

Tree [authentication-key](#)

String Length 1 to 370

Introduced 16.0.R1

Platforms All

authentication-keychain *reference*

Synopsis TCP authentication keychain to use for the session

Context **configure** [router](#) *string* [ldp](#) [tcp-session-parameters](#) [peer-transport](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [authentication-keychain](#) *reference*

Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

path-mtu-discovery *boolean*

Synopsis	Allow Path MTU Discovery for associated TCP connections
Context	configure router <i>string</i> ldp tcp-session-parameters peer-transport (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Default	false
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for incoming packets
Context	configure router <i>string</i> ldp tcp-session-parameters peer-transport (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ttl-security <i>number</i>
Tree	ttl-security
Range	1 to 255
Introduced	16.0.R1
Platforms	All

tunnel-down-damp-time *number*

Synopsis	Time interval for an LDP to damp a tunnel down event before posting to the Route Table Manager (RTM)
Context	configure router <i>string</i> ldp tunnel-down-damp-time <i>number</i>
Tree	tunnel-down-damp-time
Range	0 to 20
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	All

tunnel-table-pref *number*

Synopsis	Tunnel table preference value for address FECs
Context	configure <i>router string ldp tunnel-table-pref number</i>
Tree	tunnel-table-pref
Description	<p>This command configures the tunnel table preference for an LDP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	9
Introduced	21.10.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Allow weighted ECMP load-balancing
Context	configure <i>router string ldp weighted-ecmp boolean</i>
Tree	weighted-ecmp
Description	<p>When configured to true, the system allows weighted ECMP on LDP using RSVP LSPs or SR-TE LSPs. LDP labeled packets are sprayed across the RSVP or SR-TE LSP ECMP set in proportion to the configured load-balancing weight of LSPs.</p> <p>When configured to false, the system removes weighted ECMP load-balancing.</p>
Default	false
Introduced	16.0.R1
Platforms	All

leak-export

Synopsis	Enter the leak-export context
Context	configure <i>router string leak-export</i>

Tree	leak-export
Introduced	16.0.R4
Platforms	All

leak-export-limit *number*

Synopsis	Maximum limit on number of GRT routes leaked into VPRNs
Context	configure router <i>string</i> leak-export leak-export-limit <i>number</i>
Tree	leak-export-limit
Range	1 to 10000
Default	5
Introduced	16.0.R4
Platforms	All

policy-name (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	configure router <i>string</i> leak-export policy-name (<i>policy-expr-string</i> <i>string</i>)
Tree	policy-name
String Length	1 to 255
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

lsp-bfd

Synopsis	Enter the lsp-bfd context
Context	configure router <i>string</i> lsp-bfd
Tree	lsp-bfd
Introduced	16.0.R1
Platforms	All

bfd-sessions *number*

Synopsis	Maximum number of LSP BFD session tail-ends
Context	configure router <i>string</i> lsp-bfd bfd-sessions <i>number</i>
Tree	bfd-sessions
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tail-end

Synopsis	Enter the tail-end context
Context	configure router <i>string</i> lsp-bfd tail-end
Tree	tail-end
Introduced	20.10.R1
Platforms	All

multiplier *number*

Synopsis	Missed message threshold before session is set to down
Context	configure router <i>string</i> lsp-bfd tail-end multiplier <i>number</i>
Tree	multiplier
Range	1 to 20
Default	3
Introduced	20.10.R1
Platforms	All

receive-interval *number*

Synopsis	The BFD receive interval for LSP tail-end
Context	configure router <i>string</i> lsp-bfd tail-end receive-interval <i>number</i>
Tree	receive-interval
Range	100 to 1000
Default	1000
Units	milliseconds
Introduced	20.10.R1

Platforms All

transmit-interval *number*

Synopsis The BFD transmit interval for LSP tail-end
 Context **configure** *router string lsp-bfd tail-end transmit-interval number*
 Tree [transmit-interval](#)
 Range 100 to 1000
 Default 1000
 Units milliseconds
 Introduced 20.10.R1
 Platforms All

mc-maximum-routes

Synopsis Enter the **mc-maximum-routes** context
 Context **configure** *router string mc-maximum-routes*
 Tree [mc-maximum-routes](#)
 Introduced 16.0.R1
 Platforms All

log-only *boolean*

Synopsis Action when the maximum number of multicast routes, held within a VRF context, is reached
 Context **configure** *router string mc-maximum-routes log-only boolean*
 Tree [log-only](#)
 Default false
 Introduced 16.0.R1
 Platforms All

threshold *number*

Synopsis Mid-level water marker for the number of multicast routes which this VRF holds
 Context **configure** *router string mc-maximum-routes threshold number*
 Tree [threshold](#)

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Maximum multicast routes configured on virtual router
Context	configure router <i>string</i> mc-maximum-routes value <i>number</i>
Tree	value
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

mld

Synopsis	Enable the mld context
Context	configure router <i>string</i> mld
Tree	mld
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MLD
Context	configure router <i>string</i> mld admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

forwarding-group-interface **forwarding-service** *string* **group-interface-name** *reference*

Synopsis	Enter the forwarding-group-interface list instance
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Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i>
Tree	forwarding-group-interface
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forwarding-service *string*

Synopsis	Forwarding service for the subscriber interface
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i>
Tree	forwarding-group-interface
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i>
Tree	forwarding-group-interface
Reference	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the mcac context
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac
Tree	mcac
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the bandwidth context
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac bandwidth
Tree	bandwidth
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited

Options	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac policy <i>reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p>

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	configure mcac policy string
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router string mld forwarding-group-interface forwarding-service string group-interface-name reference query-interval number
Tree	query-interval
Range	2 to 1024
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router string mld forwarding-group-interface forwarding-service string group-interface-name reference query-last-member-interval number
Tree	query-last-member-interval
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
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Context **configure** *router* *string* *mld* *forwarding-group-interface* *forwarding-service* *string* *group-interface-name* *reference* *query-response-interval* *number*

Tree [query-response-interval](#)

Range 1 to 1023

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis Source address for MLD queries

Context **configure** *router* *string* *mld* *forwarding-group-interface* *forwarding-service* *string* *group-interface-name* *reference* *query-source-address* *string*

Tree [query-source-address](#)

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis Enable router alert checking for IGMP or MLD messages

Context **configure** *router* *string* *mld* *forwarding-group-interface* *forwarding-service* *string* *group-interface-name* *reference* *router-alert-check* *boolean*

Tree [router-alert-check](#)

Default true

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis Allow MLD traffic from known hosts only

Context **configure** *router* *string* *mld* *forwarding-group-interface* *forwarding-service* *string* *group-interface-name* *reference* *sub-hosts-only* *boolean*

Tree [sub-hosts-only](#)

Default true

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Enable subnet checking
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	MLD protocol version
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> version <i>keyword</i>
Tree	version
Default	2
Options	1, 2
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-if-query-source-address *string*

Synopsis	Source address in queries for group interfaces when not configured at group interface level
Context	configure router <i>string</i> mld group-if-query-source-address <i>string</i>
Tree	group-if-query-source-address
Introduced	16.0.R1
Platforms	All

group-interface [[group-interface-name](#)] *reference*

Synopsis	Enter the group-interface list instance
Context	configure router <i>string</i> mld group-interface <i>reference</i>
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[group-interface-name] reference

Synopsis	Group interface name
Context	configure router <i>string</i> mld <i>group-interface reference</i>
Tree	group-interface
Reference	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the MLD interface
Context	configure router <i>string</i> mld <i>group-interface reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy reference

Synopsis	Import policy to filter MLD packets
Context	configure router <i>string</i> mld <i>group-interface reference</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources number

Synopsis	Maximum number of group sources for this interface
Context	configure router <i>string</i> mld <i>group-interface reference</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources

Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure <i>router string mld group-interface reference</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure <i>router string mld group-interface reference</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the mcac context
Context	configure <i>router string mld group-interface reference</i> mcac
Tree	mcac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the bandwidth context
Context	configure router <i>string</i> mld group-interface <i>reference</i> mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure router <i>string</i> mld group-interface <i>reference</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> mld group-interface <i>reference</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> mld group-interface <i>reference</i> mcac interface-policy <i>reference</i>

Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy reference

Synopsis	Multicast CAC policy name
Context	configure router <i>string mld group-interface reference mcac policy reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none">• subscriber level and redirected interface when redirection is configured• subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval number

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string mld group-interface reference query-interval number</i>
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string</i> mld group-interface <i>reference</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>string</i> mld group-interface <i>reference</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for MLD queries
Context	configure router <i>string</i> mld group-interface <i>reference</i> query-source-address <i>string</i>
Tree	query-source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure router <i>string</i> mld group-interface <i>reference</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow MLD traffic from known hosts only
Context	configure router <i>string</i> mld group-interface <i>reference</i> sub-hosts-only <i>boolean</i>
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Enable subnet checking
Context	configure router <i>string</i> mld group-interface <i>reference</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	MLD protocol version
Context	configure router <i>string</i> mld group-interface <i>reference</i> version <i>keyword</i>
Tree	version
Default	2
Options	1, 2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [**ip-interface-name**] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> mld interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[ip-interface-name] string

Synopsis	IP interface name
Context	configure router string mld interface string
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state keyword

Synopsis	Administrative state of the MLD interface
Context	configure router string mld interface string admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

import-policy reference

Synopsis	Import policy to filter MLD packets
Context	configure router string mld interface string import-policy reference
Tree	import-policy
Reference	configure policy-options policy-statement string
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources number

Synopsis	Maximum number of group sources for this interface
Context	configure router string mld interface string maximum-number-group-sources number
Tree	maximum-number-group-sources

Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure <i>router string mld interface string maximum-number-groups number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure <i>router string mld interface string maximum-number-sources number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the mcac context
Context	configure <i>router string mld interface string mcac</i>
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
Context	configure router <i>string</i> mld interface <i>string</i> mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure router <i>string</i> mld interface <i>string</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> mld interface <i>string</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> mld interface <i>string</i> mcac interface-policy <i>reference</i>
Tree	interface-policy

Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the mc-constraints context
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

level [[level-id](#)] *number*

Synopsis	Enter the level list instance
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Introduced	16.0.R1
Platforms	All

[level-id] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints level <i>number</i> bandwidth <i>number</i>

Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [[number-lag-port-down](#)] *number*

Synopsis	Enter the number-down list instance
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down
Introduced	16.0.R1
Platforms	All

[number-lag-port-down] *number*

Synopsis	Number of ports that are down in this LAG link
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints number-down <i>number</i> level <i>number</i>
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	configure <i>router string mld interface string mcac mc-constraints use-lag-port-weight boolean</i>
Tree	use-lag-port-weight
Description	When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure <i>router string mld interface string mcac policy reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure <i>mcac policy string</i>
Introduced	16.0.R1

Platforms All

query-interval *number*

Synopsis Time between two consecutive host-query messages
Context **configure** **router** *string* **mld** **interface** *string* **query-interval** *number*
Tree **query-interval**
Range 2 to 1024
Introduced 16.0.R1
Platforms All

query-last-member-interval *number*

Synopsis Time between group-specific query messages
Context **configure** **router** *string* **mld** **interface** *string* **query-last-member-interval** *number*
Tree **query-last-member-interval**
Range 1 to 1023
Introduced 16.0.R1
Platforms All

query-response-interval *number*

Synopsis Time to wait for a response to the host-query messages
Context **configure** **router** *string* **mld** **interface** *string* **query-response-interval** *number*
Tree **query-response-interval**
Range 1 to 1023
Introduced 16.0.R1
Platforms All

router-alert-check *boolean*

Synopsis Enable router alert checking for IGMP or MLD messages
Context **configure** **router** *string* **mld** **interface** *string* **router-alert-check** *boolean*
Tree **router-alert-check**
Default true

Introduced 16.0.R1
Platforms All

ssm-translate

Synopsis Enter the **ssm-translate** context
Context **configure** [router](#) *string* [mld](#) [interface](#) *string* **ssm-translate**
Tree [ssm-translate](#)
Introduced 16.0.R1
Platforms All

group-range [start](#) *string* [end](#) *string*

Synopsis Enter the **group-range** list instance
Context **configure** [router](#) *string* [mld](#) [interface](#) *string* **ssm-translate** [group-range](#) [start](#) *string* [end](#) *string*
Tree [group-range](#)
Introduced 16.0.R1
Platforms All

start *string*

Synopsis Lower bound of the group range
Context **configure** [router](#) *string* [mld](#) [interface](#) *string* **ssm-translate** [group-range](#) [start](#) *string* [end](#) *string*
Tree [group-range](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

end *string*

Synopsis Upper bound of the group range
Context **configure** [router](#) *string* [mld](#) [interface](#) *string* **ssm-translate** [group-range](#) [start](#) *string* [end](#) *string*
Tree [group-range](#)

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure router <i>string</i> mld interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i>
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address
Context	configure router <i>string</i> mld interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

static

Synopsis	Enter the static context
Context	configure router <i>string</i> mld interface <i>string</i> static
Tree	static
Introduced	16.0.R1
Platforms	All

group [[group-address](#)] *string*

Synopsis	Enter the group list instance
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Context	configure <i>router string mld interface string static group string</i>
Tree	<i>group</i>
Introduced	16.0.R1
Platforms	All

[group-address] *string*

Synopsis	Group address of multicast channel
Context	configure <i>router string mld interface string static group string</i>
Tree	<i>group</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [**source-address**] *string*

Synopsis	Add a list entry for source
Context	configure <i>router string mld interface string static group string source string</i>
Tree	<i>source</i>
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address
Context	configure <i>router string mld interface string static group string source string</i>
Tree	<i>source</i>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
----------	--------------------------

Context	configure <i>router string mld interface string static group string starg</i>
Tree	<i>starg</i>
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

group-range *start string end string step string*

Synopsis	Enter the group-range list instance
Context	configure <i>router string mld interface string static group-range start string end string step string</i>
Tree	<i>group-range</i>
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the static multicast group
Context	configure <i>router string mld interface string static group-range start string end string step string</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the static multicast group
Context	configure <i>router string mld interface string static group-range start string end string step string</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

step *string*

Synopsis	Step interval for the group-range addresses
Context	configure router <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [**source-address**] *string*

Synopsis	Add a list entry for source
Context	configure router <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	configure router <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	configure router <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .

Introduced 16.0.R2
Platforms All

version *keyword*

Synopsis MLD protocol version
Context **configure** *router string mld interface string version keyword*
Tree [version](#)
Default 2
Options 1, 2
Introduced 16.0.R1
Platforms All

query-interval *number*

Synopsis Time between two consecutive host-query messages
Context **configure** *router string mld query-interval number*
Tree [query-interval](#)
Range 2 to 1024
Default 125
Units seconds
Introduced 16.0.R1
Platforms All

query-last-member-interval *number*

Synopsis Time between group-specific query messages
Context **configure** *router string mld query-last-member-interval number*
Tree [query-last-member-interval](#)
Range 1 to 1023
Default 1
Units seconds
Introduced 16.0.R1
Platforms All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>string</i> mld query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure router <i>string</i> mld robust-count <i>number</i>
Tree	robust-count
Range	2 to 10
Default	2
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure router <i>string</i> mld ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range **start** *string* **end** *string*

Synopsis	Enter the group-range list instance
Context	configure router <i>string</i> mld ssm-translate group-range start <i>string</i> end <i>string</i>
Tree	group-range
Introduced	16.0.R1

Platforms All

start string

Synopsis Lower bound of the group range
Context **configure** [router string mld ssm-translate group-range start string end string](#)
Tree [group-range](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

end string

Synopsis Upper bound of the group range
Context **configure** [router string mld ssm-translate group-range start string end string](#)
Tree [group-range](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

source [source-address] string

Synopsis Add a list entry for **source**
Context **configure** [router string mld ssm-translate group-range start string end string source string](#)
Tree [source](#)
Min. 1
Instances
Introduced 16.0.R1
Platforms All

[source-address] string

Synopsis Source IP address
Context **configure** [router string mld ssm-translate group-range start string end string source string](#)

Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

mpls

Synopsis	Enable the mpls context
Context	configure router string mpls
Tree	mpls
Introduced	16.0.R1
Platforms	All

admin-group-frr *boolean*

Synopsis	Use admin group constraints for FRR path computation
Context	configure router string mpls admin-group-frr boolean
Tree	admin-group-frr
Default	false
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MPLS instance
Context	configure router string mpls admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

auto-bandwidth-multipliers

Synopsis	Enter the auto-bandwidth-multipliers context
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Context	configure router <i>string</i> mpls auto-bandwidth-multipliers
Tree	auto-bandwidth-multipliers
Introduced	16.0.R1
Platforms	All

adjust-multiplier *number*

Synopsis	Collection intervals in a sample interval
Context	configure router <i>string</i> mpls auto-bandwidth-multipliers adjust-multiplier <i>number</i>
Tree	adjust-multiplier
Range	1 to 16383
Default	288
Introduced	16.0.R1
Platforms	All

sample-multiplier *number*

Synopsis	Collection intervals in a sample interval
Context	configure router <i>string</i> mpls auto-bandwidth-multipliers sample-multiplier <i>number</i>
Tree	sample-multiplier
Range	1 to 511
Default	1
Introduced	16.0.R1
Platforms	All

auto-lsp [[template-name](#)] *reference*

Synopsis	Enter the auto-lsp list instance
Context	configure router <i>string</i> mpls auto-lsp <i>reference</i>
Tree	auto-lsp
Max. Instances	500
Introduced	16.0.R1
Platforms	All

[template-name] reference

Synopsis	LSP template name
Context	configure router <i>string</i> mpls auto-lsp <i>reference</i>
Tree	auto-lsp
Reference	configure router <i>string</i> mpls lsp-template <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

one-hop boolean

Synopsis	Enable one-hop point-to-point LSP automatic signaling
Context	configure router <i>string</i> mpls auto-lsp <i>reference</i> one-hop <i>boolean</i>
Tree	one-hop
Description	This command enables the automatic signaling of one-hop point-to-point LSPs.
Default	false
Notes	The following elements are part of a choice: one-hop or policy .
Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	Peer prefix policy name
Context	configure router <i>string</i> mpls auto-lsp <i>reference</i> policy <i>reference</i>
Tree	policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	The following elements are part of a choice: one-hop or policy . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

aux-stats

Synopsis	Enable the aux-stats context
Context	configure <i>router</i> <i>string</i> <i>mpls</i> <i>aux-stats</i>
Tree	<i>aux-stats</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

sr *boolean*

Synopsis	Traffic type count in MPLS statistics table
Context	configure <i>router</i> <i>string</i> <i>mpls</i> <i>aux-stats</i> <i>sr</i> <i>boolean</i>
Tree	<i>sr</i>
Description	This command configures the type of traffic to count in the auxiliary MPLS statistics table. It refers to any type of segment routing traffic (SR-OSPF, SR-ISIS, SR-TE, and so on).
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bypass-resignal-timer *number*

Synopsis	Resignal timer for bypass
Context	configure <i>router</i> <i>string</i> <i>mpls</i> <i>bypass-resignal-timer</i> <i>number</i>
Tree	<i>bypass-resignal-timer</i>
Range	1 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

class-forwarding-policy [*policy-name*] *string*

Synopsis	Enter the class-forwarding-policy list instance
Context	configure <i>router</i> <i>string</i> <i>mpls</i> <i>class-forwarding-policy</i> <i>string</i>
Tree	<i>class-forwarding-policy</i>
Max. Instances	15

Introduced 16.0.R1
Platforms All

[policy-name] *string*

Synopsis Name of class forwarding policy
Context **configure** *router string mpls class-forwarding-policy string*
Tree *class-forwarding-policy*
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

default-set *number*

Synopsis Default forwarding set ID
Context **configure** *router string mpls class-forwarding-policy string default-set number*
Tree *default-set*
Range 1 to 6
Default 1
Introduced 16.0.R1
Platforms All

fc [**fc-name**] *keyword*

Synopsis Enter the **fc** list instance
Context **configure** *router string mpls class-forwarding-policy string fc keyword*
Tree *fc*
Introduced 16.0.R1
Platforms All

[fc-name] *keyword*

Synopsis Forwarding class name for LSP
Context **configure** *router string mpls class-forwarding-policy string fc keyword*

Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

forwarding-set *number*

Synopsis	Forwarding set ID for forwarding classes
Context	configure router <i>string</i> mpls class-forwarding-policy <i>string</i> fc <i>keyword</i> forwarding-set <i>number</i>
Tree	forwarding-set
Range	1 to 6
Default	1
Introduced	16.0.R1
Platforms	All

cspf-on-loose-hop *boolean*

Synopsis	Calculate CSPF until next loose hop on LSR
Context	configure router <i>string</i> mpls cspf-on-loose-hop <i>boolean</i>
Tree	cspf-on-loose-hop
Default	false
Introduced	16.0.R1
Platforms	All

dynamic-bypass *boolean*

Synopsis	Create dynamic bypass LSPs in FRR
Context	configure router <i>string</i> mpls dynamic-bypass <i>boolean</i>
Tree	dynamic-bypass
Default	true
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enter the entropy-label context
Context	configure router <i>string</i> mpls entropy-label
Tree	entropy-label
Introduced	16.0.R1
Platforms	All

rsvp-te *boolean*

Synopsis	Apply entropy labels to RSVP-TE LSPs
Context	configure router <i>string</i> mpls entropy-label rsvp-te <i>boolean</i>
Tree	rsvp-te
Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Apply entropy labels to SR-TE LSPs
Context	configure router <i>string</i> mpls entropy-label sr-te <i>boolean</i>
Tree	sr-te
Introduced	16.0.R1
Platforms	All

exponential-backoff-retry *boolean*

Synopsis	Use exponential back-off timer when retrying an LSP
Context	configure router <i>string</i> mpls exponential-backoff-retry <i>boolean</i>
Tree	exponential-backoff-retry
Default	false
Introduced	16.0.R1
Platforms	All

forwarding-policies

Synopsis	Enable the forwarding-policies context
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Context	configure router <i>string</i> mpls forwarding-policies
Tree	forwarding-policies
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MPLS forwarding policies
Context	configure router <i>string</i> mpls forwarding-policies admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

forwarding-policy [[policy-name](#)] *string*

Synopsis	Enter the forwarding-policy list instance
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i>
Tree	forwarding-policy
Max. Instances	65536
Introduced	16.0.R1
Platforms	All

[policy-name] *string*

Synopsis	Forwarding policy name
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i>
Tree	forwarding-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MPLS forwarding policy
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

binding-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Binding label
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> binding-label <i>number</i>
Tree	binding-label
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enable the egress-statistics context
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> egress-statistics
Tree	egress-statistics
Introduced	19.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of egress or ingress statistics
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Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> egress-statistics admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1
Platforms	All

endpoint (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure endpoint address.
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> endpoint (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	endpoint
Introduced	16.0.R4
Platforms	All

ingress-statistics

Synopsis	Enable the ingress-statistics context
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> ingress-statistics
Tree	ingress-statistics
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of egress or ingress statistics
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> ingress-statistics admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Metric of an MPLS forwarding policy
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> metric <i>number</i>
Tree	metric
Range	1 to 16777215
Introduced	16.0.R4
Platforms	All

next-hop-group [**index**] *number*

Synopsis	Enter the next-hop-group list instance
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i>
Tree	next-hop-group
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[index] *number*

Synopsis	Index for next hop group
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i>
Tree	next-hop-group
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of NHG in MPLS forwarding policy
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup-next-hop

Synopsis	Enable the backup-next-hop context
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i> backup-next-hop
Tree	backup-next-hop
Introduced	16.0.R1
Platforms	All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next hop address
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i> backup-next-hop next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Introduced	16.0.R1
Platforms	All

pushed-labels [*index*] *number*

Synopsis	Enter the pushed-labels list instance
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i> backup-next-hop pushed-labels <i>number</i>
Tree	pushed-labels
Max. Instances	10

Introduced 16.0.R4
Platforms All

[index] *number*

Synopsis Index for push label
Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number backup-next-hop pushed-labels number*
Tree [pushed-labels](#)
Range 1 to 10
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

label *number*

Synopsis Label value
Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number backup-next-hop pushed-labels number label number*
Tree [label](#)
Range 1 to 1048575
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

load-balancing-weight *number*

Synopsis Load balancing weight of an NHG entry
Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number load-balancing-weight number*
Tree [load-balancing-weight](#)
Range 1 to 4294967295
Introduced 16.0.R4
Platforms All

primary-next-hop

Synopsis	Enable the primary-next-hop context
Context	configure <i>router string mpls forwarding-policies forwarding-policy string next-hop-group number primary-next-hop</i>
Tree	primary-next-hop
Introduced	16.0.R1
Platforms	All

next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Next hop address
Context	configure <i>router string mpls forwarding-policies forwarding-policy string next-hop-group number primary-next-hop next-hop (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	next-hop
Introduced	16.0.R1
Platforms	All

pushed-labels [[index](#)] *number*

Synopsis	Enter the pushed-labels list instance
Context	configure <i>router string mpls forwarding-policies forwarding-policy string next-hop-group number primary-next-hop pushed-labels number</i>
Tree	pushed-labels
Max. Instances	10
Introduced	16.0.R4
Platforms	All

[[index](#)] *number*

Synopsis	Index for push label
Context	configure <i>router string mpls forwarding-policies forwarding-policy string next-hop-group number primary-next-hop pushed-labels number</i>
Tree	pushed-labels
Range	1 to 10
Notes	This element is part of a list key.

Introduced 16.0.R4
Platforms All

label *number*

Synopsis Label value
Context **configure** **router** *string* **mpls forwarding-policies forwarding-policy** *string* **next-hop-group**
number **primary-next-hop pushed-labels** *number* **label** *number*
Tree **label**
Range 1 to 1048575
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

resolution-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Resolution type for next hop group
Context **configure** **router** *string* **mpls forwarding-policies forwarding-policy** *string* **next-hop-group**
number **resolution-type** *keyword*
Tree **resolution-type**
Options direct, indirect
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

preference *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Preference number

Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

revert-timer *number*

Synopsis	Revert timer
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> revert-timer <i>number</i>
Tree	revert-timer
Range	1 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

tunnel-table-pref *number*

Synopsis	Tunnel table preference
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> tunnel-table-pref <i>number</i>
Tree	tunnel-table-pref
Description	<p>This command configures the TTM preference value of an MPLS forwarding policy.</p> <p>The <i>preference-value</i> parameter is used by applications to select one tunnel type to bind to in TTM when multiple tunnel types are enabled for the application.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	255
Introduced	16.0.R4
Platforms	All

reserved-label-block *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block
Context	configure router <i>string</i> mpls forwarding-policies reserved-label-block reference
Tree	reserved-label-block
Reference	configure router <i>string</i> mpls-labels reserved-label-block string
Introduced	16.0.R1
Platforms	All

frr-object *boolean*

Synopsis	Signal with fast reroute object
Context	configure router <i>string</i> mpls frr-object boolean
Tree	frr-object
Default	true
Introduced	16.0.R1
Platforms	All

hold-timer *number*

Synopsis	Hold timer value
Context	configure router <i>string</i> mpls hold-timer number
Tree	hold-timer
Range	0 to 1000
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

ingress-statistics

Synopsis	Enter the ingress-statistics context
Context	configure router <i>string</i> mpls ingress-statistics

Tree	ingress-statistics
Introduced	16.0.R1
Platforms	All

lsp sender (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **lsp-name** *string*

Synopsis	Enter the lsp list instance
Context	configure router <i>string</i> mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) lsp-name <i>string</i>
Tree	lsp
Introduced	16.0.R1
Platforms	All

sender (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Sender address
Context	configure router <i>string</i> mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) lsp-name <i>string</i>
Tree	lsp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

lsp-name *string*

Synopsis	LSP name
Context	configure router <i>string</i> mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) lsp-name <i>string</i>
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure router <i>string</i> mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) lsp-name <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	configure router <i>string</i> mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) lsp-name <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure router <i>string</i> mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) lsp-name <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode
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Context	configure <i>router string</i> mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) <i>lsp-name string stat-mode keyword</i>
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

p2mp-template-lsp sender (*ipv4-address-no-zone | ipv6-address-no-zone*) **rsvp-session-name** *string*

Synopsis	Enter the p2mp-template-lsp list instance
Context	configure <i>router string</i> mpls ingress-statistics p2mp-template-lsp sender (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) <i>rsvp-session-name string</i>
Tree	p2mp-template-lsp
Introduced	16.0.R1
Platforms	All

sender (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Sender address
Context	configure <i>router string</i> mpls ingress-statistics p2mp-template-lsp sender (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) <i>rsvp-session-name string</i>
Tree	p2mp-template-lsp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rsvp-session-name *string*

Synopsis	RSVP session name
Context	configure <i>router string</i> mpls ingress-statistics p2mp-template-lsp sender (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) <i>rsvp-session-name string</i>
Tree	p2mp-template-lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

accounting-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Accounting policy ID

Context **configure** [router](#) *string* [mpls ingress-statistics](#) [p2mp-template-lsp sender](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [rsvp-session-name](#) *string* [accounting-policy](#) *reference*

Tree [accounting-policy](#)

Reference **configure** [log](#) [accounting-policy](#) *number*

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of statistics for the LSP

Context **configure** [router](#) *string* [mpls ingress-statistics](#) [p2mp-template-lsp sender](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [rsvp-session-name](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

collect-stats *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Collect statistics

Context **configure** [router](#) *string* [mpls ingress-statistics](#) [p2mp-template-lsp sender](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [rsvp-session-name](#) *string* [collect-stats](#) *boolean*

Tree [collect-stats](#)

Default false

Introduced 16.0.R1
Platforms All

max-stats *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of statistic indices
Context **configure** *router string mpls ingress-statistics p2mp-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string max-stats number*
Tree **max-stats**
Range 1 to 8191
Default 8191
Introduced 16.0.R1
Platforms All

stat-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Stat mode
Context **configure** *router string mpls ingress-statistics p2mp-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string stat-mode keyword*
Tree **stat-mode**
Options per-fc, aggregate
Introduced 21.10.R1
Platforms All

p2p-template-lsp *sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string*

Synopsis Enter the **p2p-template-lsp** list instance
Context **configure** *router string mpls ingress-statistics p2p-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string*

Tree	p2p-template-lsp
Introduced	16.0.R1
Platforms	All

sender (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Sender address
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i>
Tree	p2p-template-lsp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rsvp-session-name *string*

Synopsis	RSVP session name
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i>
Tree	p2p-template-lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>

Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of statistics for the LSP
Context **configure** *router string mpls ingress-statistics p2p-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string admin-state keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

collect-stats *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Collect statistics
Context **configure** *router string mpls ingress-statistics p2p-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string collect-stats boolean*
Tree [collect-stats](#)
Default false
Introduced 16.0.R1
Platforms All

max-stats *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of statistic indices
Context **configure** *router string mpls ingress-statistics p2p-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string max-stats number*
Tree [max-stats](#)

Range	1 to 8191
Default	8191
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

interface [**interface-name**] *reference*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> mpls interface <i>reference</i>
Tree	interface
Description	<p>Commands in this context configure the attributes for MPLS protocol support on an IP interface.</p> <p>MPLS commands are not executed on an IP interface where MPLS is not enabled. An MPLS interface must be explicitly enabled (admin-state enabled).</p> <p>The MPLS interface must be admin-state disabled to delete the interface definition.</p> <p>A corresponding RSVP interface must also be configured. The MPLS interface cannot be deleted without also deleting the RSVP interface.</p>
Introduced	16.0.R1
Platforms	All

[interface-name] *reference*

Synopsis	Router interface name
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Context	configure router string mpls interface reference
Tree	interface
Reference	configure router string interface string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-group reference

Synopsis	Administrative groups supported by the interface
Context	configure router string mpls interface reference admin-group reference
Tree	admin-group
Description	<p>This command specifies the administrative groups that the interface supports.</p> <p>This information is advertised as part of OSPF and IS-IS to help CSPF compute constrained LSPs that must include or exclude certain administrative groups. An MPLS interface is assumed to belong to all the administrative groups unless this command is issued under the interface configuration. With this command configured, the interface is assumed to belong to only the groups specifically configured in this command.</p> <p>Only the administrative groups bound to an MPLS interface are advertised in TE link TLVs and sub-TLVs when the traffic-engineering option is enabled in IS-IS or OSPF. IES and VPRN interfaces do not have their attributes advertised in TE TLVs.</p>
Reference	configure routing-options if-attribute admin-group string
Max. Instances	32
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the MPLS interface
Context	configure router string mpls interface reference admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

label-map [[in-label](#)] *number*

Synopsis	Enter the label-map list instance
Context	configure router <i>string</i> mpls interface <i>reference</i> label-map <i>number</i>
Tree	label-map
Introduced	16.0.R1
Platforms	All

[in-label] *number*

Synopsis	Match the incoming MPLS label
Context	configure router <i>string</i> mpls interface <i>reference</i> label-map <i>number</i>
Tree	label-map
Range	32 to 1048575
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the label map
Context	configure router <i>string</i> mpls interface <i>reference</i> label-map <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

pop



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Pop (remove) the incoming label and forward packet based on service header
Context	configure router string mpls interface reference label-map number pop
Tree	pop
Notes	The following elements are part of a choice: pop or swap .
Introduced	16.0.R1
Platforms	All

swap



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the swap context
Context	configure router string mpls interface reference label-map number swap
Tree	swap
Notes	The following elements are part of a choice: pop or swap .
Introduced	16.0.R1
Platforms	All

next-hop *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address for the next hop
Context	configure router string mpls interface reference label-map number swap next-hop string
Tree	next-hop
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

out-label (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Push specific label onto the top of the outgoing packet's label stack
Context	configure router <i>string</i> mpls interface <i>reference</i> label-map <i>number</i> swap out-label (<i>number</i> <i>keyword</i>)
Tree	out-label
Range	16 to 1048575
Options	implicit-null-label
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

srlg-group [[name](#)] *reference*

Synopsis	Add a list entry for srlg-group
Context	configure router <i>string</i> mpls interface <i>reference</i> srlg-group <i>reference</i>
Tree	srlg-group
Max. Instances	64
Introduced	16.0.R1
Platforms	All

[[name](#)] *reference*

Synopsis	Shared Risk Link Group (SRLG) name
Context	configure router <i>string</i> mpls interface <i>reference</i> srlg-group <i>reference</i>
Tree	srlg-group
Reference	configure routing-options <i>if-attribute</i> srlg-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

te-metric *number*

Synopsis	TE metric for the interface
Context	configure router <i>string</i> mpls interface <i>reference</i> te-metric <i>number</i>
Tree	te-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

least-fill-min-thd *number*

Synopsis	Percentage of the least fill minimum threshold value
Context	configure router <i>string</i> mpls least-fill-min-thd <i>number</i>
Tree	least-fill-min-thd
Range	0 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	All

least-fill-reoptim-thd *number*

Synopsis	Percentage of the least fill reoptimization threshold value
Context	configure router <i>string</i> mpls least-fill-reoptim-thd <i>number</i>
Tree	least-fill-reoptim-thd
Range	0 to 100
Default	10
Units	percent
Introduced	16.0.R1
Platforms	All

logger-event-bundling *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Merge and bundle MPLS traps
Context	configure <i>router string mpls logger-event-bundling boolean</i>
Tree	logger-event-bundling
Default	false
Introduced	16.0.R1
Platforms	All

lsp [*lsp-name*] *string*

Synopsis	Enter the lsp list instance
Context	configure <i>router string mpls lsp string</i>
Tree	lsp
Introduced	16.0.R1
Platforms	All

[*lsp-name*] *string*

Synopsis	Labeled Switch path name
Context	configure <i>router string mpls lsp string</i>
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	configure <i>router string mpls lsp string adaptive boolean</i>
Tree	adaptive
Default	true

Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the LSP
Context **configure** *router string mpls lsp string admin-state keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

admin-tag [[name](#)] *reference*

Synopsis Add a list entry for **admin-tag**
Context **configure** *router string mpls lsp string admin-tag reference*
Tree [admin-tag](#)
Max. Instances 4
Introduced 16.0.R1
Platforms All

[name] *reference*

Synopsis Name of the admin tags
Context **configure** *router string mpls lsp string admin-tag reference*
Tree [admin-tag](#)
Reference **configure** *routing-options admin-tags admin-tag string*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

adspec *boolean*

Synopsis	Include ADSPEC object in RSVP messages
Context	configure <i>router string mpls lsp string adspec boolean</i>
Tree	adspec
Default	false
Introduced	16.0.R1
Platforms	All

auto-bandwidth

Synopsis	Enable the auto-bandwidth context
Context	configure <i>router string mpls lsp string auto-bandwidth</i>
Tree	auto-bandwidth
Introduced	16.0.R1
Platforms	All

adjust-down

Synopsis	Enter the adjust-down context
Context	configure <i>router string mpls lsp string auto-bandwidth adjust-down</i>
Tree	adjust-down
Introduced	16.0.R1
Platforms	All

bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	configure <i>router string mpls lsp string auto-bandwidth adjust-down bw number</i>
Tree	bw
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

percent number

Synopsis	Minimum difference in percent
Context	configure <i>router string mpls lsp string auto-bandwidth adjust-down percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	All

adjust-up

Synopsis	Enter the adjust-up context
Context	configure <i>router string mpls lsp string auto-bandwidth adjust-up</i>
Tree	<i>adjust-up</i>
Introduced	16.0.R1
Platforms	All

bw number

Synopsis	Minimum difference in absolute bandwidth
Context	configure <i>router string mpls lsp string auto-bandwidth adjust-up bw number</i>
Tree	<i>bw</i>
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

percent number

Synopsis	Minimum difference in percent
Context	configure <i>router string mpls lsp string auto-bandwidth adjust-up percent number</i>
Tree	<i>percent</i>

Range	0 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	All

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth fc <i>keyword</i>
Tree	fc
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class name for LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sampling-weight *number*

Synopsis	Forwarding class weight for LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth fc <i>keyword</i> sampling-weight <i>number</i>
Tree	sampling-weight
Range	0 to 100
Default	100
Units	percent

Introduced 16.0.R1
Platforms All

max-bandwidth *number*

Synopsis Maximum bandwidth of auto-bandwidth to request for the LSP
Context **configure** *router string mpls lsp string auto-bandwidth max-bandwidth number*
Tree [max-bandwidth](#)
Range 0 to 6400000
Default 100000
Units megabps
Introduced 16.0.R1
Platforms All

min-bandwidth *number*

Synopsis Minimum bandwidth of auto-bandwidth to request for the LSP
Context **configure** *router string mpls lsp string auto-bandwidth min-bandwidth number*
Tree [min-bandwidth](#)
Range 0 to 6400000
Default 0
Units megabps
Introduced 16.0.R1
Platforms All

monitor-bandwidth *boolean*

Synopsis Collect and display auto-bandwidth measurements for the LSP
Context **configure** *router string mpls lsp string auto-bandwidth monitor-bandwidth boolean*
Tree [monitor-bandwidth](#)
Default false
Introduced 16.0.R1
Platforms All

multipliers

Synopsis	Enter the multipliers context
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth multipliers
Tree	multipliers
Introduced	16.0.R1
Platforms	All

adjust-multiplier *number*

Synopsis	Number of collection intervals in the adjust interval
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth multipliers adjust-multiplier <i>number</i>
Tree	adjust-multiplier
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

sample-multiplier *number*

Synopsis	Multiplier for collection intervals in a sample interval
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth multipliers sample-multiplier <i>number</i>
Tree	sample-multiplier
Range	1 to 511
Introduced	16.0.R1
Platforms	All

overflow-limit

Synopsis	Enable the overflow-limit context
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth overflow-limit
Tree	overflow-limit
Introduced	16.0.R1
Platforms	All

bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth overflow-limit bw <i>number</i>
Tree	bw
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth overflow-limit number <i>number</i>
Tree	number
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth overflow-limit threshold <i>number</i>
Tree	threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

underflow-limit

Synopsis	Enable the underflow-limit context
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth underflow-limit
Tree	underflow-limit

Introduced 16.0.R1
Platforms All

bw number

Synopsis Minimum difference in absolute bandwidth
Context **configure** *router string mpls lsp string auto-bandwidth underflow-limit bw number*
Tree *bw*
Range 1 to 6400000
Units megabps
Introduced 16.0.R1
Platforms All

number number

Synopsis Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context **configure** *router string mpls lsp string auto-bandwidth underflow-limit number number*
Tree *number*
Range 1 to 10
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

threshold number

Synopsis Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context **configure** *router string mpls lsp string auto-bandwidth underflow-limit threshold number*
Tree *threshold*
Range 0 to 100
Default 0
Units percent
Introduced 16.0.R1
Platforms All

use-last-adj-bw

Synopsis	Enable the use-last-adj-bw context
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth use-last-adj-bw
Tree	use-last-adj-bw
Introduced	16.0.R5
Platforms	All

secondary-retry-limit (*number* | *keyword*)

Synopsis	Maximum number of retry limits for secondary paths
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth use-last-adj-bw secondary-retry-limit (<i>number</i> <i>keyword</i>)
Tree	secondary-retry-limit
Description	This command configures the maximum number of retry attempts for secondary paths. After each successful attempt, the counter is reset to zero.
Range	1 to 10000
Default	5
Options	infinite
Introduced	16.0.R5
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure router <i>string</i> mpls lsp <i>string</i> bfd
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> bfd bfd-liveness <i>boolean</i>
Tree	bfd-liveness

Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	configure router <i>string</i> mpls lsp <i>string</i> bfd bfd-template <i>reference</i>
Tree	bfd-template
Reference	configure bfd bfd-template <i>string</i>
Introduced	16.0.R1
Platforms	All

failure-action *keyword*

Synopsis	Action when LSP BFD fails on the RSVP SR-TE LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> bfd failure-action <i>keyword</i>
Tree	failure-action
Description	The command specifies the action when LSP BFD fails on an RSVP, SR-TE, or LDP LSP. Regardless of the failure action specified, when the BFD session goes down on the LSP, the system generates an SNMP trap.
Default	none
Options	none, down, failover, failover-or-down
Introduced	16.0.R1
Platforms	All

lsp-ping-interval (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	configure router <i>string</i> mpls lsp <i>string</i> bfd lsp-ping-interval (<i>number</i> <i>keyword</i>)
Tree	lsp-ping-interval
Range	60 to 300
Default	60
Units	seconds

Options	none
Introduced	16.0.R1
Platforms	All

return-path-label *number*

Synopsis	S-BFD return-path label
Context	configure router <i>string</i> mpls lsp <i>string</i> bfd return-path-label <i>number</i>
Tree	return-path-label
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*

Synopsis	Time to wait for BFD to become operationally available
Context	configure router <i>string</i> mpls lsp <i>string</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none">• a path undergoing MBB when BFD is up• the initial administrative state of the LSP• the retry signaling of non-standby secondary paths
Range	1 to 60

Default	4
Units	seconds
Introduced	19.7.R1
Platforms	All

bgp-shortcut *boolean*

Synopsis	Include LSP for BGP routes
Context	configure router <i>string</i> mpls lsp <i>string</i> bgp-shortcut <i>boolean</i>
Tree	bgp-shortcut
Introduced	16.0.R1
Platforms	All

bgp-transport-tunnel *boolean*

Synopsis	Include LSP as transport LSP for labeled BGP routes
Context	configure router <i>string</i> mpls lsp <i>string</i> bgp-transport-tunnel <i>boolean</i>
Tree	bgp-transport-tunnel
Introduced	16.0.R1
Platforms	All

binding-sid *number*

Synopsis	Binding SID for the LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> binding-sid <i>number</i>
Tree	binding-sid
Description	This command binds a label to the LSP. The label value must belong to the reserved label block that is configured with the configure router mpls lsp-bsid-block command.
Range	32 to 1048575
Introduced	22.10.R1
Platforms	All

class-forwarding

Synopsis	Enable the class-forwarding context
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Context	configure router <i>string</i> mpls lsp <i>string</i> class-forwarding
Tree	class-forwarding
Introduced	16.0.R1
Platforms	All

forwarding-set

Synopsis	Enter the forwarding-set context
Context	configure router <i>string</i> mpls lsp <i>string</i> class-forwarding forwarding-set
Tree	forwarding-set
Notes	The following elements are part of a choice: (default-lsp and fc) or forwarding-set .
Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	Name for the class based forwarding policy for LSP instances
Context	configure router <i>string</i> mpls lsp <i>string</i> class-forwarding forwarding-set policy <i>reference</i>
Tree	policy
Reference	configure router <i>string</i> mpls class-forwarding-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

set number

Synopsis	Forwarding set ID
Context	configure router <i>string</i> mpls lsp <i>string</i> class-forwarding forwarding-set set <i>number</i>
Tree	set
Range	1 to 6
Introduced	16.0.R1
Platforms	All

class-type number

Synopsis	Class type for an LSP
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Context	configure <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>class-type</i> <i>number</i>
Tree	class-type
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enable the egress-statistics context
Context	configure <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> egress-statistics
Tree	egress-statistics
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> egress-statistics accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure <i>log</i> accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	configure <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> egress-statistics admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect LSP statistics
Context	configure router <i>string</i> mpls lsp <i>string</i> egress-statistics collect-stats <i>boolean</i>
Tree	collect-stats
Description	<p>When configured to true, this command enables LSP statistics collection. When you apply accounting policies, the forwarding engine collects data in the appropriate records and by default the CPU obtains and writes the results to the designated billing file.</p> <p>When configured to false, the forwarding engine still accumulates statistics. However, the CPU does not write them to the billing file. If you subsequently re-enable this command, the counters written to the billing file include all the traffic collected while the command was disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

stat-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Statistics collection mode
Context	configure router <i>string</i> mpls lsp <i>string</i> egress-statistics stat-mode <i>keyword</i>
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

entropy-label *keyword*

Synopsis	Entropy label
Context	configure router <i>string</i> mpls lsp <i>string</i> entropy-label <i>keyword</i>
Tree	entropy-label
Options	false, true
Introduced	16.0.R1
Platforms	All

exclude-admin-group *reference*

Synopsis	Name of admin group excluded when LSP is set up
Context	configure <i>router string mpls lsp string exclude-admin-group reference</i>
Tree	exclude-admin-group
Reference	configure <i>routing-options if-attribute admin-group string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

exclude-node (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Exclude Routers object to be included in the bypass path message
Context	configure <i>router string mpls lsp string exclude-node (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	exclude-node
Introduced	16.0.R1
Platforms	All

fallback-path-computation-method *keyword*

Synopsis	Fallback path computation method
Context	configure <i>router string mpls lsp string fallback-path-computation-method keyword</i>
Tree	fallback-path-computation-method
Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	21.2.R1
Platforms	All

fast-reroute

Synopsis	Enable the fast-reroute context
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Context	configure <i>router string mpls lsp string fast-reroute</i>
Tree	<i>fast-reroute</i>
Introduced	16.0.R1
Platforms	All

frr-method *keyword*

Synopsis	Fast Reroute method
Context	configure <i>router string mpls lsp string fast-reroute frr-method keyword</i>
Tree	<i>frr-method</i>
Options	one-to-one, facility
Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Total number of hops a detour or backup LSP can take
Context	configure <i>router string mpls lsp string fast-reroute hop-limit number</i>
Tree	<i>hop-limit</i>
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

node-protect *boolean*

Synopsis	Enable node and link protection for the specified LSP
Context	configure <i>router string mpls lsp string fast-reroute node-protect boolean</i>
Tree	<i>node-protect</i>
Introduced	16.0.R1
Platforms	All

propagate-admin-group *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
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Context	configure <i>router string mpls lsp string fast-reroute propagate-admin-group boolean</i>
Tree	propagate-admin-group
Default	false
Introduced	16.0.R1
Platforms	All

from (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IP address of this LSP
Context	configure <i>router string mpls lsp string from (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	from
Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Maximum number of hops that an LSP can traverse including ingress and egress routers
Context	configure <i>router string mpls lsp string hop-limit number</i>
Tree	hop-limit
Range	2 to 255
Default	255
Introduced	16.0.R1
Platforms	All

igp-shortcut

Synopsis	Enter the igp-shortcut context
Context	configure <i>router string mpls lsp string igp-shortcut</i>
Tree	igp-shortcut
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of LSP for shortcut or forwarding
Context **configure** [router](#) *string* [mpls lsp](#) *string* [igp-shortcut](#) [admin-state](#) *keyword*
Tree [admin-state](#)
Options enable, disable
Introduced 16.0.R1
Platforms All

lfa-type *keyword*

Synopsis LSP usage in LFA SPF
Context **configure** [router](#) *string* [mpls lsp](#) *string* [igp-shortcut](#) [lfa-type](#) *keyword*
Tree [lfa-type](#)
Options lfa-protect, lfa-only
Notes The following elements are part of a choice: **lfa-type** or **relative-metric**.
Introduced 16.0.R1
Platforms All

relative-metric *number*

Synopsis Shortest IGP cost between the endpoints of the LSP plus the configured offset
Context **configure** [router](#) *string* [mpls lsp](#) *string* [igp-shortcut](#) [relative-metric](#) *number*
Tree [relative-metric](#)
Range -10 to 10
Notes The following elements are part of a choice: **lfa-type** or **relative-metric**.
Introduced 16.0.R1
Platforms All

include-admin-group *reference*

Synopsis Admin group name included when LSP is set up
Context **configure** [router](#) *string* [mpls lsp](#) *string* [include-admin-group](#) *reference*

Tree	include-admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

label-stack-reduction *boolean*

Synopsis	Enable/disable label compression for LSP path.
Context	configure router <i>string</i> mpls lsp <i>string</i> label-stack-reduction <i>boolean</i>
Tree	label-stack-reduction
Default	false
Introduced	19.7.R1
Platforms	All

ldp-over-rsvp *boolean*

Synopsis	Include this LSP in LDP over RSVP
Context	configure router <i>string</i> mpls lsp <i>string</i> ldp-over-rsvp <i>boolean</i>
Tree	ldp-over-rsvp
Introduced	16.0.R1
Platforms	All

least-fill *boolean*

Synopsis	Enable least-fill path selection for this LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> least-fill <i>boolean</i>
Tree	least-fill
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight for an MPLS LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

local-sr-protection *keyword*

Synopsis	Local SR protection preference for LSP path computation
Context	configure router <i>string</i> mpls lsp <i>string</i> local-sr-protection <i>keyword</i>
Tree	local-sr-protection
Default	preferred
Options	none, preferred, mandatory
Introduced	19.7.R1
Platforms	All

lsp-self-ping *keyword*

Synopsis	LSP Self Ping activation status on the RSVP-TE LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> lsp-self-ping <i>keyword</i>
Tree	lsp-self-ping
Description	When configured, the system uses this setting for the LSP regardless of the value configured under configure router mpls lsp-self-ping rsvp-te . When unconfigured, the command inherits the value configured under configure router mpls lsp-self-ping rsvp-te .
Options	false, true
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

main-ct-retry-limit *number*

Synopsis	Maximum number of retries before reverting to backup CT
Context	configure router <i>string</i> mpls lsp <i>string</i> main-ct-retry-limit <i>number</i>

Tree	main-ct-retry-limit
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

max-sr-labels

Synopsis	Enter the max-sr-labels context
Context	configure router <i>string</i> mpls lsp <i>string</i> max-sr-labels
Tree	max-sr-labels
Introduced	16.0.R1
Platforms	All

additional-frr-labels *number*

Synopsis	Value for the maximum additional overhead labels
Context	configure router <i>string</i> mpls lsp <i>string</i> max-sr-labels additional-frr-labels <i>number</i>
Tree	additional-frr-labels
Range	0 to 4
Default	1
Introduced	16.0.R1
Platforms	All

label-stack-size *number*

Synopsis	Maximum Label Stack size
Context	configure router <i>string</i> mpls lsp <i>string</i> max-sr-labels label-stack-size <i>number</i>
Tree	label-stack-size
Range	1 to 11
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	LSP metric that forces to a constant value
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Context	configure <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>metric</i> <i>number</i>
Tree	<i>metric</i>
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

metric-type *keyword*

Synopsis	Metric type used for LSP path computation
Context	configure <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>metric-type</i> <i>keyword</i>
Tree	<i>metric-type</i>
Default	igp
Options	igp, te
Introduced	19.7.R1
Platforms	All

override-tunnel-elc *boolean*

Synopsis	Override any received entropy label capability
Context	configure <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>override-tunnel-elc</i> <i>boolean</i>
Tree	<i>override-tunnel-elc</i>
Description	When configured to true , this command allows the system to override any received entropy label capability advertisement. When configured to false , this command disables the override.
Default	false
Introduced	21.10.R1
Platforms	All

p2mp-id *number*

Synopsis	Unique identifier as Point-to-Multipoint (P2MP) identifier
Context	configure <i>router</i> <i>string</i> <i>mpls lsp</i> <i>string</i> <i>p2mp-id</i> <i>number</i>
Tree	<i>p2mp-id</i>
Range	1 to 65535
Introduced	16.0.R1

Platforms All

path-computation-method *keyword*

Synopsis Path computation method

Context **configure** *router string mpls lsp string path-computation-method keyword*

Tree [path-computation-method](#)

Description This command configures the path computation method of an RSVP-TE or SR-TE LSP. If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the **hop-to-label** translation is used for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP.

Options local-cspf, pce

Introduced 19.7.R1

Platforms All

path-profile [[profile-id](#)] *number*

Synopsis Enter the **path-profile** list instance

Context **configure** *router string mpls lsp string path-profile number*

Tree [path-profile](#)

Description Commands in this context configure the attributes of the PCE path profile.

Max. Instances 5

Introduced 16.0.R1

Platforms All

[profile-id] *number*

Synopsis Profile ID for the specified LSP

Context **configure** *router string mpls lsp string path-profile number*

Tree [path-profile](#)

Range 1 to 4294967295

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

path-group *number*

Synopsis	Path-group ID for the specified LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> path-profile <i>number</i> path-group <i>number</i>
Tree	path-group
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

pce-associations

Synopsis	Enter the pce-associations context
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-associations
Tree	pce-associations
Description	Commands in this context configure the LSP binding with one or more PCEP associations.
Introduced	22.5.R1
Platforms	All

diversity [**diversity-name**] *reference*

Synopsis	Add a list entry for diversity
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-associations diversity <i>reference</i>
Tree	diversity
Description	Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

[diversity-name] *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-associations diversity <i>reference</i>

Tree	diversity
Reference	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

policy [[policy-name](#)] *reference*

Synopsis	Add a list entry for policy
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-associations policy <i>reference</i>
Tree	policy
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

[policy-name] *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-associations policy <i>reference</i>
Tree	policy
Reference	configure router <i>string</i> pcep pcc pce-associations policy <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

pce-control *boolean*

Synopsis	Enable PCE controlled LSP mode of operation
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-control <i>boolean</i>
Tree	pce-control
Description	When configured to true , this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the

path following a failure or to re-optimize the path and update the router without a request from the router.

When configured to **false**, the PCE-controlled mode of operation for the LSP has no effect.

Default	false
Introduced	16.0.R1
Platforms	All

pce-report *keyword*

Synopsis	Global configuration of reporting to PCE to override
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-report <i>keyword</i>
Tree	pce-report
Options	false, true
Introduced	16.0.R1
Platforms	All

primary [[path-name](#)] *reference*

Synopsis	Enter the primary list instance
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i>
Tree	primary
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[path-name] *reference*

Synopsis	Path name
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i>
Tree	primary
Reference	configure router <i>string</i> mpls path <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> adaptive <i>boolean</i>
Tree	adaptive
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP path
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup-class-type *number*

Synopsis	Class-type for the LSP or LSP path
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> backup-class-type <i>number</i>
Tree	backup-class-type
Range	0 to 7
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Amount of bandwidth to be reserved
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 6400000
Default	0
Units	megabps

Introduced 16.0.R1
Platforms All

bfd

Synopsis Enter the **bfd** context
Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [bfd](#)
Tree [bfd](#)
Description Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced 16.0.R1
Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [bfd](#) [bfd-liveness](#) *boolean*
Tree [bfd-liveness](#)
Default false
Introduced 16.0.R1
Platforms All

bfd-template *reference*

Synopsis BFD template to be used by LSP BFD sessions
Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [bfd](#) [bfd-template](#) *reference*
Tree [bfd-template](#)
Reference **configure** [bfd](#) [bfd-template](#) *string*
Introduced 16.0.R1
Platforms All

lsp-ping-interval (*number* | *keyword*)

Synopsis Interval for periodic LSP ping for BFD bootstrapping
Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [bfd](#) [lsp-ping-interval](#) (*number* | *keyword*)

Tree	lsp-ping-interval
Range	60 to 300
Default	60
Units	seconds
Options	none
Introduced	16.0.R1
Platforms	All

return-path-label *number*

Synopsis	S-BFD return-path label
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> bfd return-path-label <i>number</i>
Tree	return-path-label
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*

Synopsis	Time to wait for BFD to become operationally available
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p>

- a path undergoing MBB when BFD is up
- the initial administrative state of the LSP
- the retry signaling of non-standby secondary paths

Range	1 to 60
Default	4
Units	seconds
Introduced	19.7.R1
Platforms	All

class-type *number*

Synopsis	Class-type
Context	configure <i>router string mpls lsp string primary reference class-type number</i>
Tree	<i>class-type</i>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

exclude-admin-group

Synopsis	Enable the exclude-admin-group context
Context	configure <i>router string mpls lsp string primary reference exclude-admin-group</i>
Tree	<i>exclude-admin-group</i>
Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Groups to exclude when the LSP path is setup
Context	configure <i>router string mpls lsp string primary reference exclude-admin-group group reference</i>
Tree	<i>group</i>
Reference	configure <i>routing-options if-attribute admin-group string</i>
Max. Instances	32

Min. Instances	1
Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> hop-limit <i>number</i>
Tree	hop-limit
Range	2 to 255
Introduced	16.0.R1
Platforms	All

include-admin-group

Synopsis	Enable the include-admin-group context
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> include-admin-group
Tree	include-admin-group
Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> include-admin-group group <i>reference</i>
Tree	group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

priority

Synopsis	Enter the priority context
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> priority
Tree	priority
Introduced	16.0.R1
Platforms	All

hold-priority *number*

Synopsis	Priority of an LSP session at preemption action
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> priority hold-priority <i>number</i>
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> priority setup-priority <i>number</i>
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> record <i>boolean</i>
Tree	record
Default	true
Introduced	16.0.R1
Platforms	All

record-label *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	configure router <i>string</i> mpls lsp <i>string</i> primary reference record-label <i>boolean</i>
Tree	record-label
Default	true
Introduced	16.0.R1
Platforms	All

primary-p2mp-instance [*instance-name*] *string*

Synopsis	Enter the primary-p2mp-instance list instance
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i>
Tree	primary-p2mp-instance
Max. Instances	1
Introduced	16.0.R4
Platforms	All

[*instance-name*] *string*

Synopsis	P2MP LSP instance name
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i>
Tree	primary-p2mp-instance
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> adaptive <i>boolean</i>
Tree	adaptive
Introduced	16.0.R4

Platforms All

admin-state *keyword*

Synopsis Administrative state of the LSP path

Context **configure** *router string mpls lsp string primary-p2mp-instance string admin-state keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R4

Platforms All

bandwidth *number*

Synopsis Amount of bandwidth to be reserved

Context **configure** *router string mpls lsp string primary-p2mp-instance string bandwidth number*

Tree [bandwidth](#)

Range 0 to 6400000

Default 0

Units megabps

Introduced 16.0.R4

Platforms All

exclude-admin-group

Synopsis Enable the **exclude-admin-group** context

Context **configure** *router string mpls lsp string primary-p2mp-instance string exclude-admin-group*

Tree [exclude-admin-group](#)

Introduced 16.0.R4

Platforms All

group *reference*

Synopsis Groups to exclude when the LSP path is setup

Context	configure <i>router string mpls lsp string primary-p2mp-instance string exclude-admin-group group reference</i>
Tree	<i>group</i>
Reference	configure <i>routing-options if-attribute admin-group string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R4
Platforms	All

hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	configure <i>router string mpls lsp string primary-p2mp-instance string hop-limit number</i>
Tree	<i>hop-limit</i>
Range	2 to 255
Introduced	16.0.R4
Platforms	All

include-admin-group

Synopsis	Enable the include-admin-group context
Context	configure <i>router string mpls lsp string primary-p2mp-instance string include-admin-group</i>
Tree	<i>include-admin-group</i>
Introduced	16.0.R4
Platforms	All

group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	configure <i>router string mpls lsp string primary-p2mp-instance string include-admin-group group reference</i>
Tree	<i>group</i>
Reference	configure <i>routing-options if-attribute admin-group string</i>

Max. Instances	32
Min. Instances	1
Introduced	16.0.R4
Platforms	All

priority

Synopsis	Enter the priority context
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> priority
Tree	priority
Introduced	21.10.R1
Platforms	All

hold-priority *number*

Synopsis	Hold priority when not enough bandwidth for LSP setup
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> priority hold-priority <i>number</i>
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	21.10.R1
Platforms	All

setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> priority setup-priority <i>number</i>
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	21.10.R1
Platforms	All

record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> record <i>boolean</i>
Tree	record
Default	true
Introduced	16.0.R4
Platforms	All

record-label *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> record-label <i>boolean</i>
Tree	record-label
Default	true
Introduced	16.0.R4
Platforms	All

s2l-path [*path-name*] *reference to (ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the s2l-path list instance
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> s2l-path <i>reference to (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	s2l-path
Max. Instances	650
Introduced	16.0.R4
Platforms	All

[*path-name*] *reference*

Synopsis	P2MP LSP name
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> s2l-path <i>reference to (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	s2l-path

Reference	configure router <i>string</i> mpls path <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

to ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	System IP address of the egress router
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> s2l-path <i>reference</i> to (ipv4-address-no-zone ipv6-address-no-zone)
Tree	s2l-path
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the S2L sub-LSP for a P2MP LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> s2l-path <i>reference</i> to (ipv4-address-no-zone ipv6-address-no-zone) admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

propagate-admin-group *boolean*

Synopsis	Enable admin groups via session attribute object
Context	configure router <i>string</i> mpls lsp <i>string</i> propagate-admin-group <i>boolean</i>
Tree	propagate-admin-group
Default	false
Introduced	16.0.R1
Platforms	All

retry-limit *number*

Synopsis	Number of attempts to re-establish LSP after it fails
Context	configure router <i>string</i> mpls lsp <i>string</i> retry-limit <i>number</i>
Tree	retry-limit
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

retry-timer *number*

Synopsis	Time for LSP re-establishment attempts after failure
Context	configure router <i>string</i> mpls lsp <i>string</i> retry-timer <i>number</i>
Tree	retry-timer
Range	1 to 600
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

revert-timer *number*

Synopsis	Revert timer for the LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> revert-timer <i>number</i>
Tree	revert-timer
Range	1 to 4320
Units	minutes
Introduced	16.0.R1
Platforms	All

rsvp-resv-style *keyword*

Synopsis	Reservation style for RSVP
Context	configure router <i>string</i> mpls lsp <i>string</i> rsvp-resv-style <i>keyword</i>
Tree	rsvp-resv-style
Default	se

Options	se, ff
Introduced	16.0.R1
Platforms	All

secondary *[path-name] reference*

Synopsis	Enter the secondary list instance
Context	configure <i>router string mpls lsp string secondary reference</i>
Tree	<i>secondary</i>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[path-name] reference

Synopsis	Path name
Context	configure <i>router string mpls lsp string secondary reference</i>
Tree	<i>secondary</i>
Reference	configure <i>router string mpls path string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	configure <i>router string mpls lsp string secondary reference adaptive boolean</i>
Tree	<i>adaptive</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP path
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Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Amount of bandwidth to be reserved
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> bfd
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	19.7.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> bfd bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	19.7.R1

Platforms All

bfd-template *reference*

Synopsis BFD template to be used by LSP BFD sessions

Context **configure** [router](#) *string* [mpls lsp](#) *string* [secondary](#) *reference* [bfd bfd-template](#) *reference*

Tree [bfd-template](#)

Reference **configure** [bfd bfd-template](#) *string*

Introduced 19.7.R1

Platforms All

lsp-ping-interval (*number* | *keyword*)

Synopsis Interval for periodic LSP ping for BFD bootstrapping

Context **configure** [router](#) *string* [mpls lsp](#) *string* [secondary](#) *reference* [bfd lsp-ping-interval](#) (*number* | *keyword*)

Tree [lsp-ping-interval](#)

Range 60 to 300

Default 60

Units seconds

Options none

Introduced 19.7.R1

Platforms All

return-path-label *number*

Synopsis S-BFD return-path label

Context **configure** [router](#) *string* [mpls lsp](#) *string* [secondary](#) *reference* [bfd return-path-label](#) *number*

Tree [return-path-label](#)

Description This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.

The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.

If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.

Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*

Synopsis	Time to wait for BFD to become operationally available
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> • a path undergoing MBB when BFD is up • the initial administrative state of the LSP • the retry signaling of non-standby secondary paths
Range	1 to 60
Default	4
Units	seconds
Introduced	19.7.R1
Platforms	All

class-type *number*

Synopsis	Class-type
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> class-type <i>number</i>
Tree	class-type
Range	0 to 7
Introduced	16.0.R1
Platforms	All

exclude-admin-group

Synopsis	Enable the exclude-admin-group context
Context	configure <i>router string mpls lsp string secondary reference</i> exclude-admin-group
Tree	exclude-admin-group
Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Groups to exclude when the LSP path is setup
Context	configure <i>router string mpls lsp string secondary reference</i> exclude-admin-group group reference
Tree	group
Reference	configure <i>routing-options if-attribute</i> admin-group string
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	configure <i>router string mpls lsp string secondary reference</i> hop-limit number
Tree	hop-limit
Range	2 to 255
Introduced	16.0.R1
Platforms	All

include-admin-group

Synopsis	Enable the include-admin-group context
Context	configure <i>router string mpls lsp string secondary reference</i> include-admin-group
Tree	include-admin-group

Introduced	16.0.R1
Platforms	All

group reference

Synopsis	Groups that are included when LSP path is setup
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary reference include-admin-group group reference
Tree	group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

path-preference number

Synopsis	Path preference for the secondary standby path
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary reference path-preference <i>number</i>
Tree	path-preference
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

priority

Synopsis	Enter the priority context
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary reference priority
Tree	priority
Introduced	16.0.R1
Platforms	All

hold-priority *number*

Synopsis	Priority of an LSP session at preemption action
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> priority hold-priority <i>number</i>
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> priority setup-priority <i>number</i>
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> record <i>boolean</i>
Tree	record
Default	true
Introduced	16.0.R1
Platforms	All

record-label *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> record-label <i>boolean</i>
Tree	record-label
Default	true

Introduced	16.0.R1
Platforms	All

srlg *boolean*

Synopsis	Use SRLG constraint in secondary path computation for an LSP at the head-end LER
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> srlg <i>boolean</i>
Tree	srlg
Default	false
Introduced	16.0.R1
Platforms	All

standby *boolean*

Synopsis	Keep secondary path indefinitely in hot standby state
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> standby <i>boolean</i>
Tree	standby
Default	false
Introduced	16.0.R1
Platforms	All

soft-preemption *boolean*

Synopsis	Enable soft preemption
Context	configure router <i>string</i> mpls lsp <i>string</i> soft-preemption <i>boolean</i>
Tree	soft-preemption
Description	<p>When configured to true, the P2MP LSP preemption is governed by the configure router rsvp preemption-timer value.</p> <p>When configured to false, the preemption timer value is set to 0 and the P2MP LSPs are hard preempted.</p> <p>For P2P LSPs, soft preemption is always enabled and cannot be disabled.</p>
Introduced	22.2.R1
Platforms	All

to (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination IP address or the egress router for the LSP
Context	configure <i>router string mpls lsp string to (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	<i>to</i>
Introduced	16.0.R1
Platforms	All

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	LSP for bypass protection, point to multipoint, segment routing or MPLS-TP static LSP
Context	configure <i>router string mpls lsp string type keyword</i>
Tree	<i>type</i>
Options	p2p-rsvp, p2p-static-mpls, p2p-rsvp-bypass, p2mp-rsvp, p2mp-rsvp-auto, p2p-rsvp-mesh, p2p-rsvp-one-hop, p2p-sr-te, p2p-sr-te-mesh, p2p-sr-te-one-hop, p2p-sr-te-pce-init, p2p-sr-te-on-demand
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn-auto-bind *boolean*

Synopsis	Include this LSP in auto-bind for VPRN services
Context	configure <i>router string mpls lsp string vprn-auto-bind boolean</i>
Tree	<i>vprn-auto-bind</i>
Introduced	16.0.R1
Platforms	All

lsp-bsid-block *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block for binding SIDs
Context	configure router <i>string</i> mpls lsp-bsid-block <i>reference</i>
Tree	lsp-bsid-block
Description	This command references a pre-existing reserved label block for statically configured binding SIDs.
Reference	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>
Introduced	22.7.R1
Platforms	All

lsp-history

Synopsis	Enable the lsp-history context
Context	configure router <i>string</i> mpls lsp-history
Tree	lsp-history
Description	Commands in this context control the recording of LSP history events. When the context is created, memory is allocated for storing up to 100 of the most recent LSP history events. When the context is deleted, memory is deallocated.
Introduced	22.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of LSP history recording
Context	configure router <i>string</i> mpls lsp-history admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	22.10.R1
Platforms	All

lsp-init-retry-timeout *number*

Synopsis	LSP initial retry timeout
Context	configure <i>router string mpls lsp-init-retry-timeout number</i>
Tree	lsp-init-retry-timeout
Range	10 to 600
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

lsp-self-ping

Synopsis	Enter the lsp-self-ping context
Context	configure <i>router string mpls lsp-self-ping</i>
Tree	lsp-self-ping
Description	<p>Commands in this context configure LSP Self Ping parameters.</p> <p>LSP Self Ping checks that the datapath of an RSVP LSP has been programmed by all LSRs along its path before switching the traffic to it. If enabled, LSP Self Ping packets are sent periodically at a configurable interval following the receipt of the RESV message for an RSVP LSP path following an MBB or other event where the active path changes while the previous active path stayed up. The router will not switch traffic to the new path until an LSP Self Ping reply is received from the far-end LER.</p> <p>When configured under the MPLS context, LSP Self Ping is enabled for all RSVP LSPs, unless it is explicitly disabled for a given LSP.</p>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	MPLS periodic LSP Self Ping interval
Context	configure <i>router string mpls lsp-self-ping interval number</i>
Tree	interval
Description	<p>This command configures the interval at which LSP Self Ping packets are periodically sent on a candidate path of an RSVP LSP.</p> <p>This value is used for all LSPs that have LSP Self Ping enabled.</p>
Range	1 to 10

Default	1
Units	seconds
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp-te boolean

Synopsis	Activate LSP Self Ping on RSVP-TE LSPs
Context	configure router <i>string</i> mpls lsp-self-ping rsvp-te boolean
Tree	rsvp-te
Description	When configured to true , this command enables LSP Self Ping on all RSVP-TE LSPs, unless an individual LSP has this explicitly disabled under the configure router mpls lsp lsp-self-ping command or in the LSP template. When configured to false , this command disables LSP Self Ping on all RSVP-TE LSPs.
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timeout number

Synopsis	MPLS LSP Self Ping timeout
Context	configure router <i>string</i> mpls lsp-self-ping timeout number
Tree	timeout
Description	This command configures a timeout value for the LSP Self Ping timer. The LSP Self Ping timer starts when the RESV message is received for an LSP. The system periodically sends LSP Self Ping packets until the timer expires or the first LSP Self Ping reply is received, whichever comes first. If the timer expires before an LSP Self Ping packet is received, the configured timeout action is performed.
Range	3 to 3600
Default	300
Units	seconds
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timeout-action *keyword*

Synopsis	Action taken when LSP Self Ping timer expires
Context	configure router <i>string</i> mpls lsp-self-ping timeout-action <i>keyword</i>
Tree	timeout-action
Default	retry
Options	retry, switch
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp-template [**template-name**] *string*

Synopsis	Enter the lsp-template list instance
Context	configure router <i>string</i> mpls lsp-template <i>string</i>
Tree	lsp-template
Description	Commands in this context configure the attributes of an LSP template that can be referenced by a client application when dynamic LSPs must be created.
Max. Instances	4096
Introduced	16.0.R1
Platforms	All

[**template-name**] *string*

Synopsis	LSP template name
Context	configure router <i>string</i> mpls lsp-template <i>string</i>
Tree	lsp-template
Description	This command specifies the name of the LSP template. An LSP template name and LSP name must not be the same.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptive *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable make-before-break functionality
Context	configure router <i>string</i> mpls lsp-template <i>string</i> adaptive <i>boolean</i>
Tree	adaptive
Default	true
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP template
Context	configure router <i>string</i> mpls lsp-template <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

admin-tag [*name*] *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for admin-tag
Context	configure router <i>string</i> mpls lsp-template <i>string</i> admin-tag <i>reference</i>
Tree	admin-tag
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[name] *reference*

Synopsis	Name of the admin tags
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>admin-tag</i> <i>reference</i>
Tree	<i>admin-tag</i>
Reference	configure <i>routing-options</i> <i>admin-tags</i> <i>admin-tag</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adspec *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include ADSPEC objects in RSVP messages
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>adspec</i> <i>boolean</i>
Tree	<i>adspec</i>
Default	false
Introduced	16.0.R1
Platforms	All

auto-bandwidth



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the auto-bandwidth context
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>auto-bandwidth</i>
Tree	<i>auto-bandwidth</i>
Introduced	16.0.R1
Platforms	All

adjust-down



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the adjust-down context
Context	configure <i>router string mpls lsp-template string auto-bandwidth adjust-down</i>
Tree	<i>adjust-down</i>
Introduced	16.0.R1
Platforms	All

bw number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in absolute bandwidth
Context	configure <i>router string mpls lsp-template string auto-bandwidth adjust-down bw number</i>
Tree	<i>bw</i>
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

percent number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in percent
Context	configure <i>router string mpls lsp-template string auto-bandwidth adjust-down percent number</i>
Tree	<i>percent</i>
Range	0 to 100

Default	5
Units	percent
Introduced	16.0.R1
Platforms	All

adjust-up



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the adjust-up context
Context	configure <i>router string mpls lsp-template string auto-bandwidth adjust-up</i>
Tree	<i>adjust-up</i>
Introduced	16.0.R1
Platforms	All

bw number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in absolute bandwidth
Context	configure <i>router string mpls lsp-template string auto-bandwidth adjust-up bw number</i>
Tree	<i>bw</i>
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

percent number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in percent
Context	configure <i>router string mpls lsp-template string auto-bandwidth adjust-up percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	All

fc [*fc-name*] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the fc list instance
Context	configure <i>router string mpls lsp-template string auto-bandwidth fc keyword</i>
Tree	<i>fc</i>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class name for LSP
Context	configure <i>router string mpls lsp-template string auto-bandwidth fc keyword</i>
Tree	<i>fc</i>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sampling-weight *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding class weight for LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth fc <i>keyword</i> sampling-weight <i>number</i>
Tree	sampling-weight
Range	0 to 100
Default	100
Units	percent
Introduced	16.0.R1
Platforms	All

max-bandwidth *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum bandwidth of auto-bandwidth to request for the LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth max-bandwidth <i>number</i>
Tree	max-bandwidth
Range	0 to 6400000
Default	100000
Units	megabps
Introduced	16.0.R1
Platforms	All

min-bandwidth *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum bandwidth of auto-bandwidth to request for the LSP
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Context	configure <i>router string mpls lsp-template string auto-bandwidth min-bandwidth number</i>
Tree	min-bandwidth
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

monitor-bandwidth *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect and display auto-bandwidth measurements for the LSP
Context	configure <i>router string mpls lsp-template string auto-bandwidth monitor-bandwidth boolean</i>
Tree	monitor-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

multipliers



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the multipliers context
Context	configure <i>router string mpls lsp-template string auto-bandwidth multipliers</i>
Tree	multipliers
Introduced	16.0.R1
Platforms	All

adjust-multiplier *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of collection intervals in the adjust interval
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth multipliers adjust-multiplier <i>number</i>
Tree	adjust-multiplier
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

sample-multiplier *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multiplier for collection intervals in a sample interval
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth multipliers sample-multiplier <i>number</i>
Tree	sample-multiplier
Range	1 to 511
Introduced	16.0.R1
Platforms	All

overflow-limit



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the overflow-limit context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth overflow-limit
Tree	overflow-limit
Introduced	16.0.R1
Platforms	All

bw *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in absolute bandwidth
Context	configure <i>router string mpls lsp-template string auto-bandwidth overflow-limit bw number</i>
Tree	<i>bw</i>
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

number *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	configure <i>router string mpls lsp-template string auto-bandwidth overflow-limit number number</i>
Tree	<i>number</i>
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
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Context	configure <i>router string mpls lsp-template string auto-bandwidth overflow-limit threshold number</i>
Tree	threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

underflow-limit



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the underflow-limit context
Context	configure <i>router string mpls lsp-template string auto-bandwidth underflow-limit</i>
Tree	underflow-limit
Introduced	16.0.R1
Platforms	All

bw number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in absolute bandwidth
Context	configure <i>router string mpls lsp-template string auto-bandwidth underflow-limit bw number</i>
Tree	bw
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

number *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	configure <i>router string mpls lsp-template string auto-bandwidth underflow-limit number number</i>
Tree	<i>number</i>
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	configure <i>router string mpls lsp-template string auto-bandwidth underflow-limit threshold number</i>
Tree	<i>threshold</i>
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

backup-class-type *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup class type for this LSP template
Context	configure <i>router string mpls lsp-template string backup-class-type number</i>

Tree	backup-class-type
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Amount of bandwidth reserved for the P2MP instance
Context	configure router <i>string</i> mpls lsp-template <i>string</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

bfd



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the bfd context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> bfd
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> bfd bfd-liveness <i>boolean</i>
Tree	bfd-liveness

Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	configure router <i>string</i> mpls lsp-template <i>string</i> bfd bfd-template <i>reference</i>
Tree	bfd-template
Reference	configure bfd bfd-template <i>string</i>
Introduced	16.0.R1
Platforms	All

failure-action *keyword*

Synopsis	Action to take when LSP BFD session fails
Context	configure router <i>string</i> mpls lsp-template <i>string</i> bfd failure-action <i>keyword</i>
Tree	failure-action
Default	none
Options	none, down, failover-or-down
Introduced	16.0.R1
Platforms	All

lsp-ping-interval (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	configure router <i>string</i> mpls lsp-template <i>string</i> bfd lsp-ping-interval (<i>number</i> <i>keyword</i>)
Tree	lsp-ping-interval
Range	60 to 300
Default	60
Units	seconds
Options	none
Introduced	16.0.R1
Platforms	All

return-path-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	S-BFD return-path label
Context	configure router <i>string</i> mpls lsp-template <i>string</i> bfd return-path-label <i>number</i>
Tree	return-path-label
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to wait for BFD to become operationally available
Context	configure router <i>string</i> mpls lsp-template <i>string</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> • a path undergoing MBB when BFD is up • the initial administrative state of the LSP

- the retry signaling of non-standby secondary paths

Range	1 to 60
Default	4
Units	seconds
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bgp-shortcut *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable/disable use of RSVP LSP for IPv4 BGP routes.
Context	configure <i>router string mpls lsp-template string bgp-shortcut boolean</i>
Tree	bgp-shortcut
Introduced	16.0.R1
Platforms	All

bgp-transport-tunnel *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow use of RSVP-TE LSP as transport for tunnel routes
Context	configure <i>router string mpls lsp-template string bgp-transport-tunnel boolean</i>
Tree	bgp-transport-tunnel
Default	true
Introduced	16.0.R1
Platforms	All

binding-sid *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Request to allocate and bind a label
Context	configure router <i>string</i> mpls lsp-template <i>string</i> binding-sid <i>boolean</i>
Tree	binding-sid
Description	When configured to true , the system allocates and binds a label to any LSP that is created using the template. When configured to false , this command removes the configuration but this does not affect LSPs that were already created using the template.
Default	false
Introduced	22.10.R1
Platforms	All

class-forwarding



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the class-forwarding context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> class-forwarding
Tree	class-forwarding
Introduced	16.0.R1
Platforms	All

forwarding-set



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the forwarding-set context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> class-forwarding forwarding-set
Tree	forwarding-set
Notes	The following elements are part of a choice: (default-lsp and fc) or forwarding-set .
Introduced	16.0.R1
Platforms	All

policy reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name for the class based forwarding policy for LSP instances
Context	configure router <i>string</i> mpls lsp-template <i>string</i> class-forwarding forwarding-set policy reference
Tree	policy
Reference	configure router <i>string</i> mpls class-forwarding-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

set number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding set ID
Context	configure router <i>string</i> mpls lsp-template <i>string</i> class-forwarding forwarding-set set number
Tree	set
Range	1 to 6
Introduced	16.0.R1
Platforms	All

class-type number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Class type for an LSP template
Context	configure router <i>string</i> mpls lsp-template <i>string</i> class-type number
Tree	class-type
Range	0 to 7
Default	0

Introduced 16.0.R1
Platforms All

default-path *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Default path to be used for signaling LSP instances
Context **configure** **router** *string* **mpls** **lsp-template** *string* **default-path** *reference*
Tree **default-path**
Reference **configure** **router** *string* **mpls** **path** *string*
Introduced 16.0.R1
Platforms All

egress-statistics



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **egress-statistics** context
Context **configure** **router** *string* **mpls** **lsp-template** *string* **egress-statistics**
Tree **egress-statistics**
Introduced 16.0.R1
Platforms All

accounting-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>egress-statistics</i> <i>accounting-policy</i> <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect LSP statistics
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>egress-statistics</i> <i>collect-stats</i> <i>boolean</i>
Tree	collect-stats
Description	<p>When configured to true, this command enables LSP statistics collection. When you apply accounting policies, the forwarding engine collects data in the appropriate records and by default the CPU obtains and writes the results to the designated billing file.</p> <p>When configured to false, the forwarding engine still accumulates statistics. However, the CPU does not write them to the billing file. If you subsequently re-enable this command, the counters written to the billing file include all the traffic collected while the command was disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Statistics collection mode
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>egress-statistics</i> <i>stat-mode</i> <i>keyword</i>
Tree	stat-mode
Options	per-fc, aggregate

Introduced 21.10.R1
Platforms All

entropy-label *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Entropy label for an LSP template
Context **configure** **router** *string* **mpls** **lsp-template** *string* **entropy-label** *keyword*
Tree **entropy-label**
Options false, true
Introduced 16.0.R1
Platforms All

exclude-admin-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Admin group name excluded when LSP is set up
Context **configure** **router** *string* **mpls** **lsp-template** *string* **exclude-admin-group** *reference*
Tree **exclude-admin-group**
Reference **configure** **routing-options** **if-attribute** **admin-group** *string*
Max. Instances 32
Introduced 16.0.R1
Platforms All

fallback-path-computation-method *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Fallback path computation method

Context	configure router <i>string</i> mpls lsp-template <i>string</i> fallback-path-computation-method <i>keyword</i>
Tree	fallback-path-computation-method
Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	21.10.R1
Platforms	All

family *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Address family that specifies template use in SR-TE LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> family <i>keyword</i>
Tree	family
Description	This command specifies the address family for which the LSP template applies in an SR-TE LSP. An LSP template is required for each address family.
Default	ipv4
Options	ipv4, ipv6
Introduced	20.5.R1
Platforms	All

fast-reroute

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the fast-reroute context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> fast-reroute
Tree	fast-reroute
Introduced	16.0.R1

Platforms All

frr-method *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Fast Reroute method for the LSPs that are dynamically created using this LSP template
 Context **configure** *router string mpls lsp-template string fast-reroute frr-method keyword*
 Tree [frr-method](#)
 Default facility
 Options one-to-one, facility
 Introduced 16.0.R1
 Platforms All

hop-limit *number*

Synopsis Total number of hops a detour or backup LSP can take
 Context **configure** *router string mpls lsp-template string fast-reroute hop-limit number*
 Tree [hop-limit](#)
 Range 0 to 255
 Default 16
 Introduced 16.0.R1
 Platforms All

node-protect *boolean*

Synopsis Enable node and link protection for the specified LSP
 Context **configure** *router string mpls lsp-template string fast-reroute node-protect boolean*
 Tree [node-protect](#)
 Default false
 Introduced 16.0.R1
 Platforms All

propagate-admin-group *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> fast-reroute propagate-admin-group <i>boolean</i>
Tree	propagate-admin-group
Default	false
Introduced	16.0.R1
Platforms	All

from (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the ingress router for the LSP template
Context	configure router <i>string</i> mpls lsp-template <i>string</i> from (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	from
Introduced	16.0.R1
Platforms	All

hop-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum hops for an LSP created using this LSP template
Context	configure router <i>string</i> mpls lsp-template <i>string</i> hop-limit <i>number</i>
Tree	hop-limit
Range	2 to 255
Introduced	16.0.R1
Platforms	All

igp-shortcut



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the igp-shortcut context
Context	configure <i>router string mpls lsp-template string igp-shortcut</i>
Tree	<i>igp-shortcut</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of LSP for shortcut or forwarding
Context	configure <i>router string mpls lsp-template string igp-shortcut admin-state keyword</i>
Tree	<i>admin-state</i>
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

lfa-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP usage in LFA SPF
Context	configure <i>router string mpls lsp-template string igp-shortcut lfa-type keyword</i>
Tree	<i>lfa-type</i>
Options	lfa-protect, lfa-only
Notes	The following elements are part of a choice: lfa-type or relative-metric .
Introduced	16.0.R1

Platforms All

relative-metric *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Shortest IGP cost between the endpoints of the LSP plus the configured offset
 Context **configure** *router string mpls lsp-template string igp-shortcut relative-metric number*
 Tree *relative-metric*
 Range -10 to 10
 Notes The following elements are part of a choice: **lfa-type** or **relative-metric**.
 Introduced 16.0.R1
 Platforms All

include-admin-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Admin group name included when LSP is set up
 Context **configure** *router string mpls lsp-template string include-admin-group reference*
 Tree *include-admin-group*
 Reference **configure** *routing-options if-attribute admin-group string*
 Max. 32
 Instances
 Introduced 16.0.R1
 Platforms All

label-stack-reduction *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable label compression for LSP path

Context	configure router <i>string</i> mpls lsp-template <i>string</i> label-stack-reduction <i>boolean</i>
Tree	label-stack-reduction
Default	false
Introduced	19.7.R1
Platforms	All

ldp-over-rsvp *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include this LSP in LDP over RSVP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> ldp-over-rsvp <i>boolean</i>
Tree	ldp-over-rsvp
Default	true
Introduced	16.0.R1
Platforms	All

least-fill *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable least-fill path selection for this LSP template
Context	configure router <i>string</i> mpls lsp-template <i>string</i> least-fill <i>boolean</i>
Tree	least-fill
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Load balancing weight for an MPLS LSP template
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>load-balancing-weight</i> <i>number</i>
Tree	<i>load-balancing-weight</i>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

local-sr-protection *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local SR protection preference for LSP path computation
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>local-sr-protection</i> <i>keyword</i>
Tree	<i>local-sr-protection</i>
Default	preferred
Options	none, preferred, mandatory
Introduced	19.7.R1
Platforms	All

lsp-self-ping *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP Self Ping activation status on RSVP-TE LSP template
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>lsp-self-ping</i> <i>keyword</i>
Tree	<i>lsp-self-ping</i>
Description	When configured, the system uses this setting for the LSP template regardless of the value configured under configure router mpls lsp-self-ping rsvp-te . When unconfigured, the command inherits the value configured under configure router mpls lsp-self-ping rsvp-te .
Options	false, true
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

main-ct-retry-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of retries before reverting to backup CT
Context	configure router <i>string</i> mpls lsp-template <i>string</i> main-ct-retry-limit <i>number</i>
Tree	main-ct-retry-limit
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

max-sr-labels



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the max-sr-labels context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> max-sr-labels
Tree	max-sr-labels
Introduced	16.0.R1
Platforms	All

additional-frr-labels *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of additional overhead labels
Context	configure router <i>string</i> mpls lsp-template <i>string</i> max-sr-labels additional-frr-labels <i>number</i>
Tree	additional-frr-labels
Range	0 to 4
Default	1
Introduced	16.0.R1

Platforms All

label-stack-size *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Size for the maximum segment routing label stack

Context **configure** *router string mpls lsp-template string max-sr-labels label-stack-size number*

Tree [label-stack-size](#)

Range 1 to 11

Introduced 16.0.R1

Platforms All

metric *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis LSP template metric

Context **configure** *router string mpls lsp-template string metric number*

Tree [metric](#)

Range 0 to 16777215

Default 0

Introduced 16.0.R1

Platforms All

metric-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Metric type used for LSP path computation

Context **configure** *router string mpls lsp-template string metric-type keyword*

Tree [metric-type](#)

Default	igp
Options	igp, te
Introduced	19.7.R1
Platforms	All

override-tunnel-elic *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Override any received entropy label capability
Context	configure router <i>string</i> mpls lsp-template <i>string</i> override-tunnel-elic <i>boolean</i>
Tree	override-tunnel-elic
Description	When configured to true , this command allows the system to override any received entropy label capability advertisement. When configured to false , this command disables the override.
Default	false
Introduced	21.10.R1
Platforms	All

path-computation-method *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Path computation method
Context	configure router <i>string</i> mpls lsp-template <i>string</i> path-computation-method <i>keyword</i>
Tree	path-computation-method
Description	This command configures the path computation method of an RSVP-TE or SR-TE LSP. If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the hop-to-label translation is used for for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP.
Options	local-cspf, pce
Introduced	19.7.R1
Platforms	All

path-profile [[profile-id](#)] *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the path-profile list instance
Context	configure router <i>string</i> mpls lsp-template <i>string</i> path-profile <i>number</i>
Tree	path-profile
Description	Commands in this context configure the attributes of the PCE path profile.
Max. Instances	5
Introduced	21.10.R1
Platforms	All

[\[profile-id\]](#) *number*

Synopsis	Profile ID for the specified LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> path-profile <i>number</i>
Tree	path-profile
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

path-group *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Path-group ID for the specified LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> path-profile <i>number</i> path-group <i>number</i>
Tree	path-group
Max. Range	0 to 4294967295
Default	0
Introduced	21.10.R1

Platforms All

pce-associations



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **pce-associations** context

Context **configure** [router](#) [string](#) [mpls](#) [lsp-template](#) [string](#) [pce-associations](#)

Tree [pce-associations](#)

Description Commands in this context configure the LSP binding with one or more PCEP associations.

Introduced 22.5.R1

Platforms All

diversity [[diversity-name](#)] *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Add a list entry for **diversity**

Context **configure** [router](#) [string](#) [mpls](#) [lsp-template](#) [string](#) [pce-associations](#) [diversity](#) *reference*

Tree [diversity](#)

Description Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.

Max. Instances 5

Introduced 22.5.R1

Platforms All

[[diversity-name](#)] *reference*

Synopsis Name of the PCE association configured under the PCC

Context **configure** [router](#) [string](#) [mpls](#) [lsp-template](#) [string](#) [pce-associations](#) [diversity](#) *reference*

Tree [diversity](#)

Reference	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

policy [[policy-name](#)] *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for policy
Context	configure router <i>string</i> mpls lsp-template <i>string</i> pce-associations policy <i>reference</i>
Tree	policy
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

[policy-name] *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	configure router <i>string</i> mpls lsp-template <i>string</i> pce-associations policy <i>reference</i>
Tree	policy
Reference	configure router <i>string</i> pcep pcc pce-associations policy <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

pce-control *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable PCE controlled LSP mode of operation
Context	configure <i>router string mpls lsp-template string pce-control boolean</i>
Tree	<i>pce-control</i>
Description	<p>When configured to true, this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the path following a failure or to re-optimize the path and update the router without a request from the router.</p> <p>When configured to false, the PCE-controlled mode of operation for the LSP has no effect.</p>
Default	false
Introduced	21.10.R1
Platforms	All

pce-report *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable reporting modes to PCE for RSVP-TE or SR-TE LSPs
Context	configure <i>router string mpls lsp-template string pce-report keyword</i>
Tree	<i>pce-report</i>
Options	false, true
Introduced	16.0.R1
Platforms	All

priority

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the priority context
Context	configure <i>router string mpls lsp-template string priority</i>
Tree	<i>priority</i>
Introduced	16.0.R1
Platforms	All

hold-priority *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hold priority when insufficient bandwidth is available to set up LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> priority hold-priority <i>number</i>
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

setup-priority *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Setup priority when insufficient bandwidth is available to set up LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> priority setup-priority <i>number</i>
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

propagate-admin-group *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable admin groups via session attribute object
Context	configure router <i>string</i> mpls lsp-template <i>string</i> propagate-admin-group <i>boolean</i>
Tree	propagate-admin-group

Default	false
Introduced	16.0.R1
Platforms	All

record *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable recording of all hops for this LSP template
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> record <i>boolean</i>
Tree	record
Default	true
Introduced	16.0.R1
Platforms	All

record-label *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable recording of labels at each node or instance
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> record-label <i>boolean</i>
Tree	record-label
Default	true
Introduced	16.0.R1
Platforms	All

retry-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of attempts to re-establish LSP after it fails
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> retry-limit <i>number</i>

Tree	retry-limit
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

retry-timer *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time for LSP re-establishment attempts after failure
Context	configure router <i>string</i> mpls lsp-template <i>string</i> retry-timer <i>number</i>
Tree	retry-timer
Range	1 to 600
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

soft-preemption *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable soft preemption
Context	configure router <i>string</i> mpls lsp-template <i>string</i> soft-preemption <i>boolean</i>
Tree	soft-preemption
Description	<p>When configured to true, the P2MP LSP preemption is governed by the configure router rsvp preemption-timer value.</p> <p>When configured to false, the preemption timer value is set to 0 and the P2MP LSPs are hard preempted.</p> <p>For P2P LSPs, soft preemption is always enabled and cannot be disabled.</p>
Introduced	22.2.R1
Platforms	All

template-id (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Template ID
Context	configure router <i>string</i> mpls lsp-template <i>string</i> template-id (<i>number</i> <i>keyword</i>)
Tree	template-id
Description	This command specifies the value that is signaled in the PCE to identify the LSP template.
Range	1 to 4294967295
Options	default
Introduced	16.0.R5
Platforms	All

type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	LSP template type
Context	configure router <i>string</i> mpls lsp-template <i>string</i> type <i>keyword</i>
Tree	type
Description	This command configures the type of a template that can be referenced by a client application where dynamic LSP creation is required. The LSP template type is mandatory.
Options	p2mp-rsvp, p2p-rsvp-one-hop, p2p-rsvp-mesh, p2p-sr-te-one-hop, p2p-sr-te-mesh, p2p-sr-te-pce-init, p2p-sr-te-on-demand
Notes	This element is mandatory.

Introduced 16.0.R1
Platforms All

vprn-auto-bind *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Include LSP template in auto-bind for VPRN services
Context **configure** *router* *string* *mpls lsp-template* *string* *vprn-auto-bind* *boolean*
Tree [vprn-auto-bind](#)
Default true
Introduced 16.0.R1
Platforms All

max-bypass-associations *number*

Synopsis Maximum number of LSPs associated with a bypass tunnel
Context **configure** *router* *string* *mpls max-bypass-associations* *number*
Tree [max-bypass-associations](#)
Range 100 to 131072
Default 1000
Introduced 16.0.R1
Platforms All

max-bypass-plr-associations *number*

Synopsis Maximum number of PLRs per RSVP-TE bypass LSP
Context **configure** *router* *string* *mpls max-bypass-plr-associations* *number*
Tree [max-bypass-plr-associations](#)
Range 1 to 16
Default 16
Introduced 19.10.R1
Platforms All

mbb-prefer-current-hops *boolean*

Synopsis	Select preference to use the current hops for Make-Before-Break (MBB)
Context	configure <i>router string mpls mbb-prefer-current-hops boolean</i>
Tree	mbb-prefer-current-hops
Default	false
Introduced	16.0.R1
Platforms	All

p2mp-resignal-timer *number*

Synopsis	Resignal timer for P2MP LSPs
Context	configure <i>router string mpls p2mp-resignal-timer number</i>
Tree	p2mp-resignal-timer
Range	60 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

p2mp-s2l-fast-retry *number*

Synopsis	Fast retry timer for P2MP S2L paths
Context	configure <i>router string mpls p2mp-s2l-fast-retry number</i>
Tree	p2mp-s2l-fast-retry
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

p2p-active-path-fast-retry *number*

Synopsis	Fast retry timer for P2P active paths
Context	configure <i>router string mpls p2p-active-path-fast-retry number</i>
Tree	p2p-active-path-fast-retry
Range	1 to 10

Units	seconds
Introduced	16.0.R1
Platforms	All

path [*path-name*] *string*

Synopsis	Enter the path list instance
Context	configure <i>router string mpls path string</i>
Tree	<i>path</i>
Max. Instances	65535
Introduced	16.0.R1
Platforms	All

[path-name] *string*

Synopsis	Name for this LSP path
Context	configure <i>router string mpls path string</i>
Tree	<i>path</i>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the path used for LSPs
Context	configure <i>router string mpls path string admin-state keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

hop [hop-index] number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the hop list instance
Context	configure router string mpls path string hop number
Tree	hop
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[hop-index] number

Synopsis	Index to identify a particular hop
Context	configure router string mpls path string hop number
Tree	hop
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ip-address (ipv4-address-no-zone | ipv6-address-no-zone)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the transit router
Context	configure router string mpls path string hop number ip-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	ip-address

Notes	The following elements are part of a mandatory choice: (ip-address and type) or sid-label .
Introduced	16.0.R1
Platforms	All

sid-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS label for tunnel hop in the path of an SR-TE LSP
Context	configure <i>router string mpls path string hop number sid-label number</i>
Tree	<i>sid-label</i>
Range	32 to 1048575
Notes	The following elements are part of a mandatory choice: (ip-address and type) or sid-label .
Introduced	19.10.R1
Platforms	All

type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel hop type
Context	configure <i>router string mpls path string hop number type keyword</i>
Tree	<i>type</i>
Options	strict, loose
Notes	The following elements are part of a mandatory choice: (ip-address and type) or sid-label .
Introduced	16.0.R1
Platforms	All

pce-init-lsp

Synopsis	Enable the pce-init-lsp context
Context	configure <i>router string mpls pce-init-lsp</i>
Tree	pce-init-lsp
Introduced	16.0.R5
Platforms	All

sr-te

Synopsis	Enable the sr-te context
Context	configure <i>router string mpls pce-init-lsp sr-te</i>
Tree	sr-te
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of SR-TE PCE-initiated LSP support
Context	configure <i>router string mpls pce-init-lsp sr-te admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R5
Platforms	All

pce-report

Synopsis	Enter the pce-report context
Context	configure <i>router string mpls pce-report</i>
Tree	pce-report
Introduced	16.0.R1
Platforms	All

rsvp-te boolean

Synopsis	Allow PCE reporting for all TE LSPs of RSVP-TE type
Context	configure router <i>string</i> mpls pce-report rsvp-te <i>boolean</i>
Tree	rsvp-te
Default	false
Introduced	16.0.R1
Platforms	All

sr-te boolean

Synopsis	Allow PCE reporting for all TE LSPs of SR-TE type
Context	configure router <i>string</i> mpls pce-report sr-te <i>boolean</i>
Tree	sr-te
Default	false
Introduced	16.0.R1
Platforms	All

resignal-on-igp-overload boolean

Synopsis	Resignal all RSVP-TE LSPs upon IGP overload
Context	configure router <i>string</i> mpls resignal-on-igp-overload <i>boolean</i>
Tree	resignal-on-igp-overload
Description	<p>When configured to true, the receipt of the IS-IS overload bit in the TE-DB triggers the immediate resignaling of all RSVP-TE LSPs. MPLS forces the expiry of the resignal timer and the TE-DB computes a new CSPF for each RSVP-TE LSP active path. The re-optimization causes the immediate transition of RSVP-TE LSP paths away from the IS-IS node in overload using the MBB operation.</p> <p>This command cannot be configured to true when the retry-on-igp-overload command is configured to true.</p> <p>When configured to false, the default behavior is maintained where MBB re-optimization occurs only when a timer-based resignal is performed or a manual resignal is executed.</p>
Default	false
Introduced	20.10.R1
Platforms	All

resignal-timer *number*

Synopsis	Resignal timer for RSVP LSPs
Context	configure router <i>string</i> mpls resignal-timer <i>number</i>
Tree	resignal-timer
Range	30 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

retry-on-igp-overload *boolean*

Synopsis	Tear down LSPs when IGP is in overload state
Context	configure router <i>string</i> mpls retry-on-igp-overload <i>boolean</i>
Tree	retry-on-igp-overload
Default	false
Introduced	16.0.R1
Platforms	All

secondary-fast-retry-timer *number*

Synopsis	Fast retry timer for secondary paths
Context	configure router <i>string</i> mpls secondary-fast-retry-timer <i>number</i>
Tree	secondary-fast-retry-timer
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

shortcut-local-ttl-propagate *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	configure router <i>string</i> mpls shortcut-local-ttl-propagate <i>boolean</i>
Tree	shortcut-local-ttl-propagate
Default	true
Introduced	16.0.R1

Platforms All

shortcut-transit-ttl-propagate *boolean*

Synopsis Propagate TTL over LSP shortcut for local packets for transit packets
Context **configure** [router](#) *string* [mpls](#) **shortcut-transit-ttl-propagate** *boolean*
Tree [shortcut-transit-ttl-propagate](#)
Default true
Introduced 16.0.R1
Platforms All

sr-te-resignal

Synopsis Enter the **sr-te-resignal** context
Context **configure** [router](#) *string* [mpls](#) **sr-te-resignal**
Tree [sr-te-resignal](#)
Introduced 19.10.R1
Platforms All

resignal-on-igp-event *boolean*

Synopsis Re-optimize SR-TE LSPs upon IGP link events
Context **configure** [router](#) *string* [mpls](#) **sr-te-resignal** **resignal-on-igp-event** *boolean*
Tree [resignal-on-igp-event](#)
Description When configured to **true**, the system signals the re-optimization of all SR-TE LSPs when one or more IGP link down events are received in theTE-DB. The triggered behavior is identical to the timer-based or resignal behavior or the manual-based resignal behavior used with a delay option. MPLS forces the expiry of the resignal timer and all active paths of all SR-TE LSPs are re-evaluated.
When configured to **false**, re-optimization is not triggered by IGP events.
Default false
Introduced 19.10.R1
Platforms All

resignal-timer *number*

Synopsis	Resignal timer for SR-TE LSPs
Context	configure router <i>string</i> mpls sr-te-resignal resignal-timer <i>number</i>
Tree	resignal-timer
Description	This command configures the time the system waits before signaling the re-optimization of all SR-TE LSPs.
Range	30 to 10080
Units	minutes
Introduced	19.10.R1
Platforms	All

srlg-database

Synopsis	Enter the srlg-database context
Context	configure router <i>string</i> mpls srlg-database
Tree	srlg-database
Introduced	16.0.R1
Platforms	All

router-id [**router-address**] *string*

Synopsis	Enter the router-id list instance
Context	configure router <i>string</i> mpls srlg-database router-id <i>string</i>
Tree	router-id
Introduced	16.0.R1
Platforms	All

[router-address] *string*

Synopsis	Router ID for the system
Context	configure router <i>string</i> mpls srlg-database router-id <i>string</i>
Tree	router-id
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface entry
Context	configure router <i>string</i> mpls srlg-database router-id <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

interface [**interface-address**] *string* **srlg-group** *reference*

Synopsis	Add a list entry for interface
Context	configure router <i>string</i> mpls srlg-database router-id <i>string</i> interface <i>string</i> srlg-group <i>reference</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-address**] *string*

Synopsis	IP address of the interface
Context	configure router <i>string</i> mpls srlg-database router-id <i>string</i> interface <i>string</i> srlg-group <i>reference</i>
Tree	interface
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

srlg-group *reference*

Synopsis	SRLG group name
Context	configure router <i>string</i> mpls srlg-database router-id <i>string</i> interface <i>string</i> srlg-group <i>reference</i>
Tree	interface
Reference	configure routing-options if-attribute srlg-group <i>string</i>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

srlg-frr *keyword*

Synopsis	Use of SRLG constraint for FRR path computation
Context	configure router <i>string</i> mpls srlg-frr <i>keyword</i>
Tree	srlg-frr
Options	loose, strict
Introduced	16.0.R1
Platforms	All

static-lsp [**lsp-name**] *string*

Synopsis	Enter the static-lsp list instance
Context	configure router <i>string</i> mpls static-lsp <i>string</i>
Tree	static-lsp
Max. Instances	1000
Introduced	16.0.R1
Platforms	All

[**lsp-name**] *string*

Synopsis	Labeled Switch path name
Context	configure router <i>string</i> mpls static-lsp <i>string</i>
Tree	static-lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static LSP
Context	configure <i>router</i> <i>string</i> <i>mpls static-lsp</i> <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

metric *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS static LSP metric to select an LSP
Context	configure <i>router</i> <i>string</i> <i>mpls static-lsp</i> <i>string</i> metric <i>number</i>
Tree	metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

push



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the push context
Context	configure <i>router</i> <i>string</i> <i>mpls static-lsp</i> <i>string</i> push
Tree	push
Introduced	16.0.R1
Platforms	All

next-hop *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address for the next hop
Context	configure <i>router string mpls static-lsp string push next-hop string</i>
Tree	<i>next-hop</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

out-label (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Push specific label onto the top of the outgoing packet's label stack
Context	configure <i>router string mpls static-lsp string push out-label (number keyword)</i>
Tree	<i>out-label</i>
Range	16 to 1048575
Options	implicit-null-label
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

to *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination IP address or the egress router for the LSP
Context	configure <i>router string mpls static-lsp string to string</i>
Tree	<i>to</i>
Introduced	16.0.R1

Platforms All

static-lsp-fast-retry *number*

Synopsis Fast retry timer for static LSPs

Context **configure** *router string mpls static-lsp-fast-retry number*

Tree [static-lsp-fast-retry](#)

Range 1 to 30

Default 30

Units seconds

Introduced 16.0.R1

Platforms All

strict-ero-nhop-direct-resolution *boolean*

Synopsis Resolves RSVP-TE LSP ERO to local and host routes only

Context **configure** *router string mpls strict-ero-nhop-direct-resolution boolean*

Tree [strict-ero-nhop-direct-resolution](#)

Description When configured to **true**, the router enables the strict Explicit Route Object (ERO) next-hop direct resolution. The feature restricts the routes used to resolve the next hop of an ERO address to local and host routes. This command avoids using a next hop over a parallel link when a half link is up in the routing table.

This command applies to an ERO when all of the following conditions are met:

- the ERO next hop is an IPv4 address
- the ERO object is a strict hop
- the IPv4 address matches the primary subnet of a local numbered interface

If no such route exists, RSVP rejects the PATH message with ErrCode = Routing Error (24) and SubErrCode = Bad Strict Node (2).

When configured to **false**, the router disables the strict ERO next-hop direct resolution.

Default false

Introduced 22.5.R1

Platforms All

tunnel-table-pref

Synopsis Enter the **tunnel-table-pref** context

Context	configure <i>router string mpls tunnel-table-pref</i>
Tree	tunnel-table-pref
Description	Commands in this context configure the tunnel table preference for RSVP-TE LSP and SR-TE LSP tunnel types.
Introduced	21.10.R1
Platforms	All

rsvp-te number

Synopsis	RSVP-TE tunnel table preference
Context	configure <i>router string mpls tunnel-table-pref rsvp-te number</i>
Tree	rsvp-te
Description	<p>This command configures the tunnel table preference for RSVP-TE LSP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>Nokia recommends that tunnel types have unique preference values. In a situation where two or more tunnel types are set to the same preference value, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	7
Introduced	21.10.R1
Platforms	All

sr-te number

Synopsis	SR-TE tunnel table preference
Context	configure <i>router string mpls tunnel-table-pref sr-te number</i>
Tree	sr-te
Description	<p>This command configures the tunnel table preference for SR-TE LSP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p>

It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	8
Introduced	21.10.R1
Platforms	All

user-srlg-db *boolean*

Synopsis	Enable the use of user SRLG database
Context	configure router <i>string</i> mpls user-srlg-db <i>boolean</i>
Tree	user-srlg-db
Default	false
Introduced	16.0.R1
Platforms	All

mpls-labels

Synopsis	Enter the mpls-labels context
Context	configure router <i>string</i> mpls-labels
Tree	mpls-labels
Introduced	16.0.R1
Platforms	All

bgp-labels-hold-timer *number*

Synopsis	BGP labels hold timer for the ingress router
Context	configure router <i>string</i> mpls-labels bgp-labels-hold-timer <i>number</i>
Tree	bgp-labels-hold-timer
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

reserved-label-block [[label-block-name](#)] *string*

Synopsis	Enter the reserved-label-block list instance
Context	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>
Tree	reserved-label-block
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[label-block-name] *string*

Synopsis	Name for the reserved label block
Context	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>
Tree	reserved-label-block
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end-label *number*

Synopsis	End label for the reserved label block
Context	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i> end-label <i>number</i>
Tree	end-label
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

start-label *number*

Synopsis	Start label value for the reserved label block
Context	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i> start-label <i>number</i>
Tree	start-label
Range	32 to 1048575
Introduced	16.0.R1

Platforms All

sr-labels

Synopsis Enter the **sr-labels** context
Context **configure** *router* *string* *mpls-labels* *sr-labels*
Tree [sr-labels](#)
Introduced 16.0.R1
Platforms All

end number

Synopsis End label for the SRGB
Context **configure** *router* *string* *mpls-labels* *sr-labels* *end* *number*
Tree [end](#)
Range 32 to 1048575
Introduced 16.0.R1
Platforms All

start number

Synopsis Start label value for the SRGB
Context **configure** *router* *string* *mpls-labels* *sr-labels* *start* *number*
Tree [start](#)
Range 32 to 1048575
Introduced 16.0.R1
Platforms All

static-label-range number

Synopsis Static label range on the ingress router
Context **configure** *router* *string* *mpls-labels* *static-label-range* *number*
Tree [static-label-range](#)
Range 0 to 1048544
Default 18400

Introduced 16.0.R1
Platforms All

msdp

Synopsis Enable the **msdp** context
Context **configure router string msdp**
Tree **msdp**
Introduced 19.10.R1
Platforms All

active-source-limit number

Synopsis Maximum number of active messages accepted by MSDP
Context **configure router string msdp active-source-limit number**
Tree **active-source-limit**
Range 0 to 1000000
Introduced 19.10.R1
Platforms All

admin-state keyword

Synopsis Administrative state of MSDP
Context **configure router string msdp admin-state keyword**
Tree **admin-state**
Default enable
Options enable, disable
Introduced 19.10.R1
Platforms All

data-encapsulation boolean

Synopsis Enable encapsulation of multicast data used by MSDP
Context **configure router string msdp data-encapsulation boolean**
Tree **data-encapsulation**

Default	true
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	configure router <i>string</i> msdp export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

group [[name](#)] *string*

Synopsis	Enter the group list instance
Context	configure router <i>string</i> msdp group <i>string</i>
Tree	group
Introduced	19.10.R1
Platforms	All

[name] *string*

Synopsis	MSDP group name
Context	configure router <i>string</i> msdp group <i>string</i>
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	configure router <i>string</i> msdp group <i>string</i> active-source-limit <i>number</i>
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	configure router <i>string</i> msdp group <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	configure router <i>string</i> msdp group <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policies to import Source Active state from the Source Active list into MSDP
Context	configure router <i>string</i> msdp group <i>string</i> import-policy <i>reference</i>
Tree	import-policy

Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	configure router <i>string</i> msdp group <i>string</i> local-address <i>string</i>
Tree	local-address
Introduced	19.10.R1
Platforms	All

mode *keyword*

Synopsis	Topology of groups of peers
Context	configure router <i>string</i> msdp group <i>string</i> mode <i>keyword</i>
Tree	mode
Default	standard
Options	standard, mesh-group
Introduced	19.10.R1
Platforms	All

peer [[ip-address](#)] *string*

Synopsis	Enter the peer list instance
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i>
Tree	peer
Introduced	19.10.R1
Platforms	All

[ip-address] string

Synopsis	IP address of the remote MSDP router for peering
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i>
Tree	peer
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit number

Synopsis	Maximum number of active messages accepted by MSDP
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> active-source-limit <i>number</i>
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of MSDP
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

authentication-key string

Synopsis	MD5 authentication key for the MSDP peering session
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

default-peer *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> default-peer <i>boolean</i>
Tree	default-peer
Default	false
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policies to import Source Active state from the Source Active list into MSDP
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> local-address <i>string</i>
Tree	local-address
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the receive-message-rate context
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> receive-message-rate rate <i>number</i>
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> receive-message-rate threshold <i>number</i>
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> receive-message-rate time <i>number</i>
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the receive-message-rate context
Context	configure router <i>string</i> msdp group <i>string</i> receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	configure router <i>string</i> msdp group <i>string</i> receive-message-rate rate <i>number</i>
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	configure router <i>string</i> msdp group <i>string</i> receive-message-rate threshold <i>number</i>
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	configure <i>router</i> <i>string</i> <i>msdp</i> <i>group</i> <i>string</i> <i>receive-message-rate</i> <i>time</i> <i>number</i>
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policies to import Source Active state from the Source Active list into MSDP
Context	configure <i>router</i> <i>string</i> <i>msdp</i> <i>import-policy</i> <i>reference</i>
Tree	import-policy
Reference	configure <i>policy-options</i> <i>policy-statement</i> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	configure <i>router</i> <i>string</i> <i>msdp</i> <i>local-address</i> <i>string</i>
Tree	local-address
Introduced	19.10.R1
Platforms	All

peer [*ip-address*] *string*

Synopsis	Enter the peer list instance
Context	configure <i>router</i> <i>string</i> <i>msdp</i> <i>peer</i> <i>string</i>
Tree	peer

Introduced 19.10.R1
Platforms All

[ip-address] *string*

Synopsis IP address of the remote MSDP router for peering
Context **configure** *router string msdp peer string*
Tree *peer*
Notes This element is part of a list key.
Introduced 19.10.R1
Platforms All

active-source-limit *number*

Synopsis Maximum number of active messages accepted by MSDP
Context **configure** *router string msdp peer string active-source-limit number*
Tree *active-source-limit*
Range 0 to 1000000
Introduced 19.10.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of MSDP
Context **configure** *router string msdp peer string admin-state keyword*
Tree *admin-state*
Default enable
Options enable, disable
Introduced 19.10.R1
Platforms All

authentication-key *string*

Synopsis MD5 authentication key for the MSDP peering session
Context **configure** *router string msdp peer string authentication-key string*

Tree	authentication-key
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

default-peer *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	configure router <i>string</i> msdp peer <i>string</i> default-peer <i>boolean</i>
Tree	default-peer
Default	false
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	configure router <i>string</i> msdp peer <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policies to import Source Active state from the Source Active list into MSDP
Context	configure router <i>string</i> msdp peer <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.

Introduced 19.10.R1
Platforms All

local-address *string*

Synopsis Local end of an MSDP session
Context **configure** *router string msdp peer string local-address string*
Tree [local-address](#)
Introduced 19.10.R1
Platforms All

receive-message-rate

Synopsis Enter the **receive-message-rate** context
Context **configure** *router string msdp peer string receive-message-rate*
Tree [receive-message-rate](#)
Introduced 19.10.R1
Platforms All

rate *number*

Synopsis Number of MSDP messages read from the TCP session
Context **configure** *router string msdp peer string receive-message-rate rate number*
Tree [rate](#)
Range 10 to 10000
Introduced 19.10.R1
Platforms All

threshold *number*

Synopsis Limit for MSDP messages read from the TCP session
Context **configure** *router string msdp peer string receive-message-rate threshold number*
Tree [threshold](#)
Range 1 to 1000000
Introduced 19.10.R1

Platforms All

time *number*

Synopsis Limit of MSDP messages read from the TCP session
Context **configure** *router string msdp peer string receive-message-rate time number*
Tree [time](#)
Range 1 to 600
Units seconds
Introduced 19.10.R1
Platforms All

receive-message-rate

Synopsis Enter the **receive-message-rate** context
Context **configure** *router string msdp receive-message-rate*
Tree [receive-message-rate](#)
Introduced 19.10.R1
Platforms All

rate *number*

Synopsis Number of MSDP messages read from the TCP session
Context **configure** *router string msdp receive-message-rate rate number*
Tree [rate](#)
Range 10 to 10000
Introduced 19.10.R1
Platforms All

threshold *number*

Synopsis Limit for MSDP messages read from the TCP session
Context **configure** *router string msdp receive-message-rate threshold number*
Tree [threshold](#)
Range 1 to 1000000

Introduced 19.10.R1
Platforms All

time *number*

Synopsis Limit of MSDP messages read from the TCP session
Context **configure** *router string msdp receive-message-rate time number*
Tree *time*
Range 1 to 600
Units seconds
Introduced 19.10.R1
Platforms All

rpf-table *keyword*

Synopsis Route tables for RPF lookup
Context **configure** *router string msdp rpf-table keyword*
Tree *rpf-table*
Default *rtable-u*
Options *rtable-m, rtable-u, both*
Introduced 19.10.R1
Platforms All

source [*ip-prefix*] *string*

Synopsis Enter the **source** list instance
Context **configure** *router string msdp source string*
Tree *source*
Introduced 19.10.R1
Platforms All

[*ip-prefix*] *string*

Synopsis Source IP address for accepted active source messages
Context **configure** *router string msdp source string*

Tree	source
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Number of active source messages accepted by MSDP
Context	configure router <i>string</i> msdp source <i>string</i> active-source-limit <i>number</i>
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

source-active-cache-lifetime *number*

Synopsis	Lifetime given to SA cache entries when created or refreshed
Context	configure router <i>string</i> msdp source-active-cache-lifetime <i>number</i>
Tree	source-active-cache-lifetime
Range	90 to 600
Default	90
Units	seconds
Introduced	19.10.R1
Platforms	All

mss-adjust

Synopsis	Enable the mss-adjust context
Context	configure router <i>string</i> mss-adjust
Tree	mss-adjust
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group used for TCP-MSS adjustment
Context	configure <i>router</i> <i>string</i> <i>mss-adjust</i> <i>nat-group</i> <i>number</i>
Tree	nat-group
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

segment-size *number*

Synopsis	TCP-MSS option value in transmitted TCP SYN requests
Context	configure <i>router</i> <i>string</i> <i>mss-adjust</i> <i>segment-size</i> <i>number</i>
Tree	segment-size
Range	160 to 10240
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtrace2

Synopsis	Enter the mtrace2 context
Context	configure <i>router</i> <i>string</i> <i>mtrace2</i>
Tree	mtrace2
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of multicast path tracing
Context	configure <i>router</i> <i>string</i> <i>mtrace2</i> <i>admin-state</i> <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

udp-port *number*

Synopsis	Destination UDP port for mstat2 mtrace2 test, or unsolicited mstat2 mtrace2 packets
Context	configure router <i>string</i> mtrace2 udp-port <i>number</i>
Tree	udp-port
Range	1024 to 49151
Default	5000
Introduced	16.0.R1
Platforms	All

multicast-info-policy *reference*

Synopsis	Multicast policy name for virtual router
Context	configure router <i>string</i> multicast-info-policy <i>reference</i>
Tree	multicast-info-policy
Reference	configure multicast-management multicast-info-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

nat

Synopsis	Enable the nat context
Context	configure router <i>string</i> nat
Tree	nat
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside

Synopsis	Enter the inside context
Context	configure router <i>string</i> nat inside
Tree	inside
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2-aware

Synopsis	Enter the I2-aware context
Context	configure router <i>string</i> nat inside I2-aware
Tree	I2-aware
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscribers [[prefix](#)] *string*

Synopsis	Add a list entry for subscribers
Context	configure router <i>string</i> nat inside I2-aware subscribers <i>string</i>
Tree	subscribers
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[prefix](#)] *string*

Synopsis	Layer-2 Aware NAT subscriber prefix
Context	configure router <i>string</i> nat inside I2-aware subscribers <i>string</i>
Tree	subscribers
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the large-scale context
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Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#)
Tree [large-scale](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis Enter the **dnat-only** context
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dnat-only](#)
Tree [dnat-only](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-prefix-list *reference*

Synopsis NAT prefix list that contains source IP addresses
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dnat-only](#) [source-prefix-list](#) *reference*
Tree [source-prefix-list](#)
Reference **configure** [service](#) [nat](#) [prefix-list](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite

Synopsis Enter the **dual-stack-lite** context
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#)
Tree [dual-stack-lite](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of Dual Stack Lite
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [admin-state](#) *keyword*
Tree [admin-state](#)

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis	Enter the deterministic context
Context	configure router <i>string</i> nat inside large-scale dual-stack-lite deterministic
Tree	deterministic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-map [[source-prefix](#)] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enter the policy-map list instance
Context	configure router <i>string</i> nat inside large-scale dual-stack-lite deterministic policy-map <i>string</i>
Tree	policy-map
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[source-prefix](#)] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Source prefix that adds traffic to NAT pool
Context	configure router <i>string</i> nat inside large-scale dual-stack-lite deterministic policy-map <i>string</i>
Tree	policy-map
Notes	This element is part of a list key.
Introduced	16.0.R1

Deprecated 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis Administrative state of the prefix
Context **configure** [router](#) [string](#) [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [deterministic](#) [policy-map](#)
[string](#) **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Deprecated 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [[from](#)] [string](#) **to** [string](#)



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **map** list instance
Context **configure** [router](#) [string](#) [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [deterministic](#) [policy-map](#)
[string](#) **map** [string](#) **to** [string](#)
Tree [map](#)
Introduced 16.0.R1
Deprecated 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[from] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Beginning of the range for IPv6 addresses
Context	configure router string nat inside large-scale dual-stack-lite deterministic policy-map string map string to string
Tree	map
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Inside end IPv6 address to map to outside IP addresses
Context	configure router string nat inside large-scale dual-stack-lite deterministic policy-map string map string to string
Tree	map
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address *string*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	configure router string nat inside large-scale dual-stack-lite deterministic policy-map string map string to string first-outside-address string
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT policy
Context	configure router string nat inside large-scale dual-stack-lite deterministic policy-map string nat-policy reference
Tree	nat-policy
Reference	configure service nat nat-policy string
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-map [[source-prefix](#)] *string nat-policy reference*

Synopsis	Enter the prefix-map list instance
Context	configure router <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference</i>
Tree	prefix-map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[source-prefix] *string*

Synopsis	List containing source IP addresses on the private side
Context	configure router <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference</i>
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy
Context	configure router <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference</i>
Tree	prefix-map
Reference	configure service nat nat-policy <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	configure router <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference admin-state keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [from] string to string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the map list instance
Context	configure router string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string
Tree	map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[from] string

Synopsis	Beginning of the range for IPv6 addresses
Context	configure router string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to string

Synopsis	End of the range for IPv6 addresses
Context	configure router string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Outside IP address mapped to inside IP address range

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [deterministic](#) [prefix-map](#) *string* [nat-policy](#) [reference](#) [map](#) *string* [to](#) *string* **first-outside-address** *string*

Tree [first-outside-address](#)

Notes This element is mandatory.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

endpoint [[address](#)] *string*

Synopsis Enter the **endpoint** list instance

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [endpoint](#) *string*

Tree [endpoint](#)

Max. Instances 128

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[address] *string*

Synopsis Dual Stack Lite IPv6 address

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [endpoint](#) *string*

Tree [endpoint](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-fragmentation *keyword*

Synopsis Fragmentation control of the AFTR originated downstream IPv6 traffic

Context **configure** **router** *string* **nat** **inside** **large-scale** **dual-stack-lite** **endpoint** *string* **ip-fragmentation** *keyword*

Tree **ip-fragmentation**

Options fragment-ipv6, fragment-ipv6-unless-ipv4-df-set

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min-first-fragment-size-rx *number*

Synopsis Minimum MTU size for upstream packets

Context **configure** **router** *string* **nat** **inside** **large-scale** **dual-stack-lite** **endpoint** *string* **min-first-fragment-size-rx** *number*

Tree **min-first-fragment-size-rx**

Description This command configures the minimum MTU size for the first fragment in the upstream direction. This command can be used to enable processing of first IPv6 fragments smaller than 1280 bytes. RFC 8200 recommends the minimum MTU in IPv6 be 1280 bytes which allows fragmentation only for packets that are larger than 1280 bytes. If a first fragment is smaller than 1280 bytes, DS-lite implementation in the SR OS, by default, drops the first fragment.

Range 512 to 1280

Default 1280

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassemble *boolean*

Synopsis Reassembly of IPv6 payload datagrams

Context **configure** **router** *string* **nat** **inside** **large-scale** **dual-stack-lite** **endpoint** *string* **reassemble** *boolean*

Tree **reassemble**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-mtu *number*

Synopsis DS-Lite tunnel MTU for this address

Context **configure** **router** *string* **nat** **inside** **large-scale** **dual-stack-lite** **endpoint** *string* **tunnel-mtu** *number*

Tree **tunnel-mtu**

Description This command configures the Dual Stack Lite (DS-Lite) tunnel MTU for this address.

Range 464 to 9212

Default 1500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-subscriber-limit *number*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Largest value for all subscriber limits in each deterministic pool

Context **configure** **router** *string* **nat** **inside** **large-scale** **dual-stack-lite** **max-subscriber-limit** *number*

Tree **max-subscriber-limit**

Range 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 | 4096 | 8192 | 16384 | 32768

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-prefix-length *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis IPv6 prefix length of the Dual Stack Lite subscribers

Context	configure <i>router string nat inside large-scale dual-stack-lite subscriber-prefix-length number</i>
Tree	subscriber-prefix-length
Range	32 to 64 128
Default	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy for LSN
Context	configure <i>router string nat inside large-scale nat-policy reference</i>
Tree	nat-policy
Reference	configure <i>service nat nat-policy string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44

Synopsis	Enter the nat44 context
Context	configure <i>router string nat inside large-scale nat44</i>
Tree	nat44
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-prefix [[ip-prefix-length](#)] *string*

Synopsis	Enter the destination-prefix list instance
Context	configure <i>router string nat inside large-scale nat44 destination-prefix string</i>
Tree	destination-prefix
Max. Instances	6144
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-prefix-length] *string*

Synopsis Traffic sent to destinations within this prefix will be NATed
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [nat44](#) [destination-prefix](#) *string*
Tree [destination-prefix](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis NAT policy
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [nat44](#) [destination-prefix](#) *string* [nat-policy](#) *reference*
Tree [nat-policy](#)
Reference **configure** [service](#) [nat](#) [nat-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis Enter the **deterministic** context
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [nat44](#) [deterministic](#)
Tree [deterministic](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-map [[source-prefix](#)] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enter the policy-map list instance
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic policy-map <i>string</i>
Tree	policy-map
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[source-prefix] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Source prefix that adds traffic to NAT pool
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic policy-map <i>string</i>
Tree	policy-map
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Administrative state of the prefix
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic policy-map <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Deprecated 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [**from**] *string to string*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **map** list instance
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [nat44](#) [deterministic](#) [policy-map](#) *string* **map** *string to string*
Tree [map](#)
Introduced 16.0.R1
Deprecated 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[from] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis Beginning of the range for IPv4 addresses
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [nat44](#) [deterministic](#) [policy-map](#) *string* **map** *string to string*
Tree [map](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Deprecated 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to string



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	End of the range for IPv4 addresses
Context	configure router string nat inside large-scale nat44 deterministic policy-map string map string to string
Tree	map
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address string



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	configure router string nat inside large-scale nat44 deterministic policy-map string map string to string first-outside-address string
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT policy
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic policy-map <i>string</i> nat-policy <i>reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-map [[source-prefix](#)] *string* [nat-policy](#) *reference*

Synopsis	Enter the prefix-map list instance
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy <i>reference</i>
Tree	prefix-map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[source-prefix\]](#) *string*

Synopsis	Traffic sent from sources within this prefix will be NATed
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Context	configure router <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy reference
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy reference
Tree	prefix-map
Reference	configure service nat nat-policy <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy reference admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [[from](#)] *string to string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the map list instance
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Context	configure <i>router string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i>
Tree	map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[from] *string*

Synopsis	Beginning of the range for IPv4 addresses
Context	configure <i>router string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i>
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to *string*

Synopsis	End of the range for IPv4 addresses
Context	configure <i>router string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i>
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
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Context	configure <i>router</i> <i>string</i> <i>nat</i> <i>inside</i> <i>large-scale</i> <i>nat44</i> <i>deterministic</i> <i>prefix-map</i> <i>string</i> <i>nat-policy</i> <i>reference</i> <i>map</i> <i>string</i> <i>to</i> <i>string</i> <i>first-outside-address</i> <i>string</i>
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-subscriber-limit *number*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	configure <i>router</i> <i>string</i> <i>nat</i> <i>inside</i> <i>large-scale</i> <i>nat44</i> <i>max-subscriber-limit</i> <i>number</i>
Tree	max-subscriber-limit
Range	1 2 4 8 16 32 64 128 256 512 1024 2048 4096 8192 16384 32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-import *reference*

Synopsis	Import BGP-VPN routes in NAT inside routing context
Context	configure <i>router</i> <i>string</i> <i>nat</i> <i>inside</i> <i>large-scale</i> <i>nat44</i> <i>nat-import</i> <i>reference</i>
Tree	nat-import
Description	<p>This command references an import policy to determine the routes that should be installed in the routing table as NAT routes, which are used to steer traffic to NAT.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route is associated with a NAT policy that maps traffic destined into a NAT pool and outside routing context. If the NAT policy is not explicitly configured in the import route-policy, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into NAT inside routing context must be configured with action-type accept in the route policy.</p>
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat64

Synopsis Enable the **nat64** context
Context **configure** *router string nat inside large-scale nat64*
Tree [nat64](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of NAT64
Context **configure** *router string nat inside large-scale nat64 admin-state keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-zero-ipv4-checksum *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Drop UDP datagrams with zero IPv4 checksum
Context **configure** *router string nat inside large-scale nat64 drop-zero-ipv4-checksum boolean*
Tree [drop-zero-ipv4-checksum](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

insert-ipv6-fragment-header *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include IPv6 fragment header to indicate that the sender allows fragmentation
Context	configure router <i>string</i> nat inside large-scale nat64 insert-ipv6-fragment-header <i>boolean</i>
Tree	insert-ipv6-fragment-header
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-fragmentation *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Control fragmentation of originated downstream IPv6 traffic
Context	configure router <i>string</i> nat inside large-scale nat64 ip-fragmentation <i>keyword</i>
Tree	ip-fragmentation
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the IPv6 downstream packet in NAT64
Context	configure router <i>string</i> nat inside large-scale nat64 ipv6-mtu <i>number</i>
Tree	ipv6-mtu
Range	1280 to 9212
Default	1520
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis IPv6 prefix to derive the IPv6 address from the IPv4 address
Context **configure router string nat inside large-scale nat64 prefix string**
Tree **prefix**
Default 64:ff9b::/96
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-prefix-length number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis IPv6 prefix length for the NAT64 subscribers
Context **configure router string nat inside large-scale nat64 subscriber-prefix-length number**
Tree **subscriber-prefix-length**
Range 32 to 64 | 128
Default 128
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tos



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the tos context
Context	configure router string nat inside large-scale nat64 tos
Tree	tos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

downstream



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the downstream context
Context	configure router string nat inside large-scale nat64 tos downstream
Tree	downstream
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-ipv4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy TOS/DSCP bits from the incoming IPv4 frame to the outgoing IPv6 frame
Context	configure router string nat inside large-scale nat64 tos downstream use-ipv4 boolean
Tree	use-ipv4
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upstream



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the upstream context
Context	configure router string nat inside large-scale nat64 tos upstream
Tree	upstream
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

set-tos (*keyword* | *number*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TOS/DSCP bits in IPv4 frame in the upstream direction
Context	configure router string nat inside large-scale nat64 tos upstream set-tos (<i>keyword</i> <i>number</i>)
Tree	set-tos
Range	0 to 255
Default	use-ipv6
Options	use-ipv6
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the redundancy context
Context	configure router string nat inside large-scale redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer *string*

Synopsis	IP address of the NAT redundancy peer for this virtual router instance
Context	configure router <i>string</i> nat inside large-scale redundancy peer <i>string</i>
Tree	peer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer6 *string*

Synopsis	IPv6 address of the NAT redundancy peer for this virtual router instance
Context	configure router <i>string</i> nat inside large-scale redundancy peer6 <i>string</i>
Tree	peer6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

steering-route *string*

Synopsis	IP address and prefix length of the steering route
Context	configure router <i>string</i> nat inside large-scale redundancy steering-route <i>string</i>
Tree	steering-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-identification

Synopsis	Enter the subscriber-identification context
Context	configure router <i>string</i> nat inside large-scale subscriber-identification
Tree	subscriber-identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of subscriber identification
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Context	configure router string nat inside large-scale subscriber-identification admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

attribute

Synopsis	Enter the attribute context
Context	configure router string nat inside large-scale subscriber-identification attribute
Tree	attribute
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	RADIUS attribute used as subscriber identifier
Context	configure router string nat inside large-scale subscriber-identification attribute type <i>keyword</i>
Tree	type
Default	alc-sub-string
Options	alc-sub-string, user-name, class, station-id, imsi, imei
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vendor *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The RADIUS Vendor
Context	configure router string nat inside large-scale subscriber-identification attribute vendor keyword
Tree	vendor
Default	nokia
Options	standard, nokia, 3gpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure router string nat inside large-scale subscriber-identification description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-unidentified-traffic *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Drop traffic from unidentified flows
Context	configure router string nat inside large-scale subscriber-identification drop-unidentified-traffic boolean
Tree	drop-unidentified-traffic
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-proxy-server

Synopsis	Enable the radius-proxy-server context
Context	configure router string nat inside large-scale subscriber-identification radius-proxy-server

Tree	radius-proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance
Context	configure router <i>string</i> nat inside large-scale subscriber-identification radius-proxy-server router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Server name
Context	configure router <i>string</i> nat inside large-scale subscriber-identification radius-proxy-server server <i>string</i>
Tree	server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map

Synopsis	Enter the map context
Context	configure router <i>string</i> nat map

Tree [map](#)
Introduced 16.0.R1
Platforms VSR

map-domain [\[domain-name\]](#) *reference*

Synopsis Add a list entry for **map-domain**
Context **configure** [router](#) *string* [nat](#) [map](#) [map-domain](#) *reference*
Tree [map-domain](#)
Introduced 16.0.R1
Platforms VSR

[domain-name] *reference*

Synopsis MAP domain template name
Context **configure** [router](#) *string* [nat](#) [map](#) [map-domain](#) *reference*
Tree [map-domain](#)
Reference **configure** [service](#) [nat](#) [map-t](#) [domain](#) *string*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms VSR

outside

Synopsis Enter the **outside** context
Context **configure** [router](#) *string* [nat](#) [outside](#)
Tree [outside](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis Enter the **dnat-only** context
Context **configure** [router](#) *string* [nat](#) [outside](#) [dnat-only](#)
Tree [dnat-only](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

route-limit *number*

Synopsis Number that is used to limit internal routes for downstream traffic
Context **configure** [router](#) *string* [nat](#) [outside](#) [dnat-only](#) [route-limit](#) *number*
Tree [route-limit](#)
Range 1 to 131072
Default 32768
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filters

Synopsis Enter the **filters** context
Context **configure** [router](#) *string* [nat](#) [outside](#) [filters](#)
Tree [filters](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

downstream

Synopsis Enter the **downstream** context
Context **configure** [router](#) *string* [nat](#) [outside](#) [filters](#) [downstream](#)
Tree [downstream](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 *reference*

Synopsis IPv4 filter policy name
Context **configure** [router](#) *string* [nat](#) [outside](#) [filters](#) [downstream](#) [ipv4](#) *reference*
Tree [ipv4](#)
Reference **configure** [filter](#) [ip-filter](#) *string*

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [router string nat outside filters downstream ipv6 reference](#)
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter string](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upstream

Synopsis Enter the **upstream** context
Context **configure** [router string nat outside filters upstream](#)
Tree [upstream](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 reference

Synopsis IPv4 filter policy name
Context **configure** [router string nat outside filters upstream ipv4 reference](#)
Tree [ipv4](#)
Reference **configure** [filter ip-filter string](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [router string nat outside filters upstream ipv6 reference](#)
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter string](#)

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu number

Synopsis MTU for downstream traffic
Context **configure** *router string nat outside mtu number*
Tree *mtu*
Range 512 to 9000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool [name] string

Synopsis Enter the **pool** list instance
Context **configure** *router string nat outside pool string*
Tree *pool*
Max. Instances 4096
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis NAT pool name
Context **configure** *router string nat outside pool string*
Tree *pool*
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-range [start] string end string

Synopsis Enter the **address-range** list instance

Context	configure router <i>string nat outside pool string address-range string end string</i>
Tree	address-range
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[start] *string*

Synopsis	Lower bound of the NAT address range
Context	configure router <i>string nat outside pool string address-range string end string</i>
Tree	address-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the NAT address range
Context	configure router <i>string nat outside pool string address-range string end string</i>
Tree	address-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure router <i>string nat outside pool string address-range string end string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis	Start or stop draining this NAT address range
Context	configure router <i>string</i> nat outside pool <i>string</i> address-range <i>string</i> end <i>string</i> drain <i>boolean</i>
Tree	drain
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the outside routing NAT pool
Context	configure router <i>string</i> nat outside pool <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

applications

Synopsis	Enter the applications context
Context	configure router <i>string</i> nat outside pool <i>string</i> applications
Tree	applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

agnostic *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool to create in the outside routing context
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Context	configure <i>router string nat outside pool string applications agnostic boolean</i>
Tree	<i>agnostic</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure <i>router string nat outside pool string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-echo-reply *boolean*

Synopsis	Allow NAT pool IP addresses to respond to ICMP PINGs
Context	configure <i>router string nat outside pool string icmp-echo-reply boolean</i>
Tree	<i>icmp-echo-reply</i>
Description	<p>This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use.</p> <p>In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it.</p> <p>In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present.</p> <p>In LSN, the reply from an outside IP address is generated regardless if a binding is present.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware

Synopsis	Enter the l2-aware context
Context	configure <i>router string nat outside pool string l2-aware</i>

Tree	l2-aware
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis	Enable the default-host context
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware default-host
Tree	default-host
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware default-host inside-router-instance <i>string</i>
Tree	inside-router-instance
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address of the default DMZ host
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware default-host ip-address <i>string</i>
Tree	ip-address

Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware default-host rate-limit <i>number</i>
Tree	rate-limit
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host. Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

external-assignment *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	External IP address for Layer-2-aware
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware external-assignment <i>boolean</i>
Tree	external-assignment
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-block-extension



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the port-block-extension context
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension
Tree	port-block-extension
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ports *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of ports per dynamic port-block
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension ports <i>number</i>
Tree	ports
Range	10 to 5000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber

Synopsis	Enter the subscriber context
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension subscriber
Tree	subscriber
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension subscriber watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark percentage
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension subscriber watermarks high <i>number</i>
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension subscriber watermarks low <i>number</i>
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of L2-Aware NAT subscribers per outside address
Context	configure <i>router string nat outside pool string l2-aware port-block-extension subscriber-limit number</i>
Tree	<i>subscriber-limit</i>
Description	<p>When port-block extensions for the L2-Aware subscribers are enabled, the port space for an outside IP address is divided into the following:</p> <ul style="list-style-type: none">• well-known port (this is a fixed and permanently allocated block of ports for all NAT types)• static port-forwarding range (if enabled by configuration)• port range allocated for initial port blocks of each L2-Aware subscriber• port range allocated for extended port blocks for the remainder after the three previous port ranges <p>The number of L2-Aware NAT subscribers per an outside IP address multiplied by the size of the initial port-block size determines the size of the port range reserved for initial port-blocks of each subscriber.</p> <p>The lower boundary of the extended port range is determined by adding the upper boundary of the configured port forwarding range and the size of the port range allocated for initial port blocks.</p>
Range	2 to 2000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure <i>router string nat outside pool string l2-aware port-block-extension watermarks</i>
Tree	<i>watermarks</i>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark percentage
Context	configure router string nat outside pool string l2-aware port-block-extension watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
Context	configure router string nat outside pool string l2-aware port-block-extension watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the large-scale context
Context	configure router string nat outside pool string large-scale
Tree	large-scale
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis	Enable the default-host context
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale default-host
Tree	default-host
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale default-host inside-router-instance <i>string</i>
Tree	inside-router-instance
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address of the default DMZ host
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale default-host ip-address <i>string</i>
Tree	ip-address
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis Rate limit for unknown traffic sent to default DMZ host

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [default-host](#) **rate-limit** *number*

Tree [rate-limit](#)

Description This command configures the rate limit of the unknown traffic sent to the default DMZ host.

Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.

Range 1 to 10000

Default 10

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis Enter the **deterministic** context

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) **deterministic**

Tree [deterministic](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation *number*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Number of ports per deterministic port-block

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [deterministic](#) **port-reservation** *number*

Tree [port-reservation](#)

Range	1 to 65536
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale deterministic watermarks
Tree	watermarks
Description	<p>Commands in this context monitor extended (dynamic) port-block utilization per outside IP in a NAT pool in deterministic LSN.</p> <p>High and low thresholds are configured in percentages of total available extended port-blocks per outside IP in a pool. Both values represent extended port-block utilization or occupancy per outside IP in a pool.</p> <p>For the system to generate those events, the NAT event-id 2045 must be enabled through configuration in the log event-control.</p>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark percentage
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale deterministic watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
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Context	configure router string nat outside pool string large-scale deterministic watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the redundancy context
Context	configure router string nat outside pool string large-scale redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of NAT pool redundancy
Context	configure router string nat outside pool string large-scale redundancy admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Notes	The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-route *string*

Synopsis	Route to export to the peer
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Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale redundancy export-route <i>string</i>
Tree	export-route
Notes	The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

follow

Synopsis	Enter the follow context
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale redundancy follow
Tree	follow
Notes	The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Name of the pool where activity is shared
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale redundancy follow name <i>string</i>
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance where the lead pool resides
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale redundancy follow router-instance <i>string</i>
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-route *string*

Synopsis	Monitor the peer route
Context	configure <i>router string nat outside pool string large-scale redundancy monitor-route string</i>
Tree	monitor-route
Notes	The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *number*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of subscribers per IP address
Context	configure <i>router string nat outside pool string large-scale subscriber-limit number</i>
Tree	subscriber-limit
Range	1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Mode of operation of this NAT address pool
Context	configure <i>router string nat outside pool string mode keyword</i>
Tree	mode
Options	auto, napt, one-to-one
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Create a NAT group

Context **configure** *router* *string* *nat* *outside* *pool* *string* *nat-group* *reference*

Tree [nat-group](#)

Reference **configure** *isa* *nat-group* *number*

Notes The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-forwarding

Synopsis Enter the **port-forwarding** context

Context **configure** *router* *string* *nat* *outside* *pool* *string* *port-forwarding*

Tree [port-forwarding](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-block-reservation *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Reserve dynamic block for subscriber

Context **configure** *router* *string* *nat* *outside* *pool* *string* *port-forwarding* *dynamic-block-reservation* *boolean*

Tree [dynamic-block-reservation](#)

Description When configured to **true**, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if

the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged.

The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released.

Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address.

When configured to **false**, dynamic port blocks are not reserved when the first port forward for the subscriber is created.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range-end *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	End of the wildcard range for port forwards
Context	configure router <i>string</i> nat outside pool <i>string</i> port-forwarding range-end <i>number</i>
Tree	range-end
Description	<p>This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the range-start command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the range-end implicit value is set to 1023, that represents the end of the well-known port range that is always enabled.</p> <p>Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.</p>
Range	0 1023 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range-start *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start of the wildcard range for port forwards
Context	configure <i>router string nat outside pool string port-forwarding range-start number</i>
Tree	range-start
Description	<p>This command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the range-end command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the range-start implicit value is set to 1. Port 0 is always excluded from the port forwarding range.</p> <p>Port forwards are supported only in pools in Network Address and Port Translation (NAPT) mode. Pools in 1:1 mode do not support configured port forwards.</p>
Range	0 1 1025 to 65535
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation

Synopsis	Enter the port-reservation context
Context	configure <i>router string nat outside pool string port-reservation</i>
Tree	port-reservation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-blocks *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Port block size for NAT subscribers
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Context	configure <i>router string nat outside pool string port-reservation port-blocks number</i>
Tree	port-blocks
Description	<p>In CGN, this specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block.</p> <p>For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the l2-aware port-block-extension hierarchy in the NAT pool.</p>
Range	0 to 64512
Notes	The following elements are part of a choice: port-blocks or ports .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ports *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Size of the port block for NAT subscribers
Context	configure <i>router string nat outside pool string port-reservation ports number</i>
Tree	ports
Description	<p>For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribers in the NAT pool.</p> <p>For L2-aware NAT, this command specifies the size of the initial port-block of a subscriber in the pool. Additional port blocks (extended port blocks) for the L2-aware subscriber must be explicitly enabled under the l2-aware port-block-extension hierarchy in the NAT pool.</p> <p>This command does not affect the size of extended port blocks.</p>
Range	1 to 64512
Notes	The following elements are part of a choice: port-blocks or ports .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool type
Context	configure router <i>string</i> nat outside pool <i>string</i> type <i>keyword</i>
Tree	type
Options	large-scale, l2-aware, wlan-gw-anchor
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure router <i>string</i> nat outside pool <i>string</i> watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	configure router <i>string</i> nat outside pool <i>string</i> watermarks high <i>number</i>
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis Low watermark percentage

Context **configure** *router string nat outside pool string watermarks low number*

Tree *low*

Description This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group reference



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Create a WLAN GW group for NAT

Context **configure** *router string nat outside pool string wlan-gw-group reference*

Tree *wlan-gw-group*

Reference **configure** *isa wlan-gw-group number*

Notes The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

network-domains

Synopsis Enter the **network-domains** context

Context **configure** *router string network-domains*

Tree	network-domains
Introduced	16.0.R4
Platforms	All

network-domain [[domain-name](#)] *string*

Synopsis	Enter the network-domain list instance
Context	configure router <i>string</i> network-domains network-domain <i>string</i>
Tree	network-domain
Max. Instances	5
Introduced	16.0.R4
Platforms	All

[domain-name] *string*

Synopsis	Network domain name
Context	configure router <i>string</i> network-domains network-domain <i>string</i>
Tree	network-domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> network-domains network-domain <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

origin-validation

Synopsis	Enter the origin-validation context
Context	configure router string origin-validation
Tree	origin-validation
Introduced	19.5.R1
Platforms	All

rpki-session [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the rpki-session list instance
Context	configure router string origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	rpki-session
Introduced	19.5.R1
Platforms	All

[[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IPv4 or IPv6 address for the RPKI local cache server
Context	configure router string origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	rpki-session
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RPKI session
Context	configure router string origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

connect-retry *number*

Synopsis	RPKI Connect Retry timer value
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Default	120
Units	seconds
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local address for the TCP connection setup
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-address
Introduced	19.5.R1
Platforms	All

port number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination port number used to contact cache server
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	port
Range	0 to 65535
Default	323
Introduced	19.5.R1
Platforms	All

refresh-time

Synopsis	Enter the refresh-time context
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) refresh-time
Tree	refresh-time
Introduced	19.5.R1
Platforms	All

hold-time number

Synopsis	Length of time that the session is to be considered UP
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) refresh-time hold-time <i>number</i>
Tree	hold-time
Range	60 to 65535
Default	600
Units	seconds
Introduced	19.5.R1
Platforms	All

value *number*

Synopsis	Periodic Serial Query PDUs sent for liveness detection
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) refresh-time value <i>number</i>
Tree	value
Range	30 to 32767
Default	300
Units	seconds
Introduced	19.5.R1
Platforms	All

stale-time *number*

Synopsis	Maximum time prefix origin validation remains usable
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) stale-time <i>number</i>
Tree	stale-time
Range	60 to 3600
Default	3600
Units	seconds
Introduced	19.5.R1
Platforms	All

static-entry [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*) **upto** *number* **origin-as** *number*

Synopsis	Enter the static-entry list instance
Context	configure router <i>string</i> origin-validation static-entry (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) upto <i>number</i> origin-as <i>number</i>
Tree	static-entry
Introduced	19.5.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IPv4 or IPv6 address with the minimum prefix and length
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Context	configure router <i>string</i> origin-validation static-entry (<i>ipv4-prefix ipv6-prefix</i>) upto number origin-as number
Tree	static-entry
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

upto number

Synopsis	Maximum prefix length
Context	configure router <i>string</i> origin-validation static-entry (<i>ipv4-prefix ipv6-prefix</i>) upto number origin-as number
Tree	static-entry
Range	1 to 128
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

origin-as number

Synopsis	Origin AS number
Context	configure router <i>string</i> origin-validation static-entry (<i>ipv4-prefix ipv6-prefix</i>) upto number origin-as number
Tree	static-entry
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

valid boolean

Synopsis	Designate mix of origin AS and prefix range as valid
Context	configure router <i>string</i> origin-validation static-entry (<i>ipv4-prefix ipv6-prefix</i>) upto number origin-as number valid boolean
Tree	valid
Default	true

Introduced 19.5.R1
Platforms All

ospf [*ospf-instance*] *number*

Synopsis Enter the **ospf** list instance
Context **configure router** *string ospf number*
Tree **ospf**
Max. Instances 32
Introduced 16.0.R1
Platforms All

[ospf-instance] *number*

Synopsis Value for the integrated OSPF instance
Context **configure router** *string ospf number*
Tree **ospf**
Range 0 to 31
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the OSPF instance
Context **configure router** *string ospf number admin-state keyword*
Tree **admin-state**
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>string</i> ospf <i>number</i> advertise-router-capability <i>keyword</i>
Tree	advertise-router-capability
Default	false
Options	false, link, area, as
Introduced	16.0.R1
Platforms	All

advertise-tunnel-link *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>string</i> ospf <i>number</i> advertise-tunnel-link <i>boolean</i>
Tree	advertise-tunnel-link
Default	false
Introduced	16.0.R1
Platforms	All

area [[area-id](#)] *string*

Synopsis	Enter the area list instance
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i>
Tree	area
Introduced	16.0.R1
Platforms	All

[[area-id](#)] *string*

Synopsis	Area-ID attribute
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i>
Tree	area
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

area-range [[ip-prefix-mask](#)] *string*

Synopsis	Enter the area-range list instance
Context	configure <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> area-range <i>string</i>
Tree	area-range
Introduced	16.0.R1
Platforms	All

[ip-prefix-mask] *string*

Synopsis	IP prefix and subnet mask for the range used by the ABR
Context	configure <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> area-range <i>string</i>
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> area-range <i>string</i> advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

bier

Synopsis	Enter the bier context
Context	configure router string ospf number area string bier
Tree	bier
Description	Commands in this context configure the administrative state of BIER and the BIER template assigned to the OSPF area.
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	configure router string ospf number area string bier admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.5.R1
Platforms	All

template *reference*

Synopsis	BIER template name
Context	configure router string ospf number area string bier template reference
Tree	template
Reference	configure router string bier template string
Introduced	20.5.R1
Platforms	All

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	configure router string ospf number area string blackhole-aggregate boolean
Tree	blackhole-aggregate
Default	true

Introduced 16.0.R1
Platforms All

database-export-exclude *boolean*

Synopsis Exclude IGP link-state OSPF area info into TE-DB
Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* **database-export-exclude** *boolean*
Tree [database-export-exclude](#)
Default false
Introduced 16.0.R1
Platforms All

export-policy *reference*

Synopsis Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* **export-policy** *reference*
Tree [export-policy](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

import-policy *reference*

Synopsis Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* **import-policy** *reference*
Tree [import-policy](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

interface [*interface-name*] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string ospf number area string interface string</i>
Tree	<i>interface</i>
Description	Commands in this context configure the attributes of the OSPF area interface. Unless they are explicitly configured, interfaces are not activated by default in any interior gateway protocol such as OSPF.
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Router interface name
Context	configure router <i>string ospf number area string interface string</i>
Tree	<i>interface</i>
Description	This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for configure router interface and configure services interface commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. If the IP interface name does not exist or does not have an IP address configured, an error message is returned. If the IP interface exists in a different area it is moved to this area.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adjacency-set [*id*] *reference*

Synopsis	Add a list entry for adjacency-set
Context	configure router <i>string ospf number area string interface string adjacency-set reference</i>
Tree	<i>adjacency-set</i>
Max. Instances	1024

Introduced 16.0.R1
Platforms All

[id] *reference*

Synopsis Adjacency set identity
Context **configure** *router string ospf number area string interface string adjacency-set reference*
Tree *adjacency-set*
Reference **configure** *router string ospf number segment-routing adjacency-set number*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

adjacency-sid

Synopsis Enable the **adjacency-sid** context
Context **configure** *router string ospf number area string interface string adjacency-sid*
Tree *adjacency-sid*
Introduced 16.0.R1
Platforms All

label *number*

Synopsis
Context **configure** *router string ospf number area string interface string adjacency-sid label number*
Tree *label*
Range 1 to 1048575
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the OSPF interface
Context **configure** *router string ospf number area string interface string admin-state keyword*

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

advertise-subnet *boolean*

Synopsis	Advertise point-to-point interfaces as subnet routes
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> advertise-subnet <i>boolean</i>
Tree	advertise-subnet
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used on OSPF interface
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

remain-down-on-failure *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness remain-down-on-failure <i>boolean</i>
Tree	remain-down-on-failure
Default	false
Introduced	16.0.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

flex-algo [**flex-algo-id**] *number*

Synopsis	Enter the flex-algo list instance
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> flex-algo <i>number</i>
Tree	flex-algo
Description	Commands in this context configure the attributes of OSPFv2 flexible algorithms interface.
Max. Instances	7
Introduced	21.7.R1
Platforms	All

[flex-algo-id] *number*

Synopsis	Flexible algorithm ID
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

node-sid

Synopsis	Enable the node-sid context
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Context	configure router <i>string ospf number area string interface string flex-algo number node-sid</i>
Tree	node-sid
Introduced	21.7.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>string ospf number area string interface string flex-algo number node-sid index number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	21.7.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>string ospf number area string interface string flex-algo number node-sid label number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	21.7.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure router <i>string ospf number area string interface string hello-interval number</i>
Tree	hello-interval
Range	1 to 65535
Default	10
Units	seconds

Introduced 16.0.R1
Platforms All

interface-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Interface type

Context **configure** *router string ospf number area string interface string interface-type keyword*

Tree [interface-type](#)

Description This command specifies the interface type.

Use this command to set the interface type of an Ethernet link to point-to-point to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided the link is used as a point-to-point.

If the interface type is not known at the time the interface is added to OSPF and subsequently the IP interface is bound (or moved) to a different interface type, this command must be entered manually.

Configuring the interface type to **secondary**, allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.

Options broadcast, non-broadcast, point-to-point, secondary

Introduced 16.0.R1

Platforms All

load-balancing-weight *number*

Synopsis Load balancing weight for an OSPF interface

Context **configure** *router string ospf number area string interface string load-balancing-weight number*

Tree [load-balancing-weight](#)

Range 1 to 4294967295

Introduced 20.2.R1

Platforms All

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure router <i>string ospf number area string interface string loopfree-alternate</i>
Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	configure router <i>string ospf number area string interface string loopfree-alternate exclude boolean</i>
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the policy-map context
Context	configure router <i>string ospf number area string interface string loopfree-alternate policy-map</i>
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template that is applied to interface
Context	configure router <i>string ospf number area string interface string loopfree-alternate policy-map route-nh-template reference</i>
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3

Platforms All

lsa-filter-out *keyword*

Synopsis LSA flooding reduction
Context **configure** *router string ospf number area string interface string lsa-filter-out keyword*
Tree [lsa-filter-out](#)
Default none
Options none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Introduced 16.0.R1
Platforms All

message-digest-key [[key-id](#)] *number*

Synopsis Enter the **message-digest-key** list instance
Context **configure** *router string ospf number area string interface string message-digest-key number*
Tree [message-digest-key](#)
Introduced 16.0.R1
Platforms All

[key-id] *number*

Synopsis Message digest index
Context **configure** *router string ospf number area string interface string message-digest-key number*
Tree [message-digest-key](#)
Range 1 to 255
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

md5 *string*

Synopsis MD5 hash key

Context	configure router <i>string ospf number area string interface string message-digest-key number md5 string</i>
Tree	md5
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Explicit route cost metric that is applied to the interface
Context	configure router <i>string ospf number area string interface string metric number</i>
Tree	metric
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	MTU for the OSPF to use on the interface
Context	configure router <i>string ospf number area string interface string mtu number</i>
Tree	mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

neighbor [**address**] *string*

Synopsis	Add a list entry for neighbor
Context	configure router <i>string ospf number area string interface string neighbor string</i>
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[address] string

Synopsis	IPv4 address of the OSPFv2 neighbor
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> neighbor <i>string</i>
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

node-sid

Synopsis	Enable the node-sid context
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> node-sid
Tree	node-sid
Description	<p>Commands in this context configure a node SID index or label value for the prefix representing the primary address of a network interface of type system or loopback. A separate SID value can be configured for each IPv4 and IPv6 primary address of the interface. The secondary address of an IPv4 interface cannot be assigned a node SID index and does not inherit the SID of the primary IPv4 address.</p> <p>In OSPFv2 and OSPFv3, the node SID is configured in the primary area but is inherited in any other area in which the interface is added as secondary.</p> <p>This command fails if the network interface is not a loopback type or if the interface is defined in an IES or VPRN context. Assigning the same SID index or label value to the same interface in two different IGP instances is not allowed within the same node.</p> <p>The value of the label or index SID is taken from the range configured for this IGP instance. When using the global mode of operation, the segment routing module checks that the same index or label value is not assigned to more than one loopback interface address. When using the per-instance mode of operation, this check is not required because the index and, therefore, the label ranges of IGP instances are not allowed to overlap.</p> <p>The clear-n-flag option allows the user to clear the N-flag (node-sid flag) in an OSPF or OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system. By default, the prefix SID sub-TLV for the prefix of a loopback interface is tagged as a node SID; that is, it belongs to this node only. However, to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.</p> <p>The SR OS implementation is relaxed on the receive end and accepts duplicate prefix SIDs with the N-flag set or clear. SR OS resolves to the closest owner, or owners if ECMP, of the prefix SID cost-wise.</p>
Introduced	16.0.R1

Platforms All

clear-n-flag *boolean*

Synopsis Clear the N-flag in an OSPF prefix

Context **configure** *router string ospf number area string interface string node-sid clear-n-flag boolean*

Tree [clear-n-flag](#)

Description When configured to **true**, this command allows the user to clear the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system.

When configured to **false**, the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared.

When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.

Default false

Introduced 16.0.R1

Platforms All

index *number*

Synopsis Node SID index for this interface

Context **configure** *router string ospf number area string interface string node-sid index number*

Tree [index](#)

Range 0 to 4294967295

Notes The following elements are part of a choice: **index** or **label**.

Introduced 16.0.R1

Platforms All

label *number*

Synopsis Label value for the node SID

Context **configure** *router string ospf number area string interface string node-sid label number*

Tree [label](#)

Range 1 to 4294967295

Notes The following elements are part of a choice: **index** or **label**.

Introduced 16.0.R1
Platforms All

passive *boolean*

Synopsis Allow interface to be advertised as an OSPF interface without running the OSPF protocol
Context **configure** *router string ospf number area string interface string passive boolean*
Tree *passive*
Introduced 16.0.R1
Platforms All

poll-interval *number*

Synopsis Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context **configure** *router string ospf number area string interface string poll-interval number*
Tree *poll-interval*
Max. Range 0 to 4294967295
Default 120
Units seconds
Introduced 16.0.R1
Platforms All

priority *number*

Synopsis Interface priority in the DR election on the subnet
Context **configure** *router string ospf number area string interface string priority number*
Tree *priority*
Range 0 to 255
Default 1
Introduced 16.0.R1
Platforms All

retransmit-interval *number*

Synopsis Time before OSPF retransmits an unacknowledged LSA

Context	configure <i>router string ospf number area string interface string retransmit-interval number</i>
Tree	retransmit-interval
Range	1 to 1800
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	configure <i>router string ospf number area string interface string rib-priority keyword</i>
Tree	rib-priority
Options	high
Introduced	16.0.R1
Platforms	All

sid-protection *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	configure <i>router string ospf number area string interface string sid-protection boolean</i>
Tree	sid-protection
Default	true
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure <i>router string ospf number area string interface string transit-delay number</i>
Tree	transit-delay
Range	1 to 1800
Default	1
Units	seconds

Introduced 16.0.R1
Platforms All

loopfree-alternate-exclude *boolean*

Synopsis Exclude interfaces in OSPF areas in SPF LFA computation
Context **configure** *router string ospf number area string loopfree-alternate-exclude boolean*
Tree [loopfree-alternate-exclude](#)
Default false
Introduced 16.0.R1
Platforms All

nssa

Synopsis Enable the **nssa** context
Context **configure** *router string ospf number area string nssa*
Tree [nssa](#)
Introduced 16.0.R1
Platforms All

area-range [[ip-prefix-mask](#)] *string*

Synopsis Enter the **area-range** list instance
Context **configure** *router string ospf number area string nssa area-range string*
Tree [area-range](#)
Introduced 16.0.R1
Platforms All

[ip-prefix-mask] *string*

Synopsis IP prefix and subnet mask for the range used by the ABR
Context **configure** *router string ospf number area string nssa area-range string*
Tree [area-range](#)
Notes This element is part of a list key.
Introduced 16.0.R1

Platforms All

advertise *boolean*

Synopsis Advertise summarized range of addresses to other areas
Context **configure** *router string ospf number area string nssa area-range string advertise boolean*
Tree [advertise](#)
Default true
Introduced 16.0.R1
Platforms All

originate-default-route

Synopsis Enable the **originate-default-route** context
Context **configure** *router string ospf number area string nssa originate-default-route*
Tree [originate-default-route](#)
Introduced 16.0.R1
Platforms All

adjacency-check *boolean*

Synopsis Default route to remove if there is no adjacency
Context **configure** *router string ospf number area string nssa originate-default-route adjacency-check boolean*
Tree [adjacency-check](#)
Default true
Introduced 16.0.R1
Platforms All

type-nssa *boolean*

Synopsis Generate a default route using NSSA-LSA type
Context **configure** *router string ospf number area string nssa originate-default-route type-nssa boolean*
Tree [type-nssa](#)

Default	false
Introduced	16.0.R1
Platforms	All

redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> nssa redistribute-external <i>boolean</i>
Tree	redistribute-external
Default	true
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> nssa summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

stub

Synopsis	Enable the stub context
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> stub
Tree	stub
Introduced	16.0.R1
Platforms	All

default-metric *number*

Synopsis	Metric used by the ABR for the default route into the stub area
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> stub default-metric <i>number</i>
Tree	default-metric

Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> stub summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

virtual-link [**router-id**] *string* **transit-area** *reference*

Synopsis	Enter the virtual-link list instance
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i>
Tree	virtual-link
Introduced	16.0.R1
Platforms	All

[**router-id**] *string*

Synopsis	Router identity of the virtual link neighbor
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i>
Tree	virtual-link
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

transit-area *reference*

Synopsis	Transit area linking the backbone to not-connected area
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i>

Tree	virtual-link
Reference	configure router <i>string</i> ospf <i>number</i> area <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3

Platforms All

authentication-type *keyword*

Synopsis Authentication type used on OSPF interface

Context **configure** **router** *string ospf number area string virtual-link string transit-area reference authentication-type keyword*

Tree [authentication-type](#)

Options password, message-digest

Introduced 16.0.R1

Platforms All

dead-interval *number*

Synopsis OSPF wait time for Hellos before neighbor declared down

Context **configure** **router** *string ospf number area string virtual-link string transit-area reference dead-interval number*

Tree [dead-interval](#)

Range 2 to 65535

Units seconds

Introduced 16.0.R1

Platforms All

hello-interval *number*

Synopsis Time between OSPF Hellos of this interface

Context **configure** **router** *string ospf number area string virtual-link string transit-area reference hello-interval number*

Tree [hello-interval](#)

Range 1 to 65535

Default 10

Units seconds

Introduced 16.0.R1

Platforms All

message-digest-key [[key-id](#)] *number*

Synopsis	Enter the message-digest-key list instance
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> message-digest-key <i>number</i>
Tree	message-digest-key
Introduced	16.0.R1
Platforms	All

[key-id] *number*

Synopsis	Message digest index
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> message-digest-key <i>number</i>
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

md5 *string*

Synopsis	MD5 hash key
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> message-digest-key <i>number</i> md5 <i>string</i>
Tree	md5
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> retransmit-interval <i>number</i>
Tree	retransmit-interval

Range	1 to 1800
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

asbr

Synopsis	Enable the asbr context
Context	configure router <i>string</i> ospf <i>number</i> asbr
Tree	asbr
Introduced	16.0.R1
Platforms	All

trace-path (*number* | *keyword*)

Synopsis	Domain identity
Context	configure router <i>string</i> ospf <i>number</i> asbr trace-path (<i>number</i> <i>keyword</i>)
Tree	trace-path
Range	0 to 31
Default	none
Options	none
Introduced	16.0.R1

Platforms All

compatible-rfc1583 *boolean*

Synopsis OSPF summary and external route calculations
Context **configure** [router](#) *string* [ospf](#) *number* [compatible-rfc1583](#) *boolean*
Tree [compatible-rfc1583](#)
Default true
Introduced 16.0.R1
Platforms All

database-export

Synopsis Enable the **database-export** context
Context **configure** [router](#) *string* [ospf](#) *number* [database-export](#)
Tree [database-export](#)
Introduced 16.0.R1
Platforms All

bgp-ls-identifier

Synopsis Enable the **bgp-ls-identifier** context
Context **configure** [router](#) *string* [ospf](#) *number* [database-export](#) [bgp-ls-identifier](#)
Tree [bgp-ls-identifier](#)
Introduced 16.0.R1
Platforms All

value *number*

Synopsis BGP-LS identifier sent in the BGP-LS NLRI
Context **configure** [router](#) *string* [ospf](#) *number* [database-export](#) [bgp-ls-identifier](#) [value](#) *number*
Tree [value](#)
Max. Range 0 to 4294967295
Default 0
Introduced 16.0.R1

Platforms All

igp-identifier *number*

Synopsis IGP instance in the BGP-LS NLRI
Context **configure** [router](#) *string* [ospf](#) *number* [database-export](#) [igp-identifier](#) *number*
Tree [igp-identifier](#)
Max. Range 0 to 18446744073709551615
Introduced 16.0.R1
Platforms All

entropy-label

Synopsis Enter the **entropy-label** context
Context **configure** [router](#) *string* [ospf](#) *number* [entropy-label](#)
Tree [entropy-label](#)
Introduced 16.0.R1
Platforms All

override-tunnel-elc *boolean*

Synopsis Enable override of received ELC advertisements
Context **configure** [router](#) *string* [ospf](#) *number* [entropy-label](#) [override-tunnel-elc](#) *boolean*
Tree [override-tunnel-elc](#)
Default false
Introduced 16.0.R1
Platforms All

export-limit

Synopsis Enable the **export-limit** context
Context **configure** [router](#) *string* [ospf](#) *number* [export-limit](#)
Tree [export-limit](#)
Introduced 16.0.R1
Platforms All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure router <i>string</i> ospf <i>number</i> export-limit log-percent <i>number</i>
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure router <i>string</i> ospf <i>number</i> export-limit number <i>number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure router <i>string</i> ospf <i>number</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p>
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

external-db-overflow

Synopsis	Enable the external-db-overflow context
Context	configure router string ospf number external-db-overflow
Tree	external-db-overflow
Introduced	16.0.R1
Platforms	All

interval number

Synopsis	Time during which the router operates in overload
Context	configure router string ospf number external-db-overflow interval number
Tree	interval
Range	0 to 2147483647
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	All

limit number

Synopsis	Number of external LSA at which overload is triggered
Context	configure router string ospf number external-db-overflow limit number
Tree	limit
Range	0 to 2147483647
Default	0
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	Preference for OSPF external routes
Context	configure router <i>string ospf number external-preference number</i>
Tree	external-preference
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

flexible-algorithms

Synopsis	Enter the flexible-algorithms context
Context	configure router <i>string ospf number flexible-algorithms</i>
Tree	flexible-algorithms
Description	Commands in this context configure the OSPFv2 parameters for flexible algorithm participation.
Introduced	21.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	configure router <i>string ospf number flexible-algorithms admin-state keyword</i>
Tree	admin-state
Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	All

flex-algo [[flex-algo-id](#)] *number*

Synopsis	Enter the flex-algo list instance
Context	configure router <i>string ospf number flexible-algorithms flex-algo number</i>

Tree	flex-algo
Description	<p>Commands in this context configure the attributes of the OSPFv2 flexible algorithm.</p> <p>The maximum unique flexible algorithms can be configured on a router across all configured OSPFv2 instances. In each OSPF flexible algorithm configuration context, the OSPFv2 instance participation can be either enabled or disabled, and it configures the advertising of a locally-configured flexible algorithm definition.</p> <p>When flexible algorithm is enabled in an OSPF instance, it is enabled for all areas within the OSPF instance.</p>
Max. Instances	7
Introduced	21.7.R1
Platforms	All

[flex-algo-id] *number*

Synopsis	Flexible algorithm ID
Context	configure router <i>string</i> ospf <i>number</i> flexible-algorithms flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

advertise *reference*

Synopsis	Flexible Algorithm Definition advertisement
Context	configure router <i>string</i> ospf <i>number</i> flexible-algorithms flex-algo <i>number</i> advertise <i>reference</i>
Tree	advertise
Description	<p>This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD).</p> <p>The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.</p>
Reference	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i>
Introduced	21.7.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure router <i>string</i> ospf <i>number</i> flexible-algorithms flex-algo <i>number</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	21.7.R1
Platforms	All

participate *boolean*

Synopsis	Allow participation in the Flexible Algorithm
Context	configure router <i>string</i> ospf <i>number</i> flexible-algorithms flex-algo <i>number</i> participate <i>boolean</i>
Tree	participate
Description	When configured to true , the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support. When configured to false , flexible algorithm participation is not enabled.
Default	false
Introduced	21.7.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure router <i>string</i> ospf <i>number</i> graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	configure router <i>string</i> ospf <i>number</i> graceful-restart helper-mode <i>boolean</i>
Tree	helper-mode

Default	true
Introduced	16.0.R1
Platforms	All

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart helper
Context	configure router <i>string</i> ospf <i>number</i> graceful-restart strict-lsa-checking <i>boolean</i>
Tree	strict-lsa-checking
Default	true
Introduced	16.0.R1
Platforms	All

igp-shortcut

Synopsis	Enter the igp-shortcut context
Context	configure router <i>string</i> ospf <i>number</i> igp-shortcut
Tree	igp-shortcut
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IGP shortcuts
Context	configure router <i>string</i> ospf <i>number</i> igp-shortcut admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

tunnel-next-hop

Synopsis	Enter the tunnel-next-hop context
Context	configure router <i>string</i> ospf <i>number</i> igp-shortcut tunnel-next-hop

Tree	tunnel-next-hop
Introduced	16.0.R1
Platforms	All

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> ospf <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i>
Tree	family
Introduced	16.0.R1
Platforms	All

[family-type] *keyword*

Synopsis	Address family type for tunnel next-hop
Context	configure router <i>string</i> ospf <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i>
Tree	family
Options	ipv4, srv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution state for IGP shortcut tunnels
Context	configure router <i>string</i> ospf <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i> resolution <i>keyword</i>
Tree	resolution
Default	none
Options	none, filter, any, match-family-ip
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>string ospf number igp-shortcut tunnel-next-hop family keyword resolution-filter</i>
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure router <i>string ospf number igp-shortcut tunnel-next-hop family keyword resolution-filter rsvp boolean</i>
Tree	rsvp
Default	false
Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure router <i>string ospf number igp-shortcut tunnel-next-hop family keyword resolution-filter sr-te boolean</i>
Tree	sr-te
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure router <i>string ospf number import-policy reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ldp-over-rsvp *boolean*

Synopsis	Allow LSP over RSVP in this OSPF instance
Context	configure router <i>string ospf number</i> ldp-over-rsvp <i>boolean</i>
Tree	ldp-over-rsvp
Default	false
Introduced	16.0.R1
Platforms	All

ldp-sync *boolean*

Synopsis	Configure IGP-LDP synchronization for interfaces
Context	configure router <i>string ospf number</i> ldp-sync <i>boolean</i>
Tree	ldp-sync
Default	true
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure router <i>string ospf number</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

augment-route-table *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	configure router <i>string ospf number</i> loopfree-alternate augment-route-table <i>boolean</i>
Tree	augment-route-table

Description	When configured to true , this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP. When configured to false , rLFA-specific information is not added to RTM entries.
Default	false
Introduced	21.10.R1
Platforms	All

exclude

Synopsis	Enter the exclude context
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate exclude
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate exclude prefix-policy <i>reference</i>
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

multi-homed-prefix

Synopsis	Enable the multi-homed-prefix context
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate multi-homed-prefix
Tree	multi-homed-prefix

Description	<p>Commands in this context configure a multihomed prefix LFA for both RTM routes (IP FRR) and SR-OSPF tunnels. SR-OSPF tunnels enable multihomed prefix extension in both algorithm 0 and flexible-algorithm numbers.</p> <p>This feature makes use of the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes.</p> <p>This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of local anycast prefixes.</p> <p>The computed IP next-hop based backup path is added to OSPF routes of external /32 prefixes (OSPFv2 routes types 3, 4, 5, and 7) and local /32 anycast prefixes in the RTM if the prefix is not protected by base LFA or if the user set leaf preference value to all. The user must enable the ip-fast-reroute leaf to have these backup paths programmed into the FIB in datapath.</p> <p>The computed IP next hop or repair tunnel based backup path is also programmed for SR-OSPF node SID tunnels of external /32 prefixes and to /32 prefixes in same area as the computing node S and which are advertised by multiple routers (anycast prefix) in both algorithm 0 and flexible-algorithm numbers.</p>
Introduced	22.2.R1
Platforms	All

preference *keyword*

Synopsis	Multi-homed prefix LFA backup path preference
Context	configure <i>router string ospf number loopfree-alternate multi-homed-prefix preference keyword</i>
Tree	preference
Default	none
Options	none, all
Introduced	22.2.R1
Platforms	All

remote-lfa

Synopsis	Enable the remote-lfa context
Context	configure <i>router string ospf number loopfree-alternate remote-lfa</i>
Tree	remote-lfa
Introduced	16.0.R1
Platforms	All

max-pq-cost *number*

Synopsis	Destination max cost for reverse SPF calculation
Context	configure <i>router string ospf number loopfree-alternate remote-lfa max-pq-cost number</i>
Tree	max-pq-cost
Max. Range	0 to 4294967295
Default	65535
Introduced	16.0.R1
Platforms	All

node-protect

Synopsis	Enable the node-protect context
Context	configure <i>router string ospf number loopfree-alternate remote-lfa node-protect</i>
Tree	node-protect
Introduced	16.0.R4
Platforms	All

max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF's
Context	configure <i>router string ospf number loopfree-alternate remote-lfa node-protect max-pq-nodes number</i>
Tree	max-pq-nodes
Range	1 to 32
Default	16
Introduced	16.0.R4
Platforms	All

ti-lfa

Synopsis	Enable the ti-lfa context
Context	configure <i>router string ospf number loopfree-alternate ti-lfa</i>
Tree	ti-lfa
Introduced	16.0.R1

Platforms All

max-sr-frr-labels *number*

Synopsis Maximum number of labels the TI-LFA backup path can use
 Context **configure** **router** *string ospf number loopfree-alternate ti-lfa max-sr-frr-labels number*
 Tree [max-sr-frr-labels](#)
 Range 0 to 3
 Default 2
 Introduced 16.0.R1
 Platforms All

node-protect

Synopsis Enable the **node-protect** context
 Context **configure** **router** *string ospf number loopfree-alternate ti-lfa node-protect*
 Tree [node-protect](#)
 Introduced 16.0.R5
 Platforms All

multi-instance *boolean*

Synopsis Enable OSPF Multi Instance Extensions
 Context **configure** **router** *string ospf number multi-instance boolean*
 Tree [multi-instance](#)
 Description When configured to **true**, the Base router supports RFC 6549, OSPFv2 Multi-Instance Extensions.
 This support is enabled per instance and allows flexibility when migrating a particular instance from classic OSPFv2 to a multi-instance OSPFv2.
 Default false
 Introduced 19.10.R1
 Platforms All

multicast-import *boolean*

Synopsis Submit routes into the multicast Route Table Manager

Context	configure router <i>string</i> ospf <i>number</i> multicast-import <i>boolean</i>
Tree	multicast-import
Default	false
Introduced	16.0.R1
Platforms	All

overload *boolean*

Synopsis	Change local router state to appear overloaded
Context	configure router <i>string</i> ospf <i>number</i> overload <i>boolean</i>
Tree	overload
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure router <i>string</i> ospf <i>number</i> overload-include-ext-1 <i>boolean</i>
Tree	overload-include-ext-1
Default	false
Introduced	19.7.R1
Platforms	All

overload-include-ext-2 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure router <i>string</i> ospf <i>number</i> overload-include-ext-2 <i>boolean</i>
Tree	overload-include-ext-2
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	configure router <i>string ospf number</i> overload-include-stub <i>boolean</i>
Tree	overload-include-stub
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure router <i>string ospf number</i> overload-on-boot
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state
Context	configure router <i>string ospf number</i> overload-on-boot timeout <i>number</i>
Tree	timeout
Range	1 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference for OSPF internal routes
Context	configure router <i>string ospf number</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

reference-bandwidth *number*

Synopsis	Bandwidth to reference the default costing of interfaces
Context	configure <i>router string ospf number reference-bandwidth number</i>
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Default	100000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the rib-priority context
Context	configure <i>router string ospf number rib-priority</i>
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the high context
Context	configure <i>router string ospf number rib-priority high</i>
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	configure <i>router string ospf number rib-priority high prefix-list reference</i>
Tree	prefix-list
Reference	configure <i>policy-options prefix-list string</i>
Introduced	16.0.R1
Platforms	All

router-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	configure router <i>string</i> ospf <i>number</i> router-id <i>string</i>
Tree	router-id
Introduced	16.0.R1
Platforms	All

rtr-adv-lsa-limit

Synopsis	Enable the rtr-adv-lsa-limit context
Context	configure router <i>string</i> ospf <i>number</i> rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	configure router <i>string</i> ospf <i>number</i> rtr-adv-lsa-limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	configure router <i>string</i> ospf <i>number</i> rtr-adv-lsa-limit max-lsa-count <i>number</i>
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.

Introduced 16.0.R1
Platforms All

overload-timeout (*number* | *keyword*)

Synopsis Maximum time in overload after LSA limit is reached
Context **configure** *router string ospf number rtr-adv-lsa-limit overload-timeout (number | keyword)*
Tree [overload-timeout](#)
Range 1 to 1800
Default forever
Units seconds
Options forever
Introduced 16.0.R1
Platforms All

warning-threshold *number*

Synopsis Percentage of the max LSA count that causes a warning
Context **configure** *router string ospf number rtr-adv-lsa-limit warning-threshold number*
Tree [warning-threshold](#)
Range 0 to 100
Default 0
Units percent
Introduced 16.0.R1
Platforms All

segment-routing

Synopsis Enter the **segment-routing** context
Context **configure** *router string ospf number segment-routing*
Tree [segment-routing](#)
Introduced 16.0.R1
Platforms All

adj-sid-hold (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	configure router <i>string</i> ospf <i>number</i> segment-routing adj-sid-hold (<i>number</i> <i>keyword</i>)
Tree	adj-sid-hold
Range	1 to 300
Default	15
Units	seconds
Options	none
Introduced	16.0.R1
Platforms	All

adjacency-set [*id*] *number*

Synopsis	Enter the adjacency-set list instance
Context	configure router <i>string</i> ospf <i>number</i> segment-routing adjacency-set <i>number</i>
Tree	adjacency-set
Introduced	16.0.R1
Platforms	All

[*id*] *number*

Synopsis	Non-zero identifier for a given adjacency set
Context	configure router <i>string</i> ospf <i>number</i> segment-routing adjacency-set <i>number</i>
Tree	adjacency-set
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise adjacency for links terminating on same node
Context	configure router <i>string</i> ospf <i>number</i> segment-routing adjacency-set <i>number</i> advertise <i>boolean</i>
Tree	advertise

Default	true
Introduced	16.0.R1
Platforms	All

parallel *boolean*

Synopsis	Require adjacency members to terminate on same neighbor
Context	configure <i>router string ospf number segment-routing adjacency-set number parallel boolean</i>
Tree	parallel
Default	true
Introduced	16.0.R1
Platforms	All

sid

Synopsis	Enable the sid context
Context	configure <i>router string ospf number segment-routing adjacency-set number sid</i>
Tree	sid
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	
Context	configure <i>router string ospf number segment-routing adjacency-set number sid label number</i>
Tree	label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

adjacency-sid

Synopsis	Enter the adjacency-sid context
Context	configure <i>router string ospf number segment-routing adjacency-sid</i>

Tree	adjacency-sid
Introduced	22.7.R1
Platforms	All

allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	configure router <i>string</i> ospf <i>number</i> segment-routing adjacency-sid allocate-dual-sids <i>boolean</i>
Tree	allocate-dual-sids
Description	<p>When configured to true, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.</p> <p>When configured to false, the router disables the support of two SR-MPLS adjacency SIDs per interface.</p>
Default	false
Introduced	22.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	configure router <i>string</i> ospf <i>number</i> segment-routing admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup-node-sid

Synopsis	Enable the backup-node-sid context
Context	configure router <i>string</i> ospf <i>number</i> segment-routing backup-node-sid
Tree	backup-node-sid
Introduced	16.0.R1

Platforms All

index *number*

Synopsis Node SID index for this interface
Context **configure** [router](#) [string](#) [ospf](#) [number](#) [segment-routing](#) [backup-node-sid](#) [index](#) *number*
Tree [index](#)
Range 0 to 4294967295
Notes The following elements are part of a choice: **index** or **label**.
Introduced 16.0.R1
Platforms All

ip-prefix *string*

Synopsis IP prefix and prefix length for the backup node SID
Context **configure** [router](#) [string](#) [ospf](#) [number](#) [segment-routing](#) [backup-node-sid](#) [ip-prefix](#) *string*
Tree [ip-prefix](#)
Introduced 16.0.R1
Platforms All

label *number*

Synopsis Label value for the node SID
Context **configure** [router](#) [string](#) [ospf](#) [number](#) [segment-routing](#) [backup-node-sid](#) [label](#) *number*
Tree [label](#)
Range 1 to 4294967295
Notes The following elements are part of a choice: **index** or **label**.
Introduced 16.0.R1
Platforms All

class-forwarding *boolean*

Synopsis Allow CBF with ECMP over RSVP-TE LSPs as IGP shortcuts
Context **configure** [router](#) [string](#) [ospf](#) [number](#) [segment-routing](#) [class-forwarding](#) *boolean*
Tree [class-forwarding](#)

Description	<p>When configured to true, this command enables Class-Based Forwarding (CBF) with ECMP for SR-OSPF resolved to RSVP-TE LSPs as IGP shortcuts.</p> <p>For CBF with ECMP to be effective, a class forwarding policy must be defined, as well as FC to set associations and RSVP-TE LSPs to set associations.</p> <p>When configured to false, CBF over IGP shortcuts is disabled.</p>
Default	false
Introduced	20.5.R1
Platforms	All

egress-statistics

Synopsis	Enter the egress-statistics context
Context	configure router <i>string</i> ospf <i>number</i> segment-routing egress-statistics
Tree	egress-statistics
Introduced	19.10.R1
Platforms	All

adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	configure router <i>string</i> ospf <i>number</i> segment-routing egress-statistics adj-set <i>boolean</i>
Tree	adj-set
Description	<p>When configured to true, this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.</p>
Default	false
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	configure router <i>string</i> ospf <i>number</i> segment-routing egress-statistics adj-sid <i>boolean</i>
Tree	adj-sid

Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure router <i>string ospf number segment-routing egress-statistics node-sid boolean</i>
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

entropy-label *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	configure router <i>string ospf number segment-routing entropy-label boolean</i>
Tree	entropy-label
Introduced	16.0.R1
Platforms	All

export-tunnel-table *keyword*

Synopsis	Export tunnel table
Context	configure router <i>string ospf number segment-routing export-tunnel-table keyword</i>
Tree	export-tunnel-table
Options	ldp
Introduced	16.0.R1
Platforms	All

ingress-statistics

Synopsis	Enter the ingress-statistics context
Context	configure <i>router string ospf number segment-routing ingress-statistics</i>
Tree	ingress-statistics
Introduced	19.10.R1
Platforms	All

adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	configure <i>router string ospf number segment-routing ingress-statistics adj-set boolean</i>
Tree	adj-set
Description	When configured to true , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	configure <i>router string ospf number segment-routing ingress-statistics adj-sid boolean</i>
Tree	adj-sid
Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure router <i>string ospf number segment-routing ingress-statistics node-sid boolean</i>
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

mapping-server

Synopsis	Enter the mapping-server context
Context	configure router <i>string ospf number segment-routing mapping-server</i>
Tree	mapping-server
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF mapping server
Context	configure router <i>string ospf number segment-routing mapping-server admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

node-sid-map [[sid-index](#)] *number*

Synopsis	Enter the node-sid-map list instance
Context	configure router <i>string ospf number segment-routing mapping-server node-sid-map number</i>
Tree	node-sid-map
Introduced	16.0.R1
Platforms	All

[sid-index] *number*

Synopsis	Start SID index for the node SID mapping
Context	configure <i>router string ospf number segment-routing mapping-server node-sid-map number</i>
Tree	node-sid-map
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ip-prefix *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Starting prefix of the mapping
Context	configure <i>router string ospf number segment-routing mapping-server node-sid-map number ip-prefix string</i>
Tree	ip-prefix
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

range *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of prefixes to be mapped by the Extended Range Prefix TLV
Context	configure <i>router string ospf number segment-routing mapping-server node-sid-map number range number</i>
Tree	range
Range	1 to 65535
Default	1

Introduced 16.0.R1
Platforms All

scope

Synopsis Enter the **scope** context
Context **configure** [router](#) [string](#) [ospf](#) [number](#) [segment-routing](#) [mapping-server](#) [node-sid-map](#)
[number](#) [scope](#)
Tree [scope](#)
Introduced 16.0.R1
Platforms All

area reference

Synopsis Area ID in which the advertise Extended Range TLV is advertised
Context **configure** [router](#) [string](#) [ospf](#) [number](#) [segment-routing](#) [mapping-server](#) [node-sid-map](#)
[number](#) [scope](#) [area](#) [reference](#)
Tree [area](#)
Reference **configure** [router](#) [string](#) [ospf](#) [number](#) [area](#) [string](#)
Notes The following elements are part of a choice: **area** or **as**.
Introduced 16.0.R1
Platforms All

as

Synopsis Advertise Extended Range TLV in whole autonomous system
Context **configure** [router](#) [string](#) [ospf](#) [number](#) [segment-routing](#) [mapping-server](#) [node-sid-map](#)
[number](#) [scope](#) [as](#)
Tree [as](#)
Notes The following elements are part of a choice: **area** or **as**.
Introduced 16.0.R1
Platforms All

maximum-sid-depth

Synopsis Enter the **maximum-sid-depth** context

Context	configure <i>router string ospf number segment-routing maximum-sid-depth</i>
Tree	maximum-sid-depth
Introduced	20.2.R1
Platforms	All

override-bmi *number*

Synopsis	Value to override the announced node MSD-BMI value
Context	configure <i>router string ospf number segment-routing maximum-sid-depth override-bmi number</i>
Tree	override-bmi
Description	<p>This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.</p> <p>When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.</p>
Range	0 to 12
Introduced	20.2.R1
Platforms	All

override-erld *number*

Synopsis	Value to override the announced node MSD-ERLD value
Context	configure <i>router string ospf number segment-routing maximum-sid-depth override-erld number</i>
Tree	override-erld
Description	<p>This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing.</p> <p>When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.</p>
Range	0 to 15
Introduced	20.2.R1
Platforms	All

prefix-sid-range

Synopsis	Enable the prefix-sid-range context
Context	configure <i>router string ospf number segment-routing prefix-sid-range</i>
Tree	prefix-sid-range
Description	Commands in this context configure the label block BGP segment routing can use.
Introduced	16.0.R1
Platforms	All

global

Synopsis	BGP global SR range allocation
Context	configure <i>router string ospf number segment-routing prefix-sid-range global</i>
Tree	global
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the configure router mpls-labels sr-labels context.
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R1
Platforms	All

max-index *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	configure <i>router string ospf number segment-routing prefix-sid-range max-index number</i>
Tree	max-index
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R1
Platforms	All

start-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	configure router <i>string</i> ospf <i>number</i> segment-routing prefix-sid-range start-label <i>number</i>
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R1
Platforms	All

srlb *reference*

Synopsis	Segment routing local block
Context	configure router <i>string</i> ospf <i>number</i> segment-routing srlb <i>reference</i>
Tree	srlb
Reference	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>
Introduced	16.0.R1
Platforms	All

tunnel-mtu *number*

Synopsis	Tunnel MTU size
Context	configure router <i>string</i> ospf <i>number</i> segment-routing tunnel-mtu <i>number</i>
Tree	tunnel-mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

tunnel-table-pref *number*

Synopsis	Preference of SR tunnels created by the IGP instance
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Context **configure router** *string ospf number segment-routing tunnel-table-pref number*

Tree **tunnel-table-pref**

Description This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the **any** value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).

Note: The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.

The global default TTM preference for the tunnel types is as follows:

- ROUTE_PREF_RSVP 7
- ROUTE_PREF_SR_TE 8
- ROUTE_PREF_LDP 9
- ROUTE_PREF_OSPF_TTM 10
- ROUTE_PREF_ISIS_TTM 11
- ROUTE_PREF_BGP_TTM 12
- ROUTE_PREF_GRE 255

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-IS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on the lowest IGP instance ID. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.

Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range 1 to 255

Default 10

Introduced 16.0.R1

Platforms All

timers

Synopsis Enter the **timers** context
Context **configure** [router](#) *string* [ospf](#) *number* **timers**
Tree [timers](#)
Introduced 16.0.R1
Platforms All

incremental-spf-wait *number*

Synopsis Delay time before an incremental SPF calculation starts
Context **configure** [router](#) *string* [ospf](#) *number* [timers](#) **incremental-spf-wait** *number*
Tree [incremental-spf-wait](#)
Range 0 to 1000
Default 1000
Units milliseconds
Introduced 16.0.R1
Platforms All

lsa-accumulate *number*

Synopsis Delay to gather LSAs before advertising to neighbors
Context **configure** [router](#) *string* [ospf](#) *number* [timers](#) **lsa-accumulate** *number*
Tree [lsa-accumulate](#)
Range 0 to 1000
Default 1000
Units milliseconds
Introduced 16.0.R1
Platforms All

lsa-arrival *number*

Synopsis Min delay between receipt of same LSAs from neighbors

Context	configure router <i>string ospf number timers lsa-arrival number</i>
Tree	lsa-arrival
Range	0 to 600000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-generate

Synopsis	Enter the lsa-generate context
Context	configure router <i>string ospf number timers lsa-generate</i>
Tree	lsa-generate
Introduced	16.0.R1
Platforms	All

lsa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	configure router <i>string ospf number timers lsa-generate lsa-initial-wait number</i>
Tree	lsa-initial-wait
Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	configure router <i>string ospf number timers lsa-generate lsa-second-wait number</i>
Tree	lsa-second-wait
Range	10 to 600000
Default	5000
Units	milliseconds

Introduced 16.0.R1
Platforms All

max-lsa-wait *number*

Synopsis Max time between two LSAs being generated
Context **configure** *router string ospf number timers lsa-generate max-lsa-wait number*
Tree [max-lsa-wait](#)
Range 10 to 600000
Default 5000
Units milliseconds
Introduced 16.0.R1
Platforms All

redistribute-delay *number*

Synopsis Hold down timer for external routes into OSPF
Context **configure** *router string ospf number timers redistribute-delay number*
Tree [redistribute-delay](#)
Range 0 to 1000
Default 1000
Units milliseconds
Introduced 16.0.R1
Platforms All

spf-wait

Synopsis Enter the **spf-wait** context
Context **configure** *router string ospf number timers spf-wait*
Tree [spf-wait](#)
Introduced 16.0.R1
Platforms All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure router <i>string</i> ospf <i>number</i> timers spf-wait spf-initial-wait <i>number</i>
Tree	spf-initial-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	configure router <i>string</i> ospf <i>number</i> timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Default	10000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	configure router <i>string</i> ospf <i>number</i> timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

traffic-engineering *boolean*

Synopsis	Calculate traffic engineering route
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Context	configure router <i>string</i> ospf <i>number</i> traffic-engineering <i>boolean</i>
Tree	traffic-engineering
Default	false
Introduced	16.0.R1
Platforms	All

traffic-engineering-options

Synopsis	Enter the traffic-engineering-options context
Context	configure router <i>string</i> ospf <i>number</i> traffic-engineering-options
Tree	traffic-engineering-options
Introduced	20.7.R1
Platforms	All

advertise-delay *boolean*

Synopsis	Enable the advertisement of link delay for TE
Context	configure router <i>string</i> ospf <i>number</i> traffic-engineering-options advertise-delay <i>boolean</i>
Tree	advertise-delay
Description	<p>When configured to true, the router advertises link delay in the IGP LSDB within the OSPF-TE TLV attribute or when the Application-Specific Link Attribute (ASLA) is enabled within SR-TE ASLA.</p> <p>When the router is configured under the configure router ospf traffic-engineering-options sr-te application-specific-link-attributes command to generate SR-TE ASLA attributes, link delay is advertised as a legacy RFC 3630 TLV when RSVP-TE is enabled and as an ASLA RFC 8920 TLV for SR-TE when MPLS is enabled for an interface.</p> <p>SR OS accepts and handles both legacy RSVP-TE TLVs and ASLAs for the RSVP application. However, SR OS only advertises RFC 3630 legacy RSVP-TE TLVs (as recommended by RFC 8920) to avoid compatibility issues.</p> <p>When configured to false, the router disables link delay advertisement.</p>
Default	false
Introduced	22.10.R1
Platforms	All

sr-te *keyword*

Synopsis	Advertisement of link attributes for SR-TE
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Context	configure router <i>string ospf number traffic-engineering-options sr-te keyword</i>
Tree	sr-te
Description	This command specifies the advertisement of TE attributes of each link on a per-application basis for RSVP-TE and SR-TE applications.
Default	false
Options	false, legacy, application-specific-link-attributes
Introduced	20.7.R1
Platforms	All

unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	configure router <i>string ospf number unicast-import boolean</i>
Tree	unicast-import
Default	true
Introduced	16.0.R1
Platforms	All

ospf3 [[ospf-instance](#)] *number*

Synopsis	Enter the ospf3 list instance
Context	configure router <i>string ospf3 number</i>
Tree	ospf3
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[ospf-instance] *number*

Synopsis	Value for the integrated OSPF instance
Context	configure router <i>string ospf3 number</i>
Tree	ospf3
Range	0 to 31 64 to 95
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the OSPF instance
Context **configure** *router string ospf3 number admin-state keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

advertise-router-capability *keyword*

Synopsis Allow router advertisement capabilities
Context **configure** *router string ospf3 number advertise-router-capability keyword*
Tree [advertise-router-capability](#)
Default false
Options false, link, area, as
Introduced 16.0.R1
Platforms All

area [[area-id](#)] *string*

Synopsis Enter the **area** list instance
Context **configure** *router string ospf3 number area string*
Tree [area](#)
Introduced 16.0.R1
Platforms All

[[area-id](#)] *string*

Synopsis Area-ID attribute
Context **configure** *router string ospf3 number area string*

Tree	area
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>string ospf3 number area string advertise-router-capability boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

area-range [[ip-prefix-mask](#)] (*ipv4-prefix | ipv6-prefix*)

Synopsis	Enter the area-range list instance
Context	configure router <i>string ospf3 number area string area-range (ipv4-prefix ipv6-prefix)</i>
Tree	area-range
Introduced	16.0.R1
Platforms	All

[ip-prefix-mask] (*ipv4-prefix | ipv6-prefix*)

Synopsis	Address ranges to create on an ABR for route summarization or suppression
Context	configure router <i>string ospf3 number area string area-range (ipv4-prefix ipv6-prefix)</i>
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
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Context	configure router <i>string ospf3 number area string area-range (ipv4-prefix ipv6-prefix) advertise boolean</i>
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	configure router <i>string ospf3 number area string blackhole-aggregate boolean</i>
Tree	blackhole-aggregate
Default	true
Introduced	16.0.R1
Platforms	All

database-export-exclude *boolean*

Synopsis	Exclude IGP link-state OSPF area info into TE-DB
Context	configure router <i>string ospf3 number area string database-export-exclude boolean</i>
Tree	database-export-exclude
Default	false
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	configure router <i>string ospf3 number area string export-policy reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1

Platforms All

extended-lsa *keyword*

Synopsis Extended LSA format in an OSPFv3 area
 Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* **extended-lsa** *keyword*
 Tree [extended-lsa](#)
 Options only
 Introduced 16.0.R1
 Platforms All

import-policy *reference*

Synopsis Route imported as Summary Type 3/Inter-Area-Prefix-LSA
 Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* **import-policy** *reference*
 Tree [import-policy](#)
 Reference **configure** [policy-options](#) [policy-statement](#) *string*
 Max. Instances 5
 Notes This element is ordered by the user.
 Introduced 16.0.R1
 Platforms All

interface [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance
 Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* **interface** *string*
 Tree [interface](#)
 Introduced 16.0.R1
 Platforms All

[interface-name] *string*

Synopsis Router interface name
 Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* **interface** *string*

Tree	interface
Description	<p>This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for configure router interface and configure services interface commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>If the IP interface name does not exist or does not have an IP address configured, an error message is returned.</p> <p>If the IP interface exists in a different area it is moved to this area.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure router <i>string ospf3 number area string interface string admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>string ospf3 number area string interface string advertise-router-capability boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

authentication

Synopsis	Enable the authentication context
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> authentication
Tree	authentication
Introduced	16.0.R6
Platforms	All

inbound reference

Synopsis	sa-name
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> authentication inbound <i>reference</i>
Tree	inbound
Reference	configure ipsec static-sa <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

outbound reference

Synopsis	sa-name
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> authentication outbound <i>reference</i>
Tree	outbound
Reference	configure ipsec static-sa <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1

Platforms All

remain-down-on-failure *boolean*

Synopsis Force adjacency down on failure until session returns
Context **configure** *router string ospf3 number area string interface string bfd-liveness remain-down-on-failure boolean*
Tree [remain-down-on-failure](#)
Default false
Introduced 16.0.R1
Platforms All

dead-interval *number*

Synopsis OSPF wait time for Hellos before neighbor declared down
Context **configure** *router string ospf3 number area string interface string dead-interval number*
Tree [dead-interval](#)
Range 2 to 65535
Units seconds
Introduced 16.0.R1
Platforms All

hello-interval *number*

Synopsis Time between OSPF Hellos of this interface
Context **configure** *router string ospf3 number area string interface string hello-interval number*
Tree [hello-interval](#)
Range 1 to 65535
Default 10
Units seconds
Introduced 16.0.R1
Platforms All

interface-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	configure <i>router string ospf3 number area string interface string interface-type keyword</i>
Tree	<i>interface-type</i>
Description	<p>This command specifies the interface type.</p> <p>Use this command to set the interface type of an Ethernet link to point-to-point to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided the link is used as a point-to-point.</p> <p>If the interface type is not known at the time the interface is added to OSPF and subsequently the IP interface is bound (or moved) to a different interface type, this command must be entered manually.</p> <p>Configuring the interface type to secondary, allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p>
Options	broadcast, non-broadcast, point-to-point, secondary
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight for an OSPF3 interface
Context	configure <i>router string ospf3 number area string interface string load-balancing-weight number</i>
Tree	<i>load-balancing-weight</i>
Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure <i>router string ospf3 number area string interface string loopfree-alternate</i>

Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the policy-map context
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate policy-map
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template that is applied to interface
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate policy-map route-nh-template <i>reference</i>
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	configure router <i>string ospf3 number area string interface string lsa-filter-out keyword</i>
Tree	lsa-filter-out
Default	none
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Explicit route cost metric that is applied to the interface
Context	configure router <i>string ospf3 number area string interface string metric number</i>
Tree	metric
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	MTU for the OSPF to use on the interface
Context	configure router <i>string ospf3 number area string interface string mtu number</i>
Tree	mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

neighbor [**address**] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Add a list entry for neighbor
Context	configure router <i>string ospf3 number area string interface string neighbor (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Neighbor link local address
Context	configure router <i>string ospf3 number area string interface string neighbor</i> (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

node-sid

Synopsis	Enable the node-sid context
Context	configure router <i>string ospf3 number area string interface string node-sid</i>
Tree	node-sid
Description	<p>Commands in this context configure a node SID index or label value for the prefix representing the primary address of a network interface of type system or loopback. A separate SID value can be configured for each IPv4 and IPv6 primary address of the interface. The secondary address of an IPv4 interface cannot be assigned a node SID index and does not inherit the SID of the primary IPv4 address.</p> <p>In OSPFv2 and OSPFv3, the node SID is configured in the primary area but is inherited in any other area in which the interface is added as secondary.</p> <p>This command fails if the network interface is not a loopback type or if the interface is defined in an IES or VPRN context. Assigning the same SID index or label value to the same interface in two different IGP instances is not allowed within the same node.</p> <p>The value of the label or index SID is taken from the range configured for this IGP instance. When using the global mode of operation, the segment routing module checks that the same index or label value is not assigned to more than one loopback interface address. When using the per-instance mode of operation, this check is not required because the index and, therefore, the label ranges of IGP instances are not allowed to overlap.</p> <p>The clear-n-flag option allows the user to clear the N-flag (node-sid flag) in an OSPF or OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system. By default, the prefix SID sub-TLV for the prefix of a loopback interface is tagged as a node SID; that is, it belongs to this node only. However, to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.</p> <p>The SR OS implementation is relaxed on the receive end and accepts duplicate prefix SIDs with the N-flag set or clear. SR OS resolves to the closest owner, or owners if ECMP, of the prefix SID cost-wise.</p>

Introduced	16.0.R4
Platforms	All

clear-n-flag *boolean*

Synopsis	Clear the N-flag in an OSPF3 prefix
Context	configure <i>router string ospf3 number area string interface string node-sid clear-n-flag boolean</i>
Tree	<i>clear-n-flag</i>
Description	<p>When configured to true, this command allows the user to clear the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system.</p> <p>When configured to false, the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared.</p> <p>When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.</p>
Default	false
Introduced	16.0.R5
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure <i>router string ospf3 number area string interface string node-sid index number</i>
Tree	<i>index</i>
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R4
Platforms	All

label *number*

Synopsis	Node SID index for this interface
Context	configure <i>router string ospf3 number area string interface string node-sid label number</i>
Tree	<i>label</i>
Range	1 to 4294967295

Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R4
Platforms	All

passive *boolean*

Synopsis	Allow interface to be advertised as an OSPF interface without running the OSPF protocol
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> passive <i>boolean</i>
Tree	passive
Introduced	16.0.R1
Platforms	All

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> poll-interval <i>number</i>
Tree	poll-interval
Max. Range	0 to 4294967295
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> priority <i>number</i>
Tree	priority
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> rib-priority <i>keyword</i>
Tree	rib-priority
Options	high
Introduced	16.0.R1
Platforms	All

sid-protection *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> sid-protection <i>boolean</i>
Tree	sid-protection
Default	true
Introduced	16.0.R4
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800

Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

key-rollover-interval *number*

Synopsis	Key rollover interval
Context	configure router <i>string ospf3 number area string key-rollover-interval number</i>
Tree	key-rollover-interval
Range	10 to 300
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	configure router <i>string ospf3 number area string loopfree-alternate-exclude boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

nssa

Synopsis	Enable the nssa context
Context	configure router <i>string ospf3 number area string nssa</i>
Tree	nssa
Introduced	16.0.R1
Platforms	All

area-range [**ip-prefix-mask**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the area-range list instance
Context	configure router <i>string ospf3 number area string nssa area-range</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	area-range
Introduced	16.0.R1
Platforms	All

[ip-prefix-mask] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Addresses on ABR for route summarization or suppression
Context	configure router <i>string ospf3 number area string nssa area-range</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure router <i>string ospf3 number area string nssa area-range</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

originate-default-route

Synopsis	Enable the originate-default-route context
Context	configure router <i>string ospf3 number area string nssa</i> originate-default-route
Tree	originate-default-route
Introduced	16.0.R1
Platforms	All

adjacency-check *boolean*

Synopsis	Default route to remove if there is no adjacency
Context	configure router <i>string ospf3 number area string nssa originate-default-route adjacency-check</i> <i>boolean</i>
Tree	adjacency-check
Default	true
Introduced	16.0.R1
Platforms	All

type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	configure router <i>string ospf3 number area string nssa originate-default-route type-nssa</i> <i>boolean</i>
Tree	type-nssa
Default	false
Introduced	16.0.R1
Platforms	All

redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	configure router <i>string ospf3 number area string nssa redistribute-external</i> <i>boolean</i>
Tree	redistribute-external
Default	true
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	configure router <i>string ospf3 number area string nssa summaries</i> <i>boolean</i>
Tree	summaries
Default	true
Introduced	16.0.R1

Platforms All

stub

Synopsis Enable the **stub** context
Context **configure router string ospf3 number area string stub**
Tree **stub**
Introduced 16.0.R1
Platforms All

default-metric *number*

Synopsis Metric used by the ABR for the default route into the stub area
Context **configure router string ospf3 number area string stub default-metric number**
Tree **default-metric**
Range 1 to 16777214
Default 1
Introduced 16.0.R1
Platforms All

summaries *boolean*

Synopsis Send summary (Type 3) LSAs into the stub area on an ABR
Context **configure router string ospf3 number area string stub summaries boolean**
Tree **summaries**
Default true
Introduced 16.0.R1
Platforms All

virtual-link [*router-id*] *string transit-area reference*

Synopsis Enter the **virtual-link** list instance
Context **configure router string ospf3 number area string virtual-link string transit-area reference**
Tree **virtual-link**
Introduced 16.0.R1

Platforms All

[router-id] *string*

Synopsis Router ID of the virtual link neighbor
Context **configure** **router** *string* **ospf3** *number* **area** *string* **virtual-link** *string* **transit-area** *reference*
Tree **virtual-link**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

transit-area *reference*

Synopsis Transit area linking backbone and non-connected area
Context **configure** **router** *string* **ospf3** *number* **area** *string* **virtual-link** *string* **transit-area** *reference*
Tree **virtual-link**
Reference **configure** **router** *string* **ospf3** *number* **area** *string*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the OSPF interface
Context **configure** **router** *string* **ospf3** *number* **area** *string* **virtual-link** *string* **transit-area** *reference* **admin-state** *keyword*
Tree **admin-state**
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

authentication

Synopsis Enable the **authentication** context

Context	configure router <i>string ospf3 number area string virtual-link string transit-area reference authentication</i>
Tree	authentication
Introduced	16.0.R6
Platforms	All

inbound *reference*

Synopsis	sa-name
Context	configure router <i>string ospf3 number area string virtual-link string transit-area reference authentication inbound reference</i>
Tree	inbound
Reference	configure ipsec static-sa <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

outbound *reference*

Synopsis	sa-name
Context	configure router <i>string ospf3 number area string virtual-link string transit-area reference authentication outbound reference</i>
Tree	outbound
Reference	configure ipsec static-sa <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure router <i>string ospf3 number area string virtual-link string transit-area reference dead-interval number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds

Introduced 16.0.R1
Platforms All

hello-interval *number*

Synopsis Time between OSPF Hellos of this interface
Context **configure** **router** *string ospf3 number area string virtual-link string transit-area reference hello-interval number*
Tree [hello-interval](#)
Range 1 to 65535
Default 10
Units seconds
Introduced 16.0.R1
Platforms All

retransmit-interval *number*

Synopsis Time before OSPF retransmits an unacknowledged LSA
Context **configure** **router** *string ospf3 number area string virtual-link string transit-area reference retransmit-interval number*
Tree [retransmit-interval](#)
Range 1 to 1800
Default 5
Units seconds
Introduced 16.0.R1
Platforms All

transit-delay *number*

Synopsis Required LSA transmit time
Context **configure** **router** *string ospf3 number area string virtual-link string transit-area reference transit-delay number*
Tree [transit-delay](#)
Range 1 to 1800
Default 1
Units seconds

Introduced 16.0.R1
Platforms All

asbr

Synopsis Enable the **asbr** context
Context **configure** *router string ospf3 number asbr*
Tree [asbr](#)
Introduced 16.0.R1
Platforms All

database-export

Synopsis Enable the **database-export** context
Context **configure** *router string ospf3 number database-export*
Tree [database-export](#)
Introduced 16.0.R4
Platforms All

bgp-ls-identifier

Synopsis Enable the **bgp-ls-identifier** context
Context **configure** *router string ospf3 number database-export bgp-ls-identifier*
Tree [bgp-ls-identifier](#)
Introduced 16.0.R4
Platforms All

value number

Synopsis BGP-LS identifier sent in the BGP-LS NLRI
Context **configure** *router string ospf3 number database-export bgp-ls-identifier value number*
Tree [value](#)
Max. Range 0 to 4294967295
Default 0
Introduced 16.0.R4

Platforms All

igp-identifier *number*

Synopsis IGP instance in the BGP-LS NLRI

Context **configure** *router string ospf3 number database-export igp-identifier number*

Tree [igp-identifier](#)

Description This command identifies the IGP instance in the BGP-LS NLRI when a router has interfaces participating in multiple IGP instances. The concept of an instance ID specified for OSPF is local subnet significant (RFC 6549). An IGP identifier value can be configured to be unique within a given IGP domain when the router sends the IGP link state information using BGP-LS.

Max. Range 0 to 18446744073709551615

Introduced 16.0.R4

Platforms All

export-limit

Synopsis Enable the **export-limit** context

Context **configure** *router string ospf3 number export-limit*

Tree [export-limit](#)

Introduced 16.0.R1

Platforms All

log-percent *number*

Synopsis Export limit before warning and SNMP notification sent

Context **configure** *router string ospf3 number export-limit log-percent number*

Tree [log-percent](#)

Range 1 to 100

Introduced 16.0.R1

Platforms All

number *number*

Synopsis Maximum routes or prefixes exported from route table

Context	configure router <i>string ospf3 number export-limit number number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure router <i>string ospf3 number export-policy reference</i>
Tree	export-policy
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p>
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-lsa *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Extended LSA format in an OSPFv3 area
Context	configure router <i>string ospf3 number extended-lsa keyword</i>
Tree	extended-lsa

Default	sparse
Options	sparse, only
Introduced	16.0.R1
Platforms	All

external-db-overflow

Synopsis	Enable the external-db-overflow context
Context	configure router <i>string</i> ospf3 <i>number</i> external-db-overflow
Tree	external-db-overflow
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time during which the router operates in overload
Context	configure router <i>string</i> ospf3 <i>number</i> external-db-overflow interval <i>number</i>
Tree	interval
Range	0 to 2147483647
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	configure router <i>string</i> ospf3 <i>number</i> external-db-overflow limit <i>number</i>
Tree	limit
Range	0 to 2147483647
Default	0
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	Preference for OSPF external routes
Context	configure router <i>string ospf3 number external-preference number</i>
Tree	external-preference
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure router <i>string ospf3 number graceful-restart</i>
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	configure router <i>string ospf3 number graceful-restart helper-mode boolean</i>
Tree	helper-mode
Default	true
Introduced	16.0.R1
Platforms	All

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart helper
Context	configure router <i>string ospf3 number graceful-restart strict-lsa-checking boolean</i>
Tree	strict-lsa-checking
Default	true
Introduced	16.0.R1
Platforms	All

igp-shortcut

Synopsis	Enter the igp-shortcut context
Context	configure router <i>string</i> ospf3 <i>number</i> igp-shortcut
Tree	igp-shortcut
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IGP shortcuts
Context	configure router <i>string</i> ospf3 <i>number</i> igp-shortcut admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

tunnel-next-hop

Synopsis	Enter the tunnel-next-hop context
Context	configure router <i>string</i> ospf3 <i>number</i> igp-shortcut tunnel-next-hop
Tree	tunnel-next-hop
Introduced	16.0.R4
Platforms	All

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> ospf3 <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i>
Tree	family
Introduced	16.0.R4
Platforms	All

[family-type] keyword

Synopsis	Address family type for the tunnel next hop
Context	configure router <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword</i>
Tree	family
Options	ipv4, ipv6, srv4, srv6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

resolution keyword

Synopsis	Resolution state for IGP shortcut tunnels
Context	configure router <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword resolution keyword</i>
Tree	resolution
Default	none
Options	none, filter, any, match-family-ip
Introduced	16.0.R4
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword resolution-filter</i>
Tree	resolution-filter
Introduced	16.0.R4
Platforms	All

rsvp boolean

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure router <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword resolution-filter rsvp boolean</i>
Tree	rsvp
Default	false

Introduced 16.0.R4
Platforms All

sr-te *boolean*

Synopsis Use SR-TE tunneling for next-hop resolution
Context **configure** *router* *string* *ospf3* *number* *igp-shortcut* *tunnel-next-hop* *family* *keyword* *resolution-filter* *sr-te* *boolean*
Tree [sr-te](#)
Default false
Introduced 16.0.R4
Platforms All

import-policy *reference*

Synopsis Import policy names for routes from IGP to route table
Context **configure** *router* *string* *ospf3* *number* *import-policy* *reference*
Tree [import-policy](#)
Reference **configure** *policy-options* *policy-statement* *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

ldp-sync *boolean*

Synopsis Configure IGP-LDP synchronization for interfaces
Context **configure** *router* *string* *ospf3* *number* *ldp-sync* *boolean*
Tree [ldp-sync](#)
Default true
Introduced 16.0.R1
Platforms All

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure router <i>string ospf3 number loopfree-alternate</i>
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

exclude

Synopsis	Enter the exclude context
Context	configure router <i>string ospf3 number loopfree-alternate exclude</i>
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure router <i>string ospf3 number loopfree-alternate exclude prefix-policy reference</i>
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

remote-lfa

Synopsis	Enable the remote-lfa context
Context	configure router <i>string ospf3 number loopfree-alternate remote-lfa</i>
Tree	remote-lfa

Introduced 16.0.R4
Platforms All

max-pq-cost *number*

Synopsis Destination max cost for reverse SPF calculation
Context **configure** *router string ospf3 number loopfree-alternate remote-lfa max-pq-cost number*
Tree [max-pq-cost](#)
Max. Range 0 to 4294967295
Default 65535
Introduced 16.0.R4
Platforms All

node-protect

Synopsis Enable the **node-protect** context
Context **configure** *router string ospf3 number loopfree-alternate remote-lfa node-protect*
Tree [node-protect](#)
Introduced 16.0.R6
Platforms All

max-pq-nodes *number*

Synopsis Maximum number of PQ nodes found in the LFA SPF's
Context **configure** *router string ospf3 number loopfree-alternate remote-lfa node-protect max-pq-nodes number*
Tree [max-pq-nodes](#)
Range 1 to 32
Default 16
Introduced 16.0.R6
Platforms All

ti-lfa

Synopsis Enable the **ti-lfa** context
Context **configure** *router string ospf3 number loopfree-alternate ti-lfa*

Tree	ti-lfa
Introduced	16.0.R5
Platforms	All

max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	configure router <i>string</i> ospf3 <i>number</i> loopfree-alternate ti-lfa max-sr-frr-labels <i>number</i>
Tree	max-sr-frr-labels
Range	0 to 3
Default	2
Introduced	16.0.R5
Platforms	All

node-protect

Synopsis	Enable the node-protect context
Context	configure router <i>string</i> ospf3 <i>number</i> loopfree-alternate ti-lfa node-protect
Tree	node-protect
Introduced	16.0.R6
Platforms	All

multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	configure router <i>string</i> ospf3 <i>number</i> multicast-import <i>boolean</i>
Tree	multicast-import
Default	false
Introduced	16.0.R1
Platforms	All

overload *boolean*

Synopsis	Change local router state to appear overloaded
Context	configure router <i>string</i> ospf3 <i>number</i> overload <i>boolean</i>

Tree	overload
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure router <i>string ospf3 number overload-include-ext-1 boolean</i>
Tree	overload-include-ext-1
Default	false
Introduced	19.7.R1
Platforms	All

overload-include-ext-2 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure router <i>string ospf3 number overload-include-ext-2 boolean</i>
Tree	overload-include-ext-2
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	configure router <i>string ospf3 number overload-include-stub boolean</i>
Tree	overload-include-stub
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the overload-on-boot context
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Context	configure router <i>string ospf3 number overload-on-boot</i>
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Router interval in overload before normal operations
Context	configure router <i>string ospf3 number overload-on-boot timeout number</i>
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference for OSPF internal routes
Context	configure router <i>string ospf3 number preference number</i>
Tree	preference
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

reference-bandwidth *number*

Synopsis	Bandwidth to reference the default costing of interfaces
Context	configure router <i>string ospf3 number reference-bandwidth number</i>
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Default	100000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the rib-priority context
Context	configure router <i>string</i> ospf3 <i>number</i> rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the high context
Context	configure router <i>string</i> ospf3 <i>number</i> rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	configure router <i>string</i> ospf3 <i>number</i> rib-priority high prefix-list <i>reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

router-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	configure router <i>string</i> ospf3 <i>number</i> router-id <i>string</i>
Tree	router-id
Introduced	16.0.R1
Platforms	All

rtr-adv-lsa-limit

Synopsis	Enable the rtr-adv-lsa-limit context
Context	configure router <i>string</i> ospf3 <i>number</i> rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	configure router <i>string</i> ospf3 <i>number</i> rtr-adv-lsa-limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	configure router <i>string</i> ospf3 <i>number</i> rtr-adv-lsa-limit max-lsa-count <i>number</i>
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

overload-timeout (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
Context	configure router <i>string</i> ospf3 <i>number</i> rtr-adv-lsa-limit overload-timeout (<i>number</i> <i>keyword</i>)
Tree	overload-timeout
Range	1 to 1800
Default	forever

Units	seconds
Options	forever
Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	configure router <i>string</i> ospf3 <i>number</i> rtr-adv-lsa-limit warning-threshold <i>number</i>
Tree	warning-threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router <i>string</i> ospf3 <i>number</i> segment-routing
Tree	segment-routing
Introduced	16.0.R4
Platforms	All

adj-sid-hold (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	configure router <i>string</i> ospf3 <i>number</i> segment-routing adj-sid-hold (<i>number</i> <i>keyword</i>)
Tree	adj-sid-hold
Range	1 to 300
Default	15
Units	seconds
Options	none
Introduced	16.0.R4
Platforms	All

adjacency-sid

Synopsis	Enter the adjacency-sid context
Context	configure router <i>string</i> ospf3 <i>number</i> segment-routing adjacency-sid
Tree	adjacency-sid
Introduced	22.7.R1
Platforms	All

allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	configure router <i>string</i> ospf3 <i>number</i> segment-routing adjacency-sid allocate-dual-sids <i>boolean</i>
Tree	allocate-dual-sids
Description	<p>When configured to true, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.</p> <p>When configured to false, the router disables the support of two SR-MPLS adjacency SIDs per interface.</p>
Default	false
Introduced	22.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	configure router <i>string</i> ospf3 <i>number</i> segment-routing admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

egress-statistics

Synopsis	Enter the egress-statistics context
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Context	configure router <i>string ospf3 number segment-routing egress-statistics</i>
Tree	egress-statistics
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	configure router <i>string ospf3 number segment-routing egress-statistics adj-sid boolean</i>
Tree	adj-sid
Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure router <i>string ospf3 number segment-routing egress-statistics node-sid boolean</i>
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

ingress-statistics

Synopsis	Enter the ingress-statistics context
Context	configure router <i>string ospf3 number segment-routing ingress-statistics</i>
Tree	ingress-statistics
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	configure <i>router string ospf3 number segment-routing ingress-statistics adj-sid boolean</i>
Tree	adj-sid
Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure <i>router string ospf3 number segment-routing ingress-statistics node-sid boolean</i>
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

prefix-sid-range

Synopsis	Enable the prefix-sid-range context
Context	configure <i>router string ospf3 number segment-routing prefix-sid-range</i>
Tree	prefix-sid-range
Description	Commands in this context configure the label block BGP segment routing can use.
Introduced	16.0.R4
Platforms	All

global

Synopsis	BGP global SR range allocation
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Context	configure router string ospf3 number segment-routing prefix-sid-range global
Tree	global
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the configure router mpls-labels sr-labels context.
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R4
Platforms	All

max-index number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	configure router string ospf3 number segment-routing prefix-sid-range max-index number
Tree	max-index
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R4
Platforms	All

start-label number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	configure router string ospf3 number segment-routing prefix-sid-range start-label number
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).

Introduced	16.0.R4
Platforms	All

tunnel-mtu *number*

Synopsis	Tunnel MTU size
Context	configure router <i>string</i> ospf3 <i>number</i> segment-routing tunnel-mtu <i>number</i>
Tree	tunnel-mtu
Range	512 to 9786
Introduced	16.0.R4
Platforms	All

tunnel-table-pref *number*

Synopsis	Preference of SR tunnels created by the IGP instance
Context	configure router <i>string</i> ospf3 <i>number</i> segment-routing tunnel-table-pref <i>number</i>
Tree	tunnel-table-pref

Description This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the **any** value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).

Note: The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.

The global default TTM preference for the tunnel types is as follows:

- ROUTE_PREF_RSVP 7
- ROUTE_PREF_SR_TE 8

- `ROUTE_PREF_LDP 9`
- `ROUTE_PREF_OSPF_TTM 10`
- `ROUTE_PREF_ISIS_TTM 11`
- `ROUTE_PREF_BGP_TTM 12`
- `ROUTE_PREF_GRE 255`

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-ISIS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on the lowest IGP instance ID. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.

Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	10
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enter the timers context
Context	configure router string ospf3 number timers
Tree	timers
Introduced	16.0.R1
Platforms	All

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	configure router string ospf3 number timers incremental-spf-wait <i>number</i>
Tree	incremental-spf-wait
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	configure router <i>string ospf3 number timers lsa-accumulate number</i>
Tree	lsa-accumulate
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	configure router <i>string ospf3 number timers lsa-arrival number</i>
Tree	lsa-arrival
Range	0 to 600000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-generate

Synopsis	Enter the lsa-generate context
Context	configure router <i>string ospf3 number timers lsa-generate</i>
Tree	lsa-generate
Introduced	16.0.R1
Platforms	All

lsa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	configure router <i>string ospf3 number timers lsa-generate lsa-initial-wait number</i>
Tree	lsa-initial-wait

Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	configure router <i>string</i> ospf3 <i>number</i> timers lsa-generate lsa-second-wait <i>number</i>
Tree	lsa-second-wait
Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	configure router <i>string</i> ospf3 <i>number</i> timers lsa-generate max-lsa-wait <i>number</i>
Tree	max-lsa-wait
Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	configure router <i>string</i> ospf3 <i>number</i> timers redistribute-delay <i>number</i>
Tree	redistribute-delay
Range	0 to 1000
Default	1000

Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the spf-wait context
Context	configure router <i>string</i> ospf3 <i>number</i> timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure router <i>string</i> ospf3 <i>number</i> timers spf-wait spf-initial-wait <i>number</i>
Tree	spf-initial-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	configure router <i>string</i> ospf3 <i>number</i> timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Default	10000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	configure router <i>string</i> ospf3 <i>number</i> timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	configure router <i>string</i> ospf3 <i>number</i> unicast-import <i>boolean</i>
Tree	unicast-import
Default	true
Introduced	16.0.R1
Platforms	All

p2mp-sr-tree

Synopsis	Enable the p2mp-sr-tree context
Context	configure router <i>string</i> p2mp-sr-tree
Tree	p2mp-sr-tree
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the P2MP SR tree
Context	configure router <i>string</i> p2mp-sr-tree admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1

Platforms All

bfd-liveness *keyword*

Synopsis BFD-liveness for P2MP SR tree status entry
 Context **configure** **router** *string* **p2mp-sr-tree** **bfd-liveness** *keyword*
 Tree **bfd-liveness**
 Options ipv4, ipv6
 Max. Instances 2
 Introduced 21.5.R1
 Platforms All

p2mp-policy [**p2mp-policy-name**] *string*

Synopsis Enter the **p2mp-policy** list instance
 Context **configure** **router** *string* **p2mp-sr-tree** **p2mp-policy** *string*
 Tree **p2mp-policy**
 Introduced 21.5.R1
 Platforms All

[**p2mp-policy-name**] *string*

Synopsis P2MP policy name
 Context **configure** **router** *string* **p2mp-sr-tree** **p2mp-policy** *string*
 Tree **p2mp-policy**
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 21.5.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the P2MP policy
 Context **configure** **router** *string* **p2mp-sr-tree** **p2mp-policy** *string* **admin-state** *keyword*

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	All

candidate-path [[candidate-path-name](#)] *string*

Synopsis	Enter the candidate-path list instance
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i>
Tree	candidate-path
Introduced	21.5.R1
Platforms	All

[candidate-path-name] *string*

Synopsis	Candidate path name
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i>
Tree	candidate-path
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

active-instance *reference*

Synopsis	Candidate path active instance
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> active-instance <i>reference</i>
Tree	active-instance
Reference	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> path-instances <i>number</i>
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the P2MP SR tree
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	All

path-instances [*index*] *number*

Synopsis	Enter the path-instances list instance
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> path-instances <i>number</i>
Tree	path-instances
Introduced	21.5.R1
Platforms	All

[*index*] *number*

Synopsis	Instance index
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> path-instances <i>number</i>
Tree	path-instances
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

instance-id *number*

Synopsis	Instance value
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> path-instances <i>number</i> instance-id <i>number</i>
Tree	instance-id

Max. Range	0 to 4294967295
Introduced	21.5.R1
Platforms	All

preference *number*

Synopsis	Candidate-path preference
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> preference <i>number</i>
Tree	preference
Range	0 to 1024
Default	100
Introduced	21.5.R1
Platforms	All

root-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Root address for the P2MP policy
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> root-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	root-address
Default	0.0.0.0
Introduced	21.5.R1
Platforms	All

tree-id *number*

Synopsis	Tree ID for the P2MP policy
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> tree-id <i>number</i>
Tree	tree-id
Range	0 8193 to 16286
Default	0
Introduced	21.5.R1
Platforms	All

replication-segment [[policy-name](#)] *string*

Synopsis	Enter the replication-segment list instance
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i>
Tree	replication-segment
Introduced	21.5.R1
Platforms	All

[policy-name] *string*

Synopsis	P2MP policy name
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i>
Tree	replication-segment
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the replication segment
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	All

downstream-nodes [[downstream-index](#)] *number*

Synopsis	Enter the downstream-nodes list instance
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i>
Tree	downstream-nodes
Introduced	21.5.R1
Platforms	All

[downstream-index] *number*

Synopsis	Downstream index
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i>
Tree	downstream-nodes
Range	1 to 4096
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of next-hop entries
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	All

label

Synopsis	Enter the label context
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> label
Tree	label
Introduced	21.5.R1
Platforms	All

sid-list [*index*] *number*

Synopsis	Enter the sid-list list instance
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> label sid-list <i>number</i>

Tree	sid-list
Introduced	21.5.R1
Platforms	All

[index] number

Synopsis	SID list index
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> label sid-list <i>number</i>
Tree	sid-list
Range	1 to 11
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

replication-sid number

Synopsis	Segment ID for the SID list entry
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> label sid-list <i>number</i> replication-sid <i>number</i>
Tree	replication-sid
Range	3 16 to 1048575 4294967295
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	All

next-hop-address (ipv4-address-with-zone | ipv6-address-with-zone)

Synopsis	Next-hop address for replication segment next hops
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> next-hop-address (ipv4-address-with-zone ipv6-address-with-zone)
Tree	next-hop-address
Default	0.0.0.0
Introduced	21.5.R1
Platforms	All

next-hop-interface-name *string*

Synopsis	Interface name for replication segment next-hops
Context	configure <i>router string p2mp-sr-tree replication-segment string downstream-nodes number next-hop-interface-name string</i>
Tree	<i>next-hop-interface-name</i>
String Length	1 to 32
Introduced	21.5.R1
Platforms	All

protect-nexthop-id *reference*

Synopsis	ID of the protection next hop used for FRR
Context	configure <i>router string p2mp-sr-tree replication-segment string downstream-nodes number protect-nexthop-id reference</i>
Tree	<i>protect-nexthop-id</i>
Reference	configure <i>router string p2mp-sr-tree replication-segment string downstream-nodes number</i>
Introduced	21.5.R1
Platforms	All

instance-id *number*

Synopsis	Instance ID for replication segment entries
Context	configure <i>router string p2mp-sr-tree replication-segment string instance-id number</i>
Tree	<i>instance-id</i>
Max. Range	0 to 4294967295
Default	0
Introduced	21.5.R1
Platforms	All

replication-sid *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment ID of the replication segment
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> replication-sid <i>number</i>
Tree	replication-sid
Max. Range	0 to 4294967295
Default	0
Introduced	21.5.R1
Platforms	All

root-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Root address for replication segment entries
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> root-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	root-address
Introduced	21.5.R1
Platforms	All

sid-action *keyword*

Synopsis	SID action for replication segment entries
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> sid-action <i>keyword</i>
Tree	sid-action
Default	none
Options	none, push, pop, swap
Introduced	21.5.R1
Platforms	All

tree-id *number*

Synopsis	Tree ID for the replication segment of the P2MP SR tree
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> tree-id <i>number</i>
Tree	tree-id
Range	0 8193 to 16286
Default	0
Introduced	21.5.R1

Platforms All

reserved-label-block *reference*

Synopsis Reserved label block name for the P2MP SR tree
Context **configure** [router](#) *string* [p2mp-sr-tree](#) [reserved-label-block](#) *reference*
Tree [reserved-label-block](#)
Reference **configure** [router](#) *string* [mpls-labels](#) [reserved-label-block](#) *string*
Introduced 21.5.R1
Platforms All

pcep

Synopsis Enter the **pcep** context
Context **configure** [router](#) *string* [pcep](#)
Tree [pcep](#)
Introduced 16.0.R4
Platforms All

pcc

Synopsis Enable the **pcc** context
Context **configure** [router](#) *string* [pcep](#) [pcc](#)
Tree [pcc](#)
Introduced 16.0.R4
Platforms All

admin-state *keyword*

Synopsis Administrative state of the PCEP session element
Context **configure** [router](#) *string* [pcep](#) [pcc](#) [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R4

Platforms All

dead-timer *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure dead timer
Context	configure <i>router string pcep pcc dead-timer number</i>
Tree	<i>dead-timer</i>
Range	1 to 255
Default	120
Units	seconds
Introduced	16.0.R4
Platforms	All

keepalive *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure keepalive
Context	configure <i>router string pcep pcc keepalive number</i>
Tree	<i>keepalive</i>
Range	1 to 255
Default	30
Units	seconds
Introduced	16.0.R4
Platforms	All

local-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv4 address of the PCEP speaker
Context	configure <i>router string pcep pcc local-address string</i>
Tree	local-address
Description	This command configures the local IPv4 address of the PCEP speaker. See "PCEP session establishment and maintenance" in the <i>7750 SR and 7950 XRS Segment Routing and PCE User Guide</i> for more information about configuring a PCEP local IPv4 address to establish a PCEP session.
Introduced	16.0.R4
Platforms	All

local-address-ipv6 string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv6 address of the PCEP speaker
Context	configure <i>router string pcep pcc local-address-ipv6 string</i>
Tree	local-address-ipv6
Description	This command configures the local IPv6 address of the PCEP speaker. See "PCEP session establishment and maintenance" in the <i>7750 SR and 7950 XRS Segment Routing and PCE User Guide</i> for more information about configuring a PCEP local IPv6 address to establish a PCEP session.
Introduced	20.2.R1
Platforms	All

max-srte-pce-init-lsps number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure max sr te pce init LSP
Context	configure <i>router string pcep pcc max-srte-pce-init-lsps number</i>
Tree	max-srte-pce-init-lsps
Range	0 to 8191
Default	8191
Introduced	16.0.R5

Platforms All

pce-associations

Synopsis Enter the **pce-associations** context
Context **configure router string pcep pcc pce-associations**
Tree [pce-associations](#)
Description Commands in this context configure PCE association groups.
Introduced 22.5.R1
Platforms All

diversity [assoc-name] string

Synopsis Enter the **diversity** list instance
Context **configure router string pcep pcc pce-associations diversity string**
Tree [diversity](#)
Description Commands in this context create a named diversity association from which the parameters for the specified diversity association are configured.
Introduced 22.5.R1
Platforms All

[assoc-name] string

Synopsis Name of the association group
Context **configure router string pcep pcc pce-associations diversity string**
Tree [diversity](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 22.5.R1
Platforms All

association-id number

Synopsis Association ID for the diversity association group
Context **configure router string pcep pcc pce-associations diversity string association-id number**

Tree	association-id
Description	This command configures the diversity association ID. The user must specify an association ID.
Range	0 to 65535
Default	0
Introduced	22.5.R1
Platforms	All

association-source (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source IP address for the association
Context	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i> association-source (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	association-source
Description	This command configures the source IP address of the diversity association.
Introduced	22.5.R1
Platforms	All

disjointness-reference *boolean*

Synopsis	Configure P-flag in the disjointness configuration TLV
Context	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i> disjointness-reference <i>boolean</i>
Tree	disjointness-reference
Description	<p>When configured to true, the router sets the P-flag in the disjointness configuration TLV. When the P-flag is set, it indicates that this LSP path is the reference path for the disjoint set of paths. The PCE must first compute the path of this LSP and then apply the requested disjointness type to compute the path of all other paths in the same diversity association ID.</p> <p>When configured to false, the router does not set the P-flag in the disjointness configuration TLV.</p>
Default	false
Introduced	22.5.R1
Platforms	All

disjointness-type *keyword*

Synopsis	Disjointness type for the association group
Context	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i> disjointness-type <i>keyword</i>
Tree	disjointness-type
Description	This command configures the disjointness type for the association group.
Default	loose
Options	strict, loose
Introduced	22.5.R1
Platforms	All

diversity-type *keyword*

Synopsis	Diversity type for the association group
Context	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i> diversity-type <i>keyword</i>
Tree	diversity-type
Description	This command configures the diversity type for the association group.
Default	none
Options	none, link, node, srlg-link, srlg-node
Introduced	22.5.R1
Platforms	All

policy [**assoc-name**] *string*

Synopsis	Enter the policy list instance
Context	configure router <i>string</i> pcep pcc pce-associations policy <i>string</i>
Tree	policy
Description	Commands in this context create a named policy association from which the parameters for the specified policy association are configured.
Introduced	22.5.R1
Platforms	All

[**assoc-name**] *string*

Synopsis	Name of the association group
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Context	configure <i>router string pcep pcc pce-associations policy string</i>
Tree	<i>policy</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

association-id *number*

Synopsis	Association ID for the policy association group
Context	configure <i>router string pcep pcc pce-associations policy string association-id number</i>
Tree	<i>association-id</i>
Description	This command configures the policy association ID. The user must specify an association ID.
Range	0 to 65535
Default	0
Introduced	22.5.R1
Platforms	All

association-source (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source IP address for the association
Context	configure <i>router string pcep pcc pce-associations policy string association-source (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	<i>association-source</i>
Description	This command configures the source IP address of the policy association.
Introduced	22.5.R1
Platforms	All

peer [*ip-address*] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
Context	configure <i>router string pcep pcc peer (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	<i>peer</i>
Max. Instances	2

Introduced 16.0.R4
Platforms All

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Destination IP address of a PCE peer in a PCEP session
Context **configure** *router string pcep pcc peer (ipv4-address-no-zone | ipv6-address-no-zone)*
Tree *peer*
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

admin-state *keyword*

Synopsis Administrative state of the PCC peer
Context **configure** *router string pcep pcc peer (ipv4-address-no-zone | ipv6-address-no-zone) admin-state keyword*
Tree *admin-state*
Default *disable*
Options *enable, disable*
Introduced 16.0.R4
Platforms All

preference *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Preference value of the peer
Context **configure** *router string pcep pcc peer (ipv4-address-no-zone | ipv6-address-no-zone) preference number*
Tree *preference*
Range 0 to 100
Default 0
Introduced 16.0.R4

Platforms All

route-preference *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route preference to reach the PCE server
Context	configure router <i>string</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) route-preference <i>keyword</i>
Tree	route-preference
Description	This command specifies the routing preference to reach the PCE server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the management routing instance are used to reach the PCE server before the in-band routes in the Base routing instance.
Default	both
Options	inband, outband, both
Introduced	21.10.R1
Platforms	All

tls-client-profile *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TLS client profile name assigned to this PCC peer
Context	configure router <i>string</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tls-client-profile <i>reference</i>
Tree	tls-client-profile
Reference	configure system security tls client-tls-profile <i>string</i>
Introduced	21.10.R1
Platforms	All

tls-wait-timer *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time the PCC waits until declaring handshake failure
Context	configure router <i>string</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tls-wait-timer <i>number</i>
Tree	tls-wait-timer
Range	60 to 255
Default	60
Units	seconds
Introduced	21.10.R1
Platforms	All

redelegation-timer *number*

Synopsis	Configure redelegation-timer
Context	configure router <i>string</i> pcep pcc redelegation-timer <i>number</i>
Tree	redelegation-timer
Range	1 to 3600
Default	90
Units	seconds
Introduced	16.0.R4
Platforms	All

report-path-constraints *boolean*

Synopsis	Include LSP path constraints in PCE report messages
Context	configure router <i>string</i> pcep pcc report-path-constraints <i>boolean</i>
Tree	report-path-constraints
Default	true
Introduced	16.0.R4
Platforms	All

state-timer

Synopsis	Enter the state-timer context
Context	configure <i>router string pcep pcc state-timer</i>
Tree	state-timer
Introduced	16.0.R4
Platforms	All

timer number

Synopsis	Configure state-timer
Context	configure <i>router string pcep pcc state-timer timer number</i>
Tree	timer
Range	1 to 3600
Default	180
Units	seconds
Introduced	16.0.R4
Platforms	All

timer-action keyword

Synopsis	State timer action remove/none
Context	configure <i>router string pcep pcc state-timer timer-action keyword</i>
Tree	timer-action
Default	remove
Options	none, remove
Introduced	16.0.R4
Platforms	All

unknown-message-rate number

Synopsis	Configure unknown message rate
Context	configure <i>router string pcep pcc unknown-message-rate number</i>
Tree	unknown-message-rate
Range	1 to 255
Default	10

Introduced 16.0.R4
Platforms All

pcp

Synopsis Enter the **pcp** context
Context **configure** *router string* **pcp**
Tree **pcp**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [name] string

Synopsis Enter the **server** list instance
Context **configure** *router string* **pcp server string**
Tree **server**
Max. Instances 8
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis PCP server name
Context **configure** *router string* **pcp server string**
Tree **server**
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of the PCP server
Context **configure** *router string* **pcp server string** *admin-state keyword*

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure router <i>string</i> pcp server <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite-address *string*

Synopsis	Inside Dual Stack Lite AFTR address
Context	configure router <i>string</i> pcp server <i>string</i> dual-stack-lite-address <i>string</i>
Tree	dual-stack-lite-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fwd-inside-router *string*

Synopsis	PCP forwarding inside virtual router instance
Context	configure router <i>string</i> pcp server <i>string</i> fwd-inside-router <i>string</i>
Tree	fwd-inside-router
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface [[name](#)] *reference*

Synopsis	Add a list entry for interface
Context	configure router <i>string</i> pcp server <i>string</i> interface <i>reference</i>

Tree	interface
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *reference*

Synopsis	Interface name
Context	configure router <i>string</i> pcp server <i>string</i> interface <i>reference</i>
Tree	interface
Reference	configure router <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	PCP server policy
Context	configure router <i>string</i> pcp server <i>string</i> policy <i>reference</i>
Tree	policy
Reference	configure service nat pcp-server-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim

Synopsis	Enable the pim context
Context	configure router <i>string</i> pim
Tree	pim
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM
Context	configure router <i>string</i> pim admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

apply-to *keyword*

Synopsis	IES and non-IES interfaces to create in PIM
Context	configure router <i>string</i> pim apply-to <i>keyword</i>
Tree	apply-to
Default	none
Options	ies, non-ies, all, none
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enter the import context
Context	configure router <i>string</i> pim import
Tree	import
Introduced	16.0.R1
Platforms	All

join-policy *reference*

Synopsis	Character limit for policy name
Context	configure router <i>string</i> pim import join-policy <i>reference</i>
Tree	join-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

register-policy *reference*

Synopsis	Character limit for policy name
Context	configure router <i>string</i> pim import register-policy <i>reference</i>
Tree	register-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [**interface-name**] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> pim interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Router interface name
Context	configure router <i>string</i> pim interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the PIM interface
Context	configure router <i>string</i> pim interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

assert-period *number*

Synopsis	Time for periodic refreshes of PIM Assert messages on an interface
Context	configure router <i>string</i> pim interface <i>string</i> assert-period <i>number</i>
Tree	assert-period
Range	1 to 300
Default	60
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure router <i>string</i> pim interface <i>string</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Use Bidirectional Forwarding Detection for IPv4 on PIM interface
Context	configure router <i>string</i> pim interface <i>string</i> bfd-liveness ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Use Bidirectional Forwarding Detection for IPv6 on PIM interface
Context	configure <i>router string pim interface string bfd-liveness ipv6 boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

bier-signaling-type

Synopsis	Enter the bier-signaling-type context
Context	configure <i>router string pim interface string bier-signaling-type</i>
Tree	bier-signaling-type
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv4 *boolean*

Synopsis	Enable PIM IPv4 signaling through a BIER domain
Context	configure <i>router string pim interface string bier-signaling-type ipv4 boolean</i>
Tree	ipv4
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6 *boolean*

Synopsis	Enable PIM IPv6 signaling through a BIER domain
Context	configure <i>router string pim interface string bier-signaling-type ipv6 boolean</i>
Tree	ipv6
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bsm-check-rtr-alert *boolean*

Synopsis	Check router alert option in bootstrap messages received
Context	configure router <i>string</i> pim interface <i>string</i> bsm-check-rtr-alert <i>boolean</i>
Tree	bsm-check-rtr-alert
Default	false
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Frequency at which PIM Hello messages are sent over this interface
Context	configure router <i>string</i> pim interface <i>string</i> hello-interval <i>number</i>
Tree	hello-interval
Range	0 to 255
Default	30
Introduced	16.0.R1
Platforms	All

hello-multiplier *number*

Synopsis	Multiplier to determine the hold time for PIM neighbor
Context	configure router <i>string</i> pim interface <i>string</i> hello-multiplier <i>number</i>
Tree	hello-multiplier
Range	20 to 100
Default	35
Introduced	16.0.R1
Platforms	All

improved-assert *boolean*

Synopsis	Allow improved assert processing on interface
Context	configure router <i>string</i> pim interface <i>string</i> improved-assert <i>boolean</i>
Tree	improved-assert
Default	true

Introduced 16.0.R1
Platforms All

instant-prune-echo *boolean*

Synopsis Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface

Context **configure** *router string pim interface string instant-prune-echo boolean*

Tree [instant-prune-echo](#)

Default false

Introduced 16.0.R1

Platforms All

ipv4

Synopsis Enter the **ipv4** context

Context **configure** *router string pim interface string ipv4*

Tree [ipv4](#)

Introduced 16.0.R1

Platforms All

monitor-oper-group

Synopsis Enter the **monitor-oper-group** context

Context **configure** *router string pim interface string ipv4 monitor-oper-group*

Tree [monitor-oper-group](#)

Introduced 16.0.R1

Platforms All

name *reference*

Synopsis Operational group identifier

Context **configure** *router string pim interface string ipv4 monitor-oper-group name reference*

Tree [name](#)

Reference **configure** *service oper-group string*

Introduced 16.0.R1
Platforms All

operation *keyword*

Synopsis Operation performed when operational group is active
Context **configure** *router string pim interface string ipv4 monitor-oper-group operation keyword*
Tree [operation](#)
Options add, subtract, set
Introduced 16.0.R1
Platforms All

priority-delta *number*

Synopsis Delta priority with operation when operational group is active
Context **configure** *router string pim interface string ipv4 monitor-oper-group priority-delta number*
Tree [priority-delta](#)
Range 1 to 4294967295
Introduced 16.0.R1
Platforms All

multicast *boolean*

Synopsis Enable PIM interface operation
Context **configure** *router string pim interface string ipv4 multicast boolean*
Tree [multicast](#)
Default true
Introduced 16.0.R1
Platforms All

ipv6

Synopsis Enter the **ipv6** context
Context **configure** *router string pim interface string ipv6*
Tree [ipv6](#)

Introduced 16.0.R1
Platforms All

monitor-oper-group

Synopsis Enter the **monitor-oper-group** context
Context **configure** [router string pim interface string ipv6 monitor-oper-group](#)
Tree [monitor-oper-group](#)
Introduced 16.0.R1
Platforms All

name *reference*

Synopsis Operational group identifier
Context **configure** [router string pim interface string ipv6 monitor-oper-group name reference](#)
Tree [name](#)
Reference **configure** [service oper-group string](#)
Introduced 16.0.R1
Platforms All

operation *keyword*

Synopsis Operation performed when operational group is active
Context **configure** [router string pim interface string ipv6 monitor-oper-group operation keyword](#)
Tree [operation](#)
Options add, subtract, set
Introduced 16.0.R1
Platforms All

priority-delta *number*

Synopsis Delta priority with operation when operational group is active
Context **configure** [router string pim interface string ipv6 monitor-oper-group priority-delta number](#)
Tree [priority-delta](#)

Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

multicast *boolean*

Synopsis	Enable PIM interface operation
Context	configure <i>router</i> <i>string</i> <i>pim</i> <i>interface</i> <i>string</i> <i>ipv6</i> multicast <i>boolean</i>
Tree	multicast
Default	true
Introduced	16.0.R1
Platforms	All

max-groups *number*

Synopsis	Maximum number of groups for the interface
Context	configure <i>router</i> <i>string</i> <i>pim</i> <i>interface</i> <i>string</i> max-groups <i>number</i>
Tree	max-groups
Range	0 1 to 16000
Default	0
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the mcac context
Context	configure <i>router</i> <i>string</i> <i>pim</i> <i>interface</i> <i>string</i> mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
Context	configure <i>router</i> <i>string</i> <i>pim</i> <i>interface</i> <i>string</i> mcac bandwidth

Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure router <i>string</i> pim interface <i>string</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> pim interface <i>string</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> pim interface <i>string</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the mc-constraints context
Context	configure router <i>string</i> pim interface <i>string</i> mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the multicast CAC constraints
Context	configure router <i>string</i> pim interface <i>string</i> mcac mc-constraints admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

level [*level-id*] *number*

Synopsis	Enter the level list instance
Context	configure router <i>string</i> pim interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Introduced	16.0.R1
Platforms	All

[*level-id*] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure router <i>string</i> pim interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure <i>router string pim interface string mcac mc-constraints level number bandwidth number</i>
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [**number-lag-port-down**] *number*

Synopsis	Enter the number-down list instance
Context	configure <i>router string pim interface string mcac mc-constraints number-down number</i>
Tree	number-down
Introduced	16.0.R1
Platforms	All

[number-lag-port-down] *number*

Synopsis	Number of ports that are down in this LAG link
Context	configure <i>router string pim interface string mcac mc-constraints number-down number</i>
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	configure <i>router string pim interface string mcac mc-constraints number-down number level number</i>

Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	configure router <i>string</i> pim interface <i>string</i> mcac mc-constraints use-lag-port-weight <i>boolean</i>
Tree	use-lag-port-weight
Description	When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure router <i>string</i> pim interface <i>string</i> mcac policy <i>reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none">• subscriber level and redirected interface when redirection is configured• subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	configure mcac policy string
Introduced	16.0.R1
Platforms	All

multicast-senders *keyword*

Synopsis	Subnet matching for the incoming data packets
Context	configure router string pim interface string multicast-senders keyword
Tree	multicast-senders
Default	auto
Options	auto, always, never
Introduced	16.0.R1
Platforms	All

p2mp-ldp-tree-join

Synopsis	Enter the p2mp-ldp-tree-join context
Context	configure router string pim interface string p2mp-ldp-tree-join
Tree	p2mp-ldp-tree-join
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv4 *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv4 PIM joins
Context	configure router string pim interface string p2mp-ldp-tree-join ipv4 boolean
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6 boolean

Synopsis	Allow dynamic mLDP in-band signaling for IPv6 PIM joins
Context	configure router <i>string</i> pim interface <i>string</i> p2mp-ldp-tree-join ipv6 boolean
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis	DR election priority for this interface
Context	configure router <i>string</i> pim interface <i>string</i> priority number
Tree	priority
Range	1 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

sticky-dr

Synopsis	Enable the sticky-dr context
Context	configure router <i>string</i> pim interface <i>string</i> sticky-dr
Tree	sticky-dr
Introduced	16.0.R1
Platforms	All

priority number

Synopsis	DR election priority for this interface
Context	configure router <i>string</i> pim interface <i>string</i> sticky-dr priority number
Tree	priority
Range	1 to 4294967295
Default	1024
Introduced	16.0.R1
Platforms	All

three-way-hello *boolean*

Synopsis	Allow three-way hello compatibility mode
Context	configure <i>router string pim interface string three-way-hello boolean</i>
Tree	three-way-hello
Default	false
Introduced	16.0.R1
Platforms	All

tracking-support *boolean*

Synopsis	Allow upstream routers to explicitly track join membership
Context	configure <i>router string pim interface string tracking-support boolean</i>
Tree	tracking-support
Default	false
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>router string pim ipv4</i>
Tree	ipv4
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv4
Context	configure <i>router string pim ipv4 admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

gtm

Synopsis	Enter the gtm context
Context	configure router <i>string</i> pim ipv4 gtm
Tree	gtm
Introduced	16.0.R1
Platforms	All

auto-discovery *keyword*

Synopsis	Method for multicast VPN membership auto-discovery
Context	configure router <i>string</i> pim ipv4 gtm auto-discovery <i>keyword</i>
Tree	auto-discovery
Options	bgp
Introduced	16.0.R1
Platforms	All

multicast-fast-failover *boolean*

Synopsis	Use Multicast-Only Fast Reroute (MoFRR) functionality
Context	configure router <i>string</i> pim ipv4 multicast-fast-failover <i>boolean</i>
Tree	multicast-fast-failover
Default	false
Introduced	16.0.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route tables for RPF lookup
Context	configure router <i>string</i> pim ipv4 rpf-table <i>keyword</i>
Tree	rpf-table
Default	rtable-u
Options	rtable-m, rtable-u, both
Introduced	16.0.R1
Platforms	All

ssm-assert-compatible-mode *boolean*

Synopsis	Enable SSM assert compatible mode
Context	configure <i>router</i> <i>string</i> <i>pim ipv4</i> ssm-assert-compatible-mode <i>boolean</i>
Tree	ssm-assert-compatible-mode
Default	false
Introduced	16.0.R1
Platforms	All

ssm-default-range *boolean*

Synopsis	SSM default range
Context	configure <i>router</i> <i>string</i> <i>pim ipv4</i> ssm-default-range <i>boolean</i>
Tree	ssm-default-range
Default	true
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>router</i> <i>string</i> <i>pim ipv6</i>
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv6
Context	configure <i>router</i> <i>string</i> <i>pim ipv6</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

multicast-fast-failover *boolean*

Synopsis	Use Multicast-Only Fast Reroute (MoFRR) functionality
Context	configure router <i>string</i> pim ipv6 multicast-fast-failover <i>boolean</i>
Tree	multicast-fast-failover
Default	false
Introduced	16.0.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route tables for RPF lookup
Context	configure router <i>string</i> pim ipv6 rpf-table <i>keyword</i>
Tree	rpf-table
Default	rtable-u
Options	rtable-m, rtable-u, both
Introduced	16.0.R1
Platforms	All

ssm-default-range *boolean*

Synopsis	SSM default range
Context	configure router <i>string</i> pim ipv6 ssm-default-range <i>boolean</i>
Tree	ssm-default-range
Default	true
Introduced	16.0.R1
Platforms	All

lag-usage-optimization *boolean*

Synopsis	Optimize LAG usage
Context	configure router <i>string</i> pim lag-usage-optimization <i>boolean</i>
Tree	lag-usage-optimization
Default	false
Introduced	16.0.R1

Platforms All

mc-ecmp-balance *boolean*

Synopsis Enable multicast balancing of traffic over ECMP links
Context **configure** *router* *string* *pim* **mc-ecmp-balance** *boolean*
Tree [mc-ecmp-balance](#)
Default true
Introduced 16.0.R1
Platforms All

mc-ecmp-balance-hold *number*

Synopsis Hold time for multicast balancing over ECMP links
Context **configure** *router* *string* *pim* **mc-ecmp-balance-hold** *number*
Tree [mc-ecmp-balance-hold](#)
Range 2 to 600
Units minutes
Introduced 16.0.R1
Platforms All

mc-ecmp-hashing

Synopsis Enable the **mc-ecmp-hashing** context
Context **configure** *router* *string* *pim* **mc-ecmp-hashing**
Tree [mc-ecmp-hashing](#)
Introduced 16.0.R1
Platforms All

rebalance *boolean*

Synopsis Rebalance flows to newly added links immediately instead of waiting until they are pruned
Context **configure** *router* *string* *pim* **mc-ecmp-hashing** **rebalance** *boolean*
Tree [rebalance](#)
Default false

Introduced 16.0.R1
Platforms All

mdt-spt *boolean*

Synopsis Use SPT switchover for default MDT
Context **configure** *router string pim mdt-spt boolean*
Tree [mdt-spt](#)
Default false
Introduced 16.0.R1
Platforms All

non-dr-attract-traffic *boolean*

Synopsis Attract traffic when the router is not the designated one
Context **configure** *router string pim non-dr-attract-traffic boolean*
Tree [non-dr-attract-traffic](#)
Default false
Introduced 16.0.R1
Platforms All

pim-ssm-scaling *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable PIM-SSM scaling
Context **configure** *router string pim pim-ssm-scaling boolean*
Tree [pim-ssm-scaling](#)
Description When configured to **true**, this command enables an increase of PIM SSM (S,G) scaling to a maximum of 256000 per system. The total maximum multicast capacity is, however, constrained by the lowest-performance FP.

When the maximum link capacity from the fabric to the lowest-performance FP is reached, the link to that FP is overloaded, resulting in packet loss for all FPs. This capacity constraint is independent of whether the lowest-performance FP has a receiver on it or not. If the multicast management chassis per-plane total capacity is configured to an explicit value larger than that supported by the lowest-performance FP, then IMPM

believes that there is more plane capacity available than there actually is and the result is (S,G) packet loss instead of blackholing. By setting the multicast management chassis per-plane total capacity to **dynamic**, the system automatically sets the switch fabric multicast plane capacity to the minimum value supported by the fabric and all line cards in the system.

When PIM SSM scaling is enabled, the following multicast features are disabled:• DM• MoFRR• JP policy• SSM groups• InBand features (BIER and MLDP)• Extranet• ASM

When configured to **false**, there is no increase of PIM SSM (S,G) scaling.

Default	false
Introduced	19.7.R1
Platforms	All

rp

Synopsis	Enter the rp context
Context	configure <i>router string pim rp</i>
Tree	<i>rp</i>
Introduced	16.0.R1
Platforms	All

bootstrap

Synopsis	Enter the bootstrap context
Context	configure <i>router string pim rp bootstrap</i>
Tree	<i>bootstrap</i>
Introduced	16.0.R1
Platforms	All

export *reference*

Synopsis	Character limit for policy name
Context	configure <i>router string pim rp bootstrap export reference</i>
Tree	<i>export</i>
Reference	configure <i>policy-options policy-statement string</i>
Max. Instances	5
Notes	This element is ordered by the user.

Introduced 16.0.R1
Platforms All

import *reference*

Synopsis Character limit for policy name
Context **configure** *router string pim rp bootstrap import reference*
Tree *import*
Reference **configure** *policy-options policy-statement string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

ipv4

Synopsis Enter the **ipv4** context
Context **configure** *router string pim rp ipv4*
Tree *ipv4*
Introduced 16.0.R1
Platforms All

anycast [*ipv4-address*] *string rp-set-peer string*

Synopsis Add a list entry for **anycast**
Context **configure** *router string pim rp ipv4 anycast string rp-set-peer string*
Tree *anycast*
Introduced 16.0.R1
Platforms All

[ipv4-address] *string*

Synopsis Loopback IP address shared by routes in RP set
Context **configure** *router string pim rp ipv4 anycast string rp-set-peer string*

Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-set-peer *string*

Synopsis	Configure a peer in the anycast rp-set.
Context	configure router <i>string</i> pim rp ipv4 anycast <i>string</i> rp-set-peer <i>string</i>
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

auto-rp-discovery *boolean*

Synopsis	Enable auto RP discovery
Context	configure router <i>string</i> pim rp ipv4 auto-rp-discovery <i>boolean</i>
Tree	auto-rp-discovery
Default	false
Introduced	16.0.R1
Platforms	All

bsr-candidate

Synopsis	Enter the bsr-candidate context
Context	configure router <i>string</i> pim rp ipv4 bsr-candidate
Tree	bsr-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	configure router <i>string</i> pim rp ipv4 bsr-candidate <i>address</i> <i>string</i>

Tree	address
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	configure router <i>string</i> pim rp ipv4 bsr-candidate admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

hash-mask-len *number*

Synopsis	Length for bootstrap hash mask
Context	configure router <i>string</i> pim rp ipv4 bsr-candidate hash-mask-len <i>number</i>
Tree	hash-mask-len
Range	0 to 32
Default	30
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Bootstrap priority of the router
Context	configure router <i>string</i> pim rp ipv4 bsr-candidate priority <i>number</i>
Tree	priority
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

candidate *boolean*

Synopsis	Enable auto-RP to advertise candidate RP information
Context	configure <i>router</i> <i>string</i> <i>pim rp ipv4 candidate</i> <i>boolean</i>
Tree	<i>candidate</i>
Description	When configured to true , the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery. When configured to false , the candidate RP information is not specified.
Default	false
Introduced	20.10.R1
Platforms	All

mapping-agent *boolean*

Synopsis	Enable the mapping agent on the node
Context	configure <i>router</i> <i>string</i> <i>pim rp ipv4 mapping-agent</i> <i>boolean</i>
Tree	<i>mapping-agent</i>
Description	When configured to true , the mapping agent is enabled on the node. The auto-RP MA observes the auto-rp-announcement messages, selects the RP and generates the RP discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality.
Default	false
Introduced	20.10.R1
Platforms	All

rp-candidate

Synopsis	Enter the rp-candidate context
Context	configure <i>router</i> <i>string</i> <i>pim rp ipv4 rp-candidate</i>
Tree	<i>rp-candidate</i>
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Local RP address
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Context	configure router <i>string</i> pim rp ipv4 rp-candidate address <i>string</i>
Tree	address
Description	This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	configure router <i>string</i> pim rp ipv4 rp-candidate admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group-range [**ipv4-prefix**] *string*

Synopsis	Add a list entry for group-range
Context	configure router <i>string</i> pim rp ipv4 rp-candidate group-range <i>string</i>
Tree	group-range
Introduced	16.0.R1
Platforms	All

[**ipv4-prefix**] *string*

Synopsis	IPv4 address and prefix length
Context	configure router <i>string</i> pim rp ipv4 rp-candidate group-range <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	configure router <i>string</i> pim rp ipv4 rp-candidate holdtime <i>number</i>
Tree	holdtime
Range	5 to 255
Default	150
Units	seconds
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Candidate RP priority
Context	configure router <i>string</i> pim rp ipv4 rp-candidate priority <i>number</i>
Tree	priority
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the static context
Context	configure router <i>string</i> pim rp ipv4 static
Tree	static
Introduced	16.0.R1
Platforms	All

address [*ipv4-address*] *string*

Synopsis	Enter the address list instance
Context	configure router <i>string</i> pim rp ipv4 static address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	All

[ipv4-address] *string*

Synopsis	IPv4 address for the static RP
Context	configure router <i>string</i> pim rp ipv4 static address <i>string</i>
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group-prefix [**ipv4-prefix**] *string*

Synopsis	Add a list entry for group-prefix
Context	configure router <i>string</i> pim rp ipv4 static address <i>string</i> group-prefix <i>string</i>
Tree	group-prefix
Introduced	16.0.R1
Platforms	All

[ipv4-prefix] *string*

Synopsis	IPv4 address and prefix length
Context	configure router <i>string</i> pim rp ipv4 static address <i>string</i> group-prefix <i>string</i>
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	configure router <i>string</i> pim rp ipv4 static address <i>string</i> override <i>boolean</i>
Tree	override
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>string</i> pim rp ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

anycast [**ipv6-address**] *string rp-set-peer string*

Synopsis	Add a list entry for anycast
Context	configure router <i>string</i> pim rp ipv6 anycast <i>string rp-set-peer string</i>
Tree	anycast
Introduced	16.0.R1
Platforms	All

[ipv6-address] *string*

Synopsis	Loopback IP address shared by routes in RP set
Context	configure router <i>string</i> pim rp ipv6 anycast <i>string rp-set-peer string</i>
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-set-peer *string*

Synopsis	Peer in the anycast RP set
Context	configure router <i>string</i> pim rp ipv6 anycast <i>string rp-set-peer string</i>
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bsr-candidate

Synopsis	Enter the bsr-candidate context
Context	configure router <i>string</i> pim rp ipv6 bsr-candidate
Tree	bsr-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	configure router <i>string</i> pim rp ipv6 bsr-candidate address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	configure router <i>string</i> pim rp ipv6 bsr-candidate admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

hash-mask-len *number*

Synopsis	Length for bootstrap hash mask
Context	configure router <i>string</i> pim rp ipv6 bsr-candidate hash-mask-len <i>number</i>
Tree	hash-mask-len
Range	0 to 128
Default	126
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Bootstrap priority of the router
Context	configure router <i>string</i> pim rp ipv6 bsr-candidate <i>priority number</i>
Tree	priority
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

embedded-rp

Synopsis	Enable the embedded-rp context
Context	configure router <i>string</i> pim rp ipv6 embedded-rp
Tree	embedded-rp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of embedded RP
Context	configure router <i>string</i> pim rp ipv6 embedded-rp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group-range [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for group-range
Context	configure router <i>string</i> pim rp ipv6 embedded-rp group-range <i>string</i>
Tree	group-range
Introduced	16.0.R1
Platforms	All

[ipv6-prefix] string

Synopsis	IPv6 address and prefix length
Context	configure router string pim rp ipv6 embedded-rp group-range string
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-candidate

Synopsis	Enter the rp-candidate context
Context	configure router string pim rp ipv6 rp-candidate
Tree	rp-candidate
Introduced	16.0.R1
Platforms	All

address string

Synopsis	Local RP address
Context	configure router string pim rp ipv6 rp-candidate address string
Tree	address
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the Candidate RP
Context	configure router string pim rp ipv6 rp-candidate admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group-range [ipv6-prefix] *string*

Synopsis	Add a list entry for group-range
Context	configure <i>router string pim rp ipv6 rp-candidate group-range string</i>
Tree	group-range
Introduced	16.0.R1
Platforms	All

[ipv6-prefix] *string*

Synopsis	IPv6 address and prefix length
Context	configure <i>router string pim rp ipv6 rp-candidate group-range string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	configure <i>router string pim rp ipv6 rp-candidate holdtime number</i>
Tree	holdtime
Range	5 to 255
Default	150
Units	seconds
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Candidate RP priority
Context	configure <i>router string pim rp ipv6 rp-candidate priority number</i>
Tree	priority
Range	0 to 255
Default	192

Introduced 16.0.R1
Platforms All

static

Synopsis Enter the **static** context
Context **configure router string pim rp ipv6 static**
Tree **static**
Introduced 16.0.R1
Platforms All

address [ipv6-address] string

Synopsis Enter the **address** list instance
Context **configure router string pim rp ipv6 static address string**
Tree **address**
Introduced 16.0.R1
Platforms All

[ipv6-address] string

Synopsis Static IP address of the RP
Context **configure router string pim rp ipv6 static address string**
Tree **address**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

group-prefix [ipv6-prefix] string

Synopsis Add a list entry for **group-prefix**
Context **configure router string pim rp ipv6 static address string group-prefix string**
Tree **group-prefix**
Introduced 16.0.R1
Platforms All

[**ipv6-prefix**] *string*

Synopsis	IPv6 address and prefix length
Context	configure router <i>string</i> pim rp ipv6 static address <i>string</i> group-prefix <i>string</i>
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	configure router <i>string</i> pim rp ipv6 static address <i>string</i> override <i>boolean</i>
Tree	override
Default	false
Introduced	16.0.R1
Platforms	All

rpfv

Synopsis	Enter the rpfv context
Context	configure router <i>string</i> pim rpfv
Tree	rpfv
Introduced	16.0.R1
Platforms	All

core *boolean*

Synopsis	Include proxy RPF vector for core
Context	configure router <i>string</i> pim rpfv core <i>boolean</i>
Tree	core
Default	false
Introduced	16.0.R1
Platforms	All

mvpn *boolean*

Synopsis	Include proxy RPF vector for Inter-AS Rosen MVPN
Context	configure router <i>string</i> pim rpfv mvpn <i>boolean</i>
Tree	mvpn
Default	false
Introduced	16.0.R1
Platforms	All

spt-switchover [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the spt-switchover list instance
Context	configure router <i>string</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	spt-switchover
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address and mask length
Context	configure router <i>string</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	spt-switchover
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

threshold (*number* | *keyword*)

Synopsis	SPT switchover threshold
Context	configure router <i>string</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) threshold (<i>number</i> <i>keyword</i>)
Tree	threshold
Range	1 to 4294967294
Units	kilobps
Options	infinity

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ssm-groups

Synopsis	Enter the ssm-groups context
Context	configure <i>router string pim ssm-groups</i>
Tree	ssm-groups
Introduced	16.0.R1
Platforms	All

group-range [[ip-prefix](#)] (*ipv4-prefix | ipv6-prefix*)

Synopsis	Add a list entry for group-range
Context	configure <i>router string pim ssm-groups group-range (ipv4-prefix ipv6-prefix)</i>
Tree	group-range
Introduced	16.0.R1
Platforms	All

[[ip-prefix](#)] (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP address and mask length
Context	configure <i>router string pim ssm-groups group-range (ipv4-prefix ipv6-prefix)</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

radius

Synopsis	Enter the radius context
Context	configure <i>router string radius</i>
Tree	radius
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy [*name*] *string*

Synopsis Enter the **proxy** list instance
Context **configure** *router string radius proxy string*
Tree *proxy*
Max. Instances 8
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis RADIUS proxy name
Context **configure** *router string radius proxy string*
Tree *proxy*
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of RADIUS proxy
Context **configure** *router string radius proxy string admin-state keyword*
Tree *admin-state*
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-matching

Synopsis Enter the **attribute-matching** context

Context **configure router string radius proxy string attribute-matching**
Tree [attribute-matching](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [[index](#)] *number*

Synopsis Enter the **entry** list instance
Context **configure router string radius proxy string attribute-matching entry number**
Tree [entry](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[index] *number*

Synopsis Index of this entry
Context **configure router string radius proxy string attribute-matching entry number**
Tree [entry](#)
Range 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-server-policy *string*

Synopsis Accounting server policy
Context **configure router string radius proxy string attribute-matching entry number accounting-server-policy string**
Tree [accounting-server-policy](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-server-policy *string*

Synopsis	Authentication server policy
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> authentication-server-policy <i>string</i>
Tree	authentication-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis	Prefix string
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> prefix-string <i>string</i>
Tree	prefix-string
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix-string *string*

Synopsis	Prefix string
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> suffix-string <i>string</i>
Tree	suffix-string
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Matching attribute type to RADIUS server policy
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching type <i>number</i>
Tree	type
Range	1 to 255
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number | keyword*)

Synopsis Matching Vendor ID to RADIUS server policy
Context **configure** *router string radius proxy string attribute-matching vendor (number | keyword)*
Tree *vendor*
Range 1 to 16777215
Options nokia
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cache

Synopsis Enter the **cache** context
Context **configure** *router string radius proxy string cache*
Tree *cache*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the RADIUS proxy cache
Context **configure** *router string radius proxy string cache admin-state keyword*
Tree *admin-state*
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

key

Synopsis Enable the **key** context
Context **configure** *router string radius proxy string cache key*
Tree *key*

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-type *number*

Synopsis RADIUS attribute type to cache for this RADIUS proxy server
Context **configure** *router string radius proxy string cache key attribute-type number*
Tree [attribute-type](#)
Range 1 to 255
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-type *keyword*

Synopsis Packet type of the RADIUS messages
Context **configure** *router string radius proxy string cache key packet-type keyword*
Tree [packet-type](#)
Options access-request, access-accept
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number | keyword*)

Synopsis RADIUS Vendor ID
Context **configure** *router string radius proxy string cache key vendor (number | keyword)*
Tree [vendor](#)
Range 1 to 16777215
Options nokia
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Idle timeout value
Context	configure router <i>string</i> radius proxy <i>string</i> cache timeout <i>number</i>
Tree	timeout
Range	60 to 3600
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-accounting

Synopsis	Enter the track-accounting context
Context	configure router <i>string</i> radius proxy <i>string</i> cache track-accounting
Tree	track-accounting
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-off *boolean*

Synopsis	Remove all ESM hosts associated with the RADIUS client
Context	configure router <i>string</i> radius proxy <i>string</i> cache track-accounting accounting-off <i>boolean</i>
Tree	accounting-off
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-on *boolean*

Synopsis	Remove all ESM hosts associated with the RADIUS client
Context	configure router <i>string</i> radius proxy <i>string</i> cache track-accounting accounting-on <i>boolean</i>
Tree	accounting-on
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis Update the ESM host with the RADIUS client that generated the interim update
Context **configure** *router string radius proxy string cache track-accounting interim-update boolean*
Tree [interim-update](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *boolean*

Synopsis Update host with client that generated accounting-start
Context **configure** *router string radius proxy string cache track-accounting start boolean*
Tree [start](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop *boolean*

Synopsis Remove ESM host and forward accounting-stop packet
Context **configure** *router string radius proxy string cache track-accounting stop boolean*
Tree [stop](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-authentication

Synopsis Enter the **track-authentication** context
Context **configure** *router string radius proxy string cache track-authentication*
Tree [track-authentication](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept *boolean*

Synopsis Track Access-Accept message for mobility
Context **configure** *router string radius proxy string cache track-authentication accept boolean*
Tree [accept](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-delete-hold-time *number*

Synopsis Delete hold time
Context **configure** *router string radius proxy string cache track-delete-hold-time number*
Tree [track-delete-hold-time](#)
Range 0 to 6000
Default 0
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis Enter the **defaults** context
Context **configure** *router string radius proxy string defaults*
Tree [defaults](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-server-policy *string*

Synopsis Default accounting RADIUS server policy
Context **configure** *router string radius proxy string defaults accounting-server-policy string*

Tree [accounting-server-policy](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-server-policy *string*

Synopsis Default authentication RADIUS server policy
Context **configure** [router](#) *string* [radius proxy](#) *string* [defaults authentication-server-policy](#) *string*
Tree [authentication-server-policy](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [router](#) *string* [radius proxy](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [[interface-name](#)] *string*

Synopsis Add a list entry for **interface**
Context **configure** [router](#) *string* [radius proxy](#) *string* [interface](#) *string*
Tree [interface](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[interface-name] *string*

Synopsis IP interface name
Context **configure** [router](#) *string* [radius proxy](#) *string* [interface](#) *string*

Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

load-balance-key

Synopsis	Enter the load-balance-key context
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key
Tree	load-balance-key
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-1

Synopsis	Enter the attribute-1 context
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-1
Tree	attribute-1
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-1 <i>type</i> <i>number</i>
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-1 vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-2

Synopsis	Enter the attribute-2 context
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-2
Tree	attribute-2
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-2 type <i>number</i>
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-2 vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215

Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-3

Synopsis	Enter the attribute-3 context
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-3
Tree	attribute-3
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type number

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-3 type <i>number</i>
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (number | keyword)

Synopsis	Vendor-Id attribute
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-3 vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-4

Synopsis	Enter the attribute-4 context
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-4
Tree	attribute-4
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-4 type <i>number</i>
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-4 vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-5

Synopsis	Enter the attribute-5 context
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-5
Tree	attribute-5
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis Attribute type to cache for this RADIUS Proxy server
Context **configure** *router string radius proxy string load-balance-key attribute-5 type number*
Tree *type*
Range 1 to 255
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number | keyword*)

Synopsis Vendor-Id attribute
Context **configure** *router string radius proxy string load-balance-key attribute-5 vendor (number | keyword)*
Tree *vendor*
Range 1 to 16777215
Options nokia
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-udp

Synopsis Key to consist of the source IP address and source UDP port of the RADIUS message
Context **configure** *router string radius proxy string load-balance-key source-ip-udp*
Tree *source-ip-udp*
Notes The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

purpose *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Purpose of the RADIUS proxy
Context	configure router <i>string</i> radius proxy <i>string</i> purpose <i>keyword</i>
Tree	purpose
Options	accounting, authentication, accounting-authentication
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	configure router <i>string</i> radius proxy <i>string</i> python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Format of the secret key to access the RADIUS proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> secret <i>string</i>
Tree	secret
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-accounting-response *boolean*

Synopsis	Allow RADIUS proxy server to respond to Accounting-Response messages
Context	configure router <i>string</i> radius proxy <i>string</i> send-accounting-response <i>boolean</i>

Tree	send-accounting-response
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the wlan-gw context
Context	configure router <i>string</i> radius proxy <i>string</i> wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	IPv4 address of the distributed RADIUS proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> wlan-gw address <i>string</i>
Tree	address
Description	This command configures the IPv4 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	IPv6 address of the distributed RADIUS proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> wlan-gw ipv6-address <i>string</i>
Tree	ipv6-address
Description	This command configures the IPv6 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN gateway group
Context	configure <i>router string radius proxy string wlan-gw-group reference</i>
Tree	<i>wlan-gw-group</i>
Reference	configure <i>isa wlan-gw-group number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [*name*] *string*

Synopsis	Enter the server list instance
Context	configure <i>router string radius server string</i>
Tree	<i>server</i>
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis	External RADIUS server name
Context	configure <i>router string radius server string</i>
Tree	<i>server</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept-coa *boolean*

Synopsis	Process Change of Authorization (CoA) messages
Context	configure <i>router string radius server string accept-coa boolean</i>

Tree	accept-coa
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-port number

Synopsis	UDP port number of the RADIUS for accounting events
Context	configure router <i>string</i> radius server <i>string</i> acct-port number
Tree	acct-port
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	IP address of the RADIUS server
Context	configure router <i>string</i> radius server <i>string</i> address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auth-port number

Synopsis	UDP port number of the RADIUS to be used as match criteria
Context	configure router <i>string</i> radius server <i>string</i> auth-port number
Tree	auth-port
Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure router <i>string</i> radius server <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pending-requests-limit *number*

Synopsis	Limit of the number for pending RADIUS requests
Context	configure router <i>string</i> radius server <i>string</i> pending-requests-limit <i>number</i>
Tree	pending-requests-limit
Range	1 to 4096
Default	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python script policy to modify CoA messages
Context	configure router <i>string</i> radius server <i>string</i> python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Secret key associated with this RADIUS server
Context	configure router <i>string</i> radius server <i>string</i> secret <i>string</i>
Tree	secret
String Length	1 to 115
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reassemble

Synopsis Enable the **reassemble** context
Context **configure router string reassemble**
Tree **reassemble**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis NAT group (including WLAN Gateway group) that executes the reassemble
Context **configure router string reassemble nat-group number**
Tree **nat-group**
Max. Range 0 to 4294967295
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to-base-network *boolean*

Synopsis Allow reassembled traffic sent to network interface
Context **configure router string reassemble to-base-network boolean**
Tree **to-base-network**
Default false
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rib-api

Synopsis Enter the **rib-api** context
Context **configure router string rib-api**

Tree	rib-api
Introduced	16.0.R4
Platforms	All

mpls

Synopsis	Enter the mpls context
Context	configure router <i>string</i> rib-api mpls
Tree	mpls
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MPLS for RIB-API gRPC service
Context	configure router <i>string</i> rib-api mpls admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

label-name *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure reserved label block.
Context	configure router <i>string</i> rib-api mpls label-name <i>reference</i>
Tree	label-name
Reference	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>
Introduced	16.0.R4
Platforms	All

rip

Synopsis	Enable the rip context
Context	configure router <i>string</i> rip
Tree	rip
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIP instance
Context	configure router <i>string</i> rip admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	configure router <i>string</i> rip authentication-key <i>string</i>
Tree	authentication-key
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used between RIP neighbors
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Context	configure <i>router</i> <i>string</i> <i>rip</i> <i>authentication-type</i> <i>keyword</i>
Tree	authentication-type
Description	This command sets the type of authentication to be used between RIP neighbors. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Default	none
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure <i>router</i> <i>string</i> <i>rip</i> <i>bfd-liveness</i> <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure <i>router</i> <i>string</i> <i>rip</i> <i>check-zero</i> <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4

Platforms All

description *string*

Synopsis Text description
Context **configure** [router](#) *string* [rip](#) [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R4
Platforms All

export-limit

Synopsis Enable the **export-limit** context
Context **configure** [router](#) *string* [rip](#) [export-limit](#)
Tree [export-limit](#)
Introduced 16.0.R4
Platforms All

log-percent *number*

Synopsis Export limit before warning and SNMP notification sent
Context **configure** [router](#) *string* [rip](#) [export-limit](#) [log-percent](#) *number*
Tree [log-percent](#)
Range 1 to 100
Introduced 16.0.R4
Platforms All

number *number*

Synopsis Maximum routes or prefixes exported from route table
Context **configure** [router](#) *string* [rip](#) [export-limit](#) [number](#) *number*
Tree [number](#)
Range 1 to 4294967295
Notes This element is mandatory.

Introduced 16.0.R4
Platforms All

export-policy *reference*

Synopsis Policies to determine exported routes
Context **configure** *router string rip export-policy reference*
Tree [export-policy](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R4
Platforms All

group [[group-name](#)] *string*

Synopsis Enter the **group** list instance
Context **configure** *router string rip group string*
Tree [group](#)
Introduced 16.0.R4
Platforms All

[group-name] *string*

Synopsis RIP group name
Context **configure** *router string rip group string*
Tree [group](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

admin-state *keyword*

Synopsis	Administrative state of RIP neighbor interface group
Context	configure router <i>string</i> rip group <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	configure router <i>string</i> rip group <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
Context	configure router <i>string</i> rip group <i>string</i> authentication-type <i>keyword</i>
Tree	authentication-type
Description	<p>This command configures the type of authentication to be used.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Options	none, password, md5, md20

Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure <i>router string rip group string bfd-liveness boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure <i>router string rip group string check-zero boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure <i>router string rip group string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure router <i>string</i> rip group <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure router <i>string</i> rip group <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	configure router <i>string</i> rip group <i>string</i> message-size <i>number</i>
Tree	message-size

Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure router <i>string</i> rip group <i>string</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure router <i>string</i> rip group <i>string</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

neighbor [*interface-name*] *string*

Synopsis	Enter the neighbor list instance
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i>
Tree	neighbor
Introduced	16.0.R4
Platforms	All

[interface-name] *string*

Synopsis	Neighbor added through the interface to the RIP group
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i>
Tree	neighbor

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIP neighbor interface
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> authentication-type <i>keyword</i>
Tree	authentication-type

Description	<p>This command configures the type of authentication to be used.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to false, this command removes BFD from the associated protocol adjacency.</p>
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> check-zero <i>boolean</i>
Tree	check-zero
Description	<p>When configured to true, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.</p> <p>When configured to false, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.</p>
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> description <i>string</i>

Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	configure <i>router string rip group string neighbor string message-size number</i>
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure <i>router string rip group string neighbor string metric-in number</i>
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure <i>router string rip group string neighbor string metric-out number</i>
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure <i>router string rip group string neighbor string preference number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive keyword

Synopsis	Accepted version on received packets
Context	configure router string rip group string neighbor string receive keyword
Tree	receive
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send keyword

Synopsis	RIP version and method used to send RIP updates
Context	configure router string rip group string neighbor string send keyword
Tree	send
Options	none, version-1, broadcast, multicast, unicast
Introduced	16.0.R4
Platforms	All

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure router string rip group string neighbor string split-horizon boolean
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
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Context	configure <i>router string rip group string neighbor string timers</i>
Tree	<i>timers</i>
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	configure <i>router string rip group string neighbor string timers flush number</i>
Tree	<i>flush</i>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure <i>router string rip group string neighbor string timers timeout number</i>
Tree	<i>timeout</i>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
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Context	configure <i>router string rip group string neighbor string timers update number</i>
Tree	<i>update</i>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

unicast-address [*address*] *string*

Synopsis	Add a list entry for unicast-address
Context	configure <i>router string rip group string neighbor string unicast-address string</i>
Tree	<i>unicast-address</i>
Introduced	16.0.R4
Platforms	All

[address] *string*

Synopsis	Unicast address for the neighbor
Context	configure <i>router string rip group string neighbor string unicast-address string</i>
Tree	<i>unicast-address</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure <i>router string rip group string preference number</i>
Tree	<i>preference</i>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive keyword

Synopsis	Accepted version on received packets
Context	configure <i>router string rip group string receive keyword</i>
Tree	<i>receive</i>
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send keyword

Synopsis	RIP version and method used to send RIP updates
Context	configure <i>router string rip group string send keyword</i>
Tree	<i>send</i>
Options	none, version-1, broadcast, multicast
Introduced	16.0.R4
Platforms	All

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure <i>router string rip group string split-horizon boolean</i>
Tree	<i>split-horizon</i>
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure <i>router string rip group string timers</i>

Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	configure router <i>string</i> rip <i>group</i> <i>string</i> timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure router <i>string</i> rip <i>group</i> <i>string</i> timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure router <i>string</i> rip <i>group</i> <i>string</i> timers update <i>number</i>

Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	configure router <i>string</i> rip import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the RIP message
Context	configure router <i>string</i> rip message-size <i>number</i>
Tree	message-size
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure router <i>string</i> rip metric-in <i>number</i>
Tree	metric-in
Range	1 to 16

Default	1
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure router <i>string</i> rip metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure router <i>string</i> rip preference <i>number</i>
Tree	preference
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure router <i>string</i> rip receive <i>keyword</i>
Tree	receive
Default	both
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	configure <i>router string rip send keyword</i>
Tree	send
Default	broadcast
Options	none, version-1, broadcast, multicast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure <i>router string rip split-horizon boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure <i>router string rip timers</i>
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
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Context	configure router <i>string rip timers flush number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure router <i>string rip timers timeout number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure router <i>string rip timers update number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

ripng

Synopsis	Enable the ripng context
Context	configure router string ripng
Tree	ripng
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIPng instance
Context	configure router string ripng admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router string ripng bfd-liveness boolean
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure router string ripng check-zero boolean
Tree	check-zero

Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure <i>router string ripng description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-limit

Synopsis	Enable the export-limit context
Context	configure <i>router string ripng export-limit</i>
Tree	<i>export-limit</i>
Introduced	16.0.R4
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure <i>router string ripng export-limit log-percent number</i>
Tree	<i>log-percent</i>
Range	1 to 100
Introduced	16.0.R4
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure router <i>string</i> ripng export-limit number <i>number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies to determine exported routes
Context	configure router <i>string</i> ripng export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

group [*group-name*] *string*

Synopsis	Enter the group list instance
Context	configure router <i>string</i> ripng group <i>string</i>
Tree	group
Introduced	16.0.R4
Platforms	All

[*group-name*] *string*

Synopsis	RIP group name
Context	configure router <i>string</i> ripng group <i>string</i>
Tree	group
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RIPng neighbor interface group
Context	configure router <i>string ripng group string admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router <i>string ripng group string bfd-liveness boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure router <i>string ripng group string check-zero boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4

Platforms All

description *string*

Synopsis Text description
 Context **configure** [router](#) *string* [ripng](#) [group](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R4
 Platforms All

export-policy *reference*

Synopsis Policies used to rule which routes are exported to RIP
 Context **configure** [router](#) *string* [ripng](#) [group](#) *string* [export-policy](#) *reference*
 Tree [export-policy](#)
 Description This command specifies the export route policies used to determine which routes are exported to RIP.
 If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
 Reference **configure** [policy-options](#) [policy-statement](#) *string*
 Max. Instances 5
 Notes This element is ordered by the user.
 Introduced 16.0.R4
 Platforms All

import-policy *reference*

Synopsis Policies to decide routes accepted from RIP neighbors
 Context **configure** [router](#) *string* [ripng](#) [group](#) *string* [import-policy](#) *reference*
 Tree [import-policy](#)
 Description This command configures import route policies to determine which routes are accepted from RIP neighbors.
 If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure router <i>string</i> ripng group <i>string</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure router <i>string</i> ripng group <i>string</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure router <i>string</i> ripng group <i>string</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

neighbor [interface-name] string

Synopsis	Enter the neighbor list instance
Context	configure router string ripng group string neighbor string
Tree	neighbor
Introduced	16.0.R4
Platforms	All

[interface-name] string

Synopsis	Neighbor added to the RIPng group through the interface
Context	configure router string ripng group string neighbor string
Tree	neighbor
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state keyword

Synopsis	Administrative state of the RIPng neighbor
Context	configure router string ripng group string neighbor string admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

bfd-liveness boolean

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router string ripng group string neighbor string bfd-liveness boolean
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency.

When configured to **false**, this command removes BFD from the associated protocol adjacency.

Introduced 16.0.R4
Platforms All

check-zero *boolean*

Synopsis Enable checking of mandatory zero fields
Context **configure** *router string ripng group string neighbor string check-zero boolean*
Tree [check-zero](#)
Description When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.
When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced 16.0.R4
Platforms All

description *string*

Synopsis Text description
Context **configure** *router string ripng group string neighbor string description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R4
Platforms All

export-policy *reference*

Synopsis Policies used to rule which routes are exported to RIP
Context **configure** *router string ripng group string neighbor string export-policy reference*
Tree [export-policy](#)
Description This command specifies the export route policies used to determine which routes are exported to RIP.
If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference **configure** *policy-options policy-statement string*

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure router <i>string ripng group string neighbor string import-policy reference</i>
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure router <i>string ripng group string neighbor string message-size number</i>
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure router <i>string ripng group string neighbor string metric-in number</i>
Tree	metric-in

Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> receive <i>keyword</i>
Tree	receive
Options	none, ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> send <i>keyword</i>

Tree	send
Options	none, ripng, unicast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

unicast-address [*address*] *string*

Synopsis	Add a list entry for unicast-address
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> unicast-address <i>string</i>

Tree	unicast-address
Introduced	16.0.R4
Platforms	All

[address] *string*

Synopsis	Unicast address for the neighbour
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> unicast-address <i>string</i>
Tree	unicast-address
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure router <i>string</i> ripng group <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure router <i>string</i> ripng group <i>string</i> receive <i>keyword</i>
Tree	receive
Options	none, ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	configure router <i>string</i> ripng group <i>string</i> send <i>keyword</i>

Tree	send
Options	none, ripng
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure router <i>string</i> ripng group <i>string</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure router <i>string</i> ripng group <i>string</i> timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	configure router <i>string</i> ripng group <i>string</i> timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure <i>router string ripng group string timers timeout number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure <i>router string ripng group string timers update number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	configure <i>router string ripng import-policy reference</i>

Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure router <i>string</i> ripng message-size <i>number</i>
Tree	message-size
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure router <i>string</i> ripng metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure router <i>string</i> ripng metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Default	1

Introduced 16.0.R4
Platforms All

preference *number*

Synopsis Route preference
Context **configure** *router string ripng preference number*
Tree [preference](#)
Range 1 to 255
Default 100
Introduced 16.0.R4
Platforms All

receive *keyword*

Synopsis Accepted version on received packets
Context **configure** *router string ripng receive keyword*
Tree [receive](#)
Default ripng
Options none, ripng
Introduced 16.0.R4
Platforms All

send *keyword*

Synopsis RIPng version and method used to send RIPng updates
Context **configure** *router string ripng send keyword*
Tree [send](#)
Default ripng
Options none, ripng
Introduced 16.0.R4
Platforms All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure router <i>string</i> ripng split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure router <i>string</i> ripng timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	configure router <i>string</i> ripng timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure <i>router string ripng timers timeout number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure <i>router string ripng timers update number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

router-id *string*

Synopsis	Unique router ID for the router in the AS
Context	configure <i>router string router-id string</i>
Tree	router-id
Introduced	16.0.R1
Platforms	All

rsvp

Synopsis	Enable the rsvp context
Context	configure router <i>string</i> rsvp
Tree	rsvp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RSVP
Context	configure router <i>string</i> rsvp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-over-bypass *boolean*

Synopsis	Enable MD5 authentication over bypass LSP of PLR and MP
Context	configure router <i>string</i> rsvp authentication-over-bypass <i>boolean</i>
Tree	authentication-over-bypass
Description	When configured to true , this command configures the MD5 authentication over the bypass LSP of all Point of Local Repairs (PLRs) and Merge Points (MPs) on the router. Only enable this command when the TE interfaces in the RSVP-TE network use the same MD5 authentication parameters.

When a Point of Local Repair (PLR) activates a bypass LSP towards a Merge Point (MP), by default, the INTEGRITY object corresponding to the bypass LSP interface is not added to a transmitted RSVP message except for packets of routed RSVP messages (Resv, Srefresh, and ACK), and only when the packet is intended for a bypass LSP endpoint (PLR or MP) that is a directly connected neighbor.

When this command is enabled, the INTEGRITY object of the interface corresponding to the bypass LSP is added to a transmitted RSVP message regardless of whether the bypass LSP endpoint (PLR or MP) is a directly connected RSVP neighbor. The INTEGRITY object is included with the following RSVP messages: Path, PathTear, PathErr, Resv, ResvTear, ResvErr, Srefresh, and ACK.

In all cases, an RSVP message received from a PLR or a MP (sender address in the SenderTemplate or FilterSpec is different from an Extended Tunnel Id in a Session Object), and which includes the INTEGRITY object is authenticated against the bypass

LSP interface. An RSVP message received from a PLR or MP without the INTEGRITY object is also accepted.

When configured to **false**, the router disables MD5 authentication over bypass LSP of the PLRs and MPs.

Default	false
Introduced	22.10.R1
Platforms	All

dbw-accounting

Synopsis	Enable the dbw-accounting context
Context	configure router <i>string</i> rsvp dbw-accounting
Tree	dbw-accounting
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

dbw-multiplier *number*

Synopsis	Dark Bandwidth multiplier
Context	configure router <i>string</i> rsvp dbw-accounting dbw-multiplier <i>number</i>
Tree	dbw-multiplier
Range	0 to 1000
Default	100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

down-threshold

Synopsis	Enter the down-threshold context
Context	configure router <i>string</i> rsvp dbw-accounting down-threshold
Tree	down-threshold
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw number

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	configure router string rsvp dbw-accounting down-threshold bw number
Tree	bw
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent number

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	configure router string rsvp dbw-accounting down-threshold percent number
Tree	percent
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

sample-interval number

Synopsis	Dark Bandwidth sample interval
Context	configure router string rsvp dbw-accounting sample-interval number
Tree	sample-interval
Range	10 to 600
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

sample-multiplier number

Synopsis	Dark Bandwidth sample multiplier
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Context	configure router <i>string</i> <i>rsvp dbw-accounting sample-multiplier number</i>
Tree	sample-multiplier
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

up-threshold

Synopsis	Enter the up-threshold context
Context	configure router <i>string</i> <i>rsvp dbw-accounting up-threshold</i>
Tree	up-threshold
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw number

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	configure router <i>string</i> <i>rsvp dbw-accounting up-threshold bw number</i>
Tree	bw
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent number

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	configure router <i>string</i> <i>rsvp dbw-accounting up-threshold percent number</i>
Tree	percent
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-s, 7950 XRS, VSR

diffserv-te

Synopsis Enable the **diffserv-te** context
Context **configure router string rsvp diffserv-te**
Tree [diffserv-te](#)
Introduced 16.0.R1
Platforms All

admission-control-model *keyword*

Synopsis Parameters for the DiffServ TE node
Context **configure router string rsvp diffserv-te admission-control-model keyword**
Tree [admission-control-model](#)
Options mam, rdm
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

class-type-bw

Synopsis Enter the **class-type-bw** context
Context **configure router string rsvp diffserv-te class-type-bw**
Tree [class-type-bw](#)
Introduced 16.0.R1
Platforms All

ct0 *number*

Synopsis RSVP interface bandwidth percentage for class type 0
Context **configure router string rsvp diffserv-te class-type-bw ct0 number**
Tree [ct0](#)
Range 0 to 100
Default 0

Introduced 16.0.R1
Platforms All

ct1 number

Synopsis RSVP interface bandwidth percentage for class type 1
Context **configure router string rsvp diffserv-te class-type-bw ct1 number**
Tree [ct1](#)
Range 0 to 100
Default 0
Introduced 16.0.R1
Platforms All

ct2 number

Synopsis RSVP interface bandwidth percentage for class type 2
Context **configure router string rsvp diffserv-te class-type-bw ct2 number**
Tree [ct2](#)
Range 0 to 100
Default 0
Introduced 16.0.R1
Platforms All

ct3 number

Synopsis RSVP interface bandwidth percentage for class type 3
Context **configure router string rsvp diffserv-te class-type-bw ct3 number**
Tree [ct3](#)
Range 0 to 100
Default 0
Introduced 16.0.R1
Platforms All

ct4 number

Synopsis	RSVP interface bandwidth percentage for class type 4
Context	configure router <i>string</i> rsvp <i>diffserv-te</i> class-type-bw ct4 <i>number</i>
Tree	ct4
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct5 number

Synopsis	RSVP interface bandwidth percentage for class type 5
Context	configure router <i>string</i> rsvp <i>diffserv-te</i> class-type-bw ct5 <i>number</i>
Tree	ct5
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct6 number

Synopsis	RSVP interface bandwidth percentage for class type 6
Context	configure router <i>string</i> rsvp <i>diffserv-te</i> class-type-bw ct6 <i>number</i>
Tree	ct6
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct7 number

Synopsis	RSVP interface bandwidth percentage for class type 7
Context	configure router <i>string</i> rsvp <i>diffserv-te</i> class-type-bw ct7 <i>number</i>
Tree	ct7
Range	0 to 100

Default	0
Introduced	16.0.R1
Platforms	All

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure router <i>string</i> rsvp diffserv-te fc <i>keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class for this mapping
Context	configure router <i>string</i> rsvp diffserv-te fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

class-type *number*

Synopsis	Diff-Serv Class Type (CT) for an LSP
Context	configure router <i>string</i> rsvp diffserv-te fc <i>keyword</i> class-type <i>number</i>
Tree	class-type
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

te-class [**te-class-number**] *number*

Synopsis	Enter the te-class list instance
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Context	configure <i>router string rsvp diffserv-te te-class number</i>
Tree	te-class
Introduced	16.0.R1
Platforms	All

[te-class-number] *number*

Synopsis	TE class number
Context	configure <i>router string rsvp diffserv-te te-class number</i>
Tree	te-class
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

class-type *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Class type (CT) associated with the TE class
Context	configure <i>router string rsvp diffserv-te te-class number class-type number</i>
Tree	class-type
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

priority *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TE class priority
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Context	configure router <i>string</i> rsvp diffserv-te te-class <i>number</i> priority <i>number</i>
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

entropy-label-capability *boolean*

Synopsis	Allow receiving and processing of the entropy label and ELI on incoming packets of RSVP LSPs
Context	configure router <i>string</i> rsvp entropy-label-capability <i>boolean</i>
Tree	entropy-label-capability
Default	false
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enter the graceful-restart context
Context	configure router <i>string</i> rsvp graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

max-recovery *number*

Synopsis	Maximum time to wait before a graceful helper recovers the session
Context	configure router <i>string</i> rsvp graceful-restart max-recovery <i>number</i>
Tree	max-recovery
Range	1 to 1800
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	All

max-restart *number*

Synopsis	Maximum time that a graceful helper waits for session restart after the neighbor is considered down
Context	configure router <i>string</i> rsvp graceful-restart max-restart <i>number</i>
Tree	max-restart
Range	1 to 300
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	All

graceful-shutdown *boolean*

Synopsis	Initiate a graceful shutdown of all RSVP interfaces on the node
Context	configure router <i>string</i> rsvp graceful-shutdown <i>boolean</i>
Tree	graceful-shutdown
Default	false
Introduced	16.0.R1
Platforms	All

implicit-null-label *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal the implicit null option for all RSVP LSPs
Context	configure router <i>string</i> rsvp implicit-null-label <i>boolean</i>
Tree	implicit-null-label
Default	false
Introduced	16.0.R1
Platforms	All

include-node-id-in-rro *boolean*

Synopsis	Include the node-id sub-object in the RRO (Record Route Object) on the RSVP instance
Context	configure router <i>string</i> rsvp include-node-id-in-rro <i>boolean</i>
Tree	include-node-id-in-rro
Default	false
Introduced	16.0.R1
Platforms	All

interface [[interface-name](#)] *reference*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> rsvp interface <i>reference</i>
Tree	interface
Description	<p>Commands in this context configure the attributes of the RSVP protocol support on an IP interface. RSVP commands are not executed on an IP interface if RSVP is not enabled.</p> <p>The RSVP interface must be administratively disabled before it can be deleted.</p> <p>A corresponding MPLS interface must also be configured. The RSVP interface cannot be deleted without also deleting the MPLS interface.</p>
Introduced	16.0.R1
Platforms	All

[interface-name] *reference*

Synopsis	Index for router RSVP interface
Context	configure router <i>string</i> rsvp interface <i>reference</i>
Tree	interface
Reference	configure router <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RSVP on the IP interface
Context	configure router <i>string</i> rsvp interface <i>reference</i> admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication or hash key string
Context	configure router string rsvp interface reference authentication-key string
Tree	authentication-key
Description	<p>This command configures the authentication key for use between RSVP neighbors to authenticate RSVP messages. Authentication uses the MD5 message-based digest.</p> <p>When enabled on an RSVP interface, authentication of RSVP messages operates in both directions of the interface. A router maintains a security association using one authentication key for each interface to an RSVP neighbor.</p> <p>An RSVP neighbor transmits an authenticating digest of the RSVP message that is computed using the shared authentication key and a keyed-hash algorithm. The message digest is included in an INTEGRITY object, which also contains a flags field, a key identifier field, and a sequence number field. An RSVP neighbor uses the key together with the authentication algorithm to process received RSVP messages. The RSVP MD5 authentication complies to the procedures for RSVP message generation in RFC 2747, <i>RSVP Cryptographic Authentication</i>.</p> <p>The MD5 implementation does not support the authentication challenge procedures in RFC 2747.</p>
String Length	1 to 51
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router string rsvp interface reference authentication-keychain reference
Tree	authentication-keychain
Reference	configure system security keychains keychain string
Introduced	16.0.R3
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure router <i>string</i> rsvp interface <i>reference</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

class-type-bw

Synopsis	Enable the class-type-bw context
Context	configure router <i>string</i> rsvp interface <i>reference</i> class-type-bw
Tree	class-type-bw
Introduced	16.0.R1
Platforms	All

ct0 *number*

Synopsis	Percentage of link bandwidth for class type (CT) 0
Context	configure router <i>string</i> rsvp interface <i>reference</i> class-type-bw ct0 <i>number</i>
Tree	ct0
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct1 *number*

Synopsis	Percentage of link bandwidth for class type (CT) 1
Context	configure router <i>string</i> rsvp interface <i>reference</i> class-type-bw ct1 <i>number</i>
Tree	ct1
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct2 number

Synopsis	Percentage of link bandwidth for class type (CT) 2
Context	configure router string rsvp interface reference class-type-bw ct2 number
Tree	ct2
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct3 number

Synopsis	Percentage of link bandwidth for class type (CT) 3
Context	configure router string rsvp interface reference class-type-bw ct3 number
Tree	ct3
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct4 number

Synopsis	Percentage of link bandwidth for class type (CT) 4
Context	configure router string rsvp interface reference class-type-bw ct4 number
Tree	ct4
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct5 number

Synopsis	Percentage of link bandwidth for class type (CT) 5
Context	configure router string rsvp interface reference class-type-bw ct5 number
Tree	ct5
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct6 number

Synopsis	Percentage of link bandwidth for class type (CT) 6
Context	configure router string rsvp interface reference class-type-bw ct6 number
Tree	ct6
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct7 number

Synopsis	Percentage of link bandwidth for class type (CT) 7
Context	configure router string rsvp interface reference class-type-bw ct7 number
Tree	ct7
Range	0 to 100
Introduced	16.0.R1
Platforms	All

dbw-down-threshold

Synopsis	Enable the dbw-down-threshold context
Context	configure router string rsvp interface reference dbw-down-threshold
Tree	dbw-down-threshold
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw number

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	configure router string rsvp interface reference dbw-down-threshold bw number
Tree	bw
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent *number*

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	configure router <i>string</i> rsvp interface <i>reference</i> dbw-down-threshold percent <i>number</i>
Tree	percent
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

dbw-multiplier *number*

Synopsis	Configure the Dark Bandwidth multiplier.
Context	configure router <i>string</i> rsvp interface <i>reference</i> dbw-multiplier <i>number</i>
Tree	dbw-multiplier
Range	0 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

dbw-up-threshold

Synopsis	Enable the dbw-up-threshold context
Context	configure router <i>string</i> rsvp interface <i>reference</i> dbw-up-threshold
Tree	dbw-up-threshold
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw *number*

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	configure router <i>string</i> rsvp interface <i>reference</i> dbw-up-threshold bw <i>number</i>
Tree	bw
Range	0 to 1000000

Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent *number*

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	configure router <i>string</i> rsvp interface <i>reference</i> dbw-up-threshold percent <i>number</i>
Tree	percent
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

graceful-restart-helper-mode *boolean*

Synopsis	Enable graceful restart helper for the RSVP interface
Context	configure router <i>string</i> rsvp interface <i>reference</i> graceful-restart-helper-mode <i>boolean</i>
Tree	graceful-restart-helper-mode
Default	false
Introduced	16.0.R1
Platforms	All

graceful-shutdown *boolean*

Synopsis	Initiate a graceful shutdown of RSVP interface
Context	configure router <i>string</i> rsvp interface <i>reference</i> graceful-shutdown <i>boolean</i>
Tree	graceful-shutdown
Default	false
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between RSVP Hello messages
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Context	configure router <i>string</i> rsvp interface <i>reference</i> hello-interval <i>number</i>
Tree	hello-interval
Range	0 to 60
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	All

implicit-null-label *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal the implicit null label value for all LSPs
Context	configure router <i>string</i> rsvp interface <i>reference</i> implicit-null-label <i>boolean</i>
Tree	implicit-null-label
Introduced	16.0.R1
Platforms	All

refresh-reduction

Synopsis	Enable the refresh-reduction context
Context	configure router <i>string</i> rsvp interface <i>reference</i> refresh-reduction
Tree	refresh-reduction
Introduced	16.0.R1
Platforms	All

reliable-delivery *boolean*

Synopsis	Reliable delivery of RSVP messages over the RSVP interface
Context	configure router <i>string</i> rsvp interface <i>reference</i> refresh-reduction reliable-delivery <i>boolean</i>
Tree	reliable-delivery
Default	false
Introduced	16.0.R1

Platforms All

subscription *number*

Synopsis Percentage of the link bandwidth to use for reservation
Context **configure** [router](#) *string* [rsvp](#) [interface](#) *reference* [subscription](#) *number*
Tree [subscription](#)
Range 0 to 1000
Default 100
Introduced 16.0.R1
Platforms All

te-down-threshold

Synopsis Enable the **te-down-threshold** context
Context **configure** [router](#) *string* [rsvp](#) [interface](#) *reference* [te-down-threshold](#)
Tree [te-down-threshold](#)
Introduced 16.0.R1
Platforms All

value *number*

Synopsis Threshold level per interface
Context **configure** [router](#) *string* [rsvp](#) [interface](#) *reference* [te-down-threshold](#) [value](#) *number*
Tree [value](#)
Range 0 to 100
Max. Instances 16
Min. Instances 1
Notes This element is ordered by the user.
Introduced 16.0.R2
Platforms All

te-up-threshold

Synopsis	Enable the te-up-threshold context
Context	configure router <i>string</i> rsvp interface <i>reference</i> te-up-threshold
Tree	te-up-threshold
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Threshold level per interface
Context	configure router <i>string</i> rsvp interface <i>reference</i> te-up-threshold <i>value</i> <i>number</i>
Tree	value
Range	0 to 100
Max. Instances	16
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R2
Platforms	All

keep-multiplier *number*

Synopsis	Value for the keep-multiplier to declare a reservation or neighbor as down
Context	configure router <i>string</i> rsvp keep-multiplier <i>number</i>
Tree	keep-multiplier
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

msg-pacing

Synopsis	Enable the msg-pacing context
Context	configure router <i>string</i> rsvp msg-pacing

Tree	msg-pacing
Introduced	16.0.R1
Platforms	All

max-burst *number*

Synopsis	Maximum RSVP messages that are sent over a specified period when message pacing is enabled
Context	configure router <i>string</i> rsvp msg-pacing max-burst <i>number</i>
Tree	max-burst
Range	100 to 1000
Default	650
Introduced	16.0.R1
Platforms	All

period *number*

Synopsis	Time for RSVP message pacing
Context	configure router <i>string</i> rsvp msg-pacing period <i>number</i>
Tree	period
Range	100 to 1000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

p2mp-merge-point-abort-timer *number*

Synopsis	Merge pointer timer for abort timer
Context	configure router <i>string</i> rsvp p2mp-merge-point-abort-timer <i>number</i>
Tree	p2mp-merge-point-abort-timer
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

p2p-merge-point-abort-timer *number*

Synopsis	Merge pointer timer for P2P paths
Context	configure <i>router</i> <i>string</i> <i>rsvp</i> p2p-merge-point-abort-timer <i>number</i>
Tree	p2p-merge-point-abort-timer
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

preemption-timer *number*

Synopsis	Preemption timer for the MPLS instance
Context	configure <i>router</i> <i>string</i> <i>rsvp</i> preemption-timer <i>number</i>
Tree	preemption-timer
Range	0 to 1800
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	All

rapid-retransmit-time *number*

Synopsis	Rapid retransmission interval to reliably deliver RSVP messages
Context	configure <i>router</i> <i>string</i> <i>rsvp</i> rapid-retransmit-time <i>number</i>
Tree	rapid-retransmit-time
Range	1 to 100
Default	5
Units	deciseconds
Introduced	16.0.R1
Platforms	All

rapid-retry-limit *number*

Synopsis	Rapid retry limit to reliably deliver RSVP messages
----------	---

Context	configure router <i>string rsvp rapid-retry-limit number</i>
Tree	rapid-retry-limit
Range	1 to 6
Default	3
Introduced	16.0.R1
Platforms	All

refresh-reduction-over-bypass *boolean*

Synopsis	Enable refresh reduction capabilities over tunnels
Context	configure router <i>string rsvp refresh-reduction-over-bypass boolean</i>
Tree	refresh-reduction-over-bypass
Default	false
Introduced	16.0.R1
Platforms	All

refresh-time *number*

Synopsis	Interval between refresh messages
Context	configure router <i>string rsvp refresh-time number</i>
Tree	refresh-time
Range	1 to 65535
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

te-down-threshold *number*

Synopsis	Value for the te-down-threshold
Context	configure router <i>string rsvp te-down-threshold number</i>
Tree	te-down-threshold
Range	0 to 100
Max. Instances	16

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

te-threshold-update

Synopsis	Enable the te-threshold-update context
Context	configure router string rsvp te-threshold-update
Tree	te-threshold-update
Introduced	16.0.R1
Platforms	All

on-cac-failure *boolean*

Synopsis	CAC (Call Admission Control) failure-triggered IGP update
Context	configure router string rsvp te-threshold-update on-cac-failure <i>boolean</i>
Tree	on-cac-failure
Default	false
Introduced	16.0.R1
Platforms	All

update-timer *number*

Synopsis	Timer-based IGP updates
Context	configure router string rsvp te-threshold-update update-timer <i>number</i>
Tree	update-timer
Range	1 to 300
Units	seconds
Introduced	16.0.R1
Platforms	All

te-up-threshold *number*

Synopsis	Value for the te-up-threshold
Context	configure router string rsvp te-up-threshold <i>number</i>

Tree	te-up-threshold
Range	0 to 100
Max. Instances	16
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router <i>string</i> segment-routing
Tree	segment-routing
Introduced	16.0.R1
Platforms	All

maintenance-policy [[policy-name](#)] *string*

Synopsis	Enter the maintenance-policy list instance
Context	configure router <i>string</i> segment-routing maintenance-policy <i>string</i>
Tree	maintenance-policy
Description	Commands in this context configure a named maintenance policy that can be applied to SR policy candidate paths that are either statically configured or imported via BGP.
Introduced	20.10.R1
Platforms	All

[[policy-name](#)] *string*

Synopsis	Maintenance policy name
Context	configure router <i>string</i> segment-routing maintenance-policy <i>string</i>
Tree	maintenance-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the maintenance policy
Context	configure router <i>string</i> segment-routing maintenance-policy <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Description	<p>This command sets the administrative state of the maintenance policy.</p> <p>A maintenance policy must be administratively disabled to change any of the parameters.</p> <p>When a maintenance template is administratively disabled, all applicable candidate paths are removed from the data path.</p>
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

bfd-liveness *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable seamless BFD for segment lists of candidate path
Context	configure router <i>string</i> segment-routing maintenance-policy <i>string</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables seamless BFD on every segment list of an SR policy candidate path to which the maintenance policy is applied. The BFD template configures the parameters for the BFD session.</p> <p>When configured to false, seamless BFD is disabled.</p>
Default	false
Introduced	20.10.R1
Platforms	All

bfd-template *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	BFD template to be used by seamless BFD
Context	configure <i>router string</i> segment-routing maintenance-policy <i>string</i> bfd-template <i>reference</i>
Tree	bfd-template
Description	This command references a named BFD template to be used by seamless BFD. A BFD template must exist on the system before being referenced from a maintenance policy. The template specifies parameters that are used by the BFD session, such as the minimum transmit and receive control packet timer intervals.
Reference	configure bfd bfd-template <i>string</i>
Introduced	20.10.R1
Platforms	All

hold-down-timer *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hold down timer for SR policy candidate paths
Context	configure <i>router string</i> segment-routing maintenance-policy <i>string</i> hold-down-timer <i>number</i>
Tree	hold-down-timer
Description	<p>This command configures the hold down timer for the maintenance policy. The purpose of the timer is to prevent bouncing of the SR policy path state if S-BFD sessions associated with the segment lists flap, causing the threshold to be repeatedly crossed in a short period of time.</p> <p>The timer is started when the number of up S-BFD sessions drops below the threshold. The SR policy path is not considered to be up again until the hold down timer has expired and the number of up S-BFD sessions reaches or exceeds the threshold and the internal hold timer is not running.</p> <p>If the revert timer is also configured, the revert timer is not started until after the number of up S-BFD sessions equals or exceeds the threshold and the hold down timer for the primary candidate path has expired.</p>
Range	0 to 5000
Default	0
Units	deciseconds
Introduced	20.10.R1
Platforms	All

mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Protection mode for SR policy candidate paths
Context	configure <i>router string segment-routing maintenance-policy string mode keyword</i>
Tree	<i>mode</i>
Description	This command specifies the data path programming and protection mechanism for SR policy candidate paths to which the maintenance policy is applied.
Default	none
Options	none, ecmp-protected, linear
Introduced	20.10.R1
Platforms	All

return-path-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	S-BFD return-path label
Context	configure <i>router string segment-routing maintenance-policy string return-path-label number</i>
Tree	<i>return-path-label</i>
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.10.R1
Platforms	All

revert-timer *number*

Synopsis	Revert timer for SR policy candidate paths
Context	configure <i>router string segment-routing maintenance-policy string revert-timer number</i>
Tree	<i>revert-timer</i>
Description	This command configures the revert timer for SR Policy candidate paths. The revert timer is started when the primary path recovers (the number of S-BFD sessions that are up equals or exceeds the threshold value and the hold down timer has expired). When the timer expires, the system reverts to the primary path.
Range	0 to 4320
Default	0
Units	minutes
Introduced	20.10.R1
Platforms	All

threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum number of up S-BFD sessions for up path status
Context	configure <i>router string segment-routing maintenance-policy string threshold number</i>
Tree	<i>threshold</i>
Description	This command configures the minimum number of S-BFD sessions that must be up for the SR policy candidate path to be considered up. If the number of up sessions is below this threshold value, the policy candidate path is marked as BFD degraded by the system. This command is only valid in the ecmp-protected mode.
Range	1 to 32
Default	1
Introduced	20.10.R1
Platforms	All

segment-routing-v6

Synopsis	Enable the segment-routing-v6 context
Context	configure <i>router string segment-routing segment-routing-v6</i>

Tree	segment-routing-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

base-routing-instance

Synopsis	Enter the base-routing-instance context
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance
Tree	base-routing-instance
Description	Commands in this context configure SRv6 SID functions for End, End.X, and service SIDs for IPv4 and IPv6 prefixes in the base routing instance.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [[locator-name](#)] *reference*

Synopsis	Enter the locator list instance
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i>
Tree	locator
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis	SRv6 locator name
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i>
Tree	locator
Reference	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the function context
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator reference function
Tree	function
Description	Commands in this context configure the function value of SRv6 SIDs. The end-dt46 command is mutually exclusive with the end-dt4 and end-dt6 commands.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end [[value](#)] *number*

Synopsis	Enter the end list instance
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator reference function end <i>number</i>
Tree	end
Description	Commands in this context configure the attributes of SRv6 End SID function. The End SID functions for each SRH mode must be statically allocated. The value is not automatically allocated by default for a locator.
Max. Instances	8
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[\[value\]](#) *number*

Synopsis	SRv6 SID function value
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator reference function end <i>number</i>
Tree	end
Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator reference function end <i>number</i> srh-mode <i>keyword</i>
Tree	srh-mode
Description	This command configures the popping mode for the SID.
Default	psp
Options	psp, usp
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt4

Synopsis	Enable the end-dt4 context
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator reference function end-dt4
Tree	end-dt4
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator reference function end-dt4 <i>value</i> <i>number</i>
Tree	value
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt46

Synopsis	Enable the end-dt46 context
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator reference function end-dt46
Tree	end-dt46

Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis SRv6 function value
Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) [base-routing-instance](#)
[locator](#) [reference](#) [function](#) [end-dt46](#) [value](#) *number*
Tree [value](#)
Range 1 to 1048575
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt6

Synopsis Enable the **end-dt6** context
Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) [base-routing-instance](#)
[locator](#) [reference](#) [function](#) [end-dt6](#)
Tree [end-dt6](#)
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis SRv6 function value
Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) [base-routing-instance](#)
[locator](#) [reference](#) [function](#) [end-dt6](#) [value](#) *number*
Tree [value](#)
Range 1 to 1048575
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-x [[value](#)] *number*

Synopsis Enter the **end-x** list instance
Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) [base-routing-instance](#)
[locator](#) [reference](#) [function](#) [end-x](#) *number*

Tree	end-x
Description	<p>Commands in this context configure the attributes of the End.X SID function associated with a P2P interface.</p> <p>A static function value can be configured for each combination of SRH mode and protection type. For a specific interface, the static function value associated with the same combination of protection type and SRH mode overrides any corresponding function value that is automatically allocated (end.x-auto-allocate list configuration).</p> <p>If more than one value is configured for an interface and combination of SRH mode and protection type, they are all advertised in IS-IS.</p> <p>When used in remote TI-LFA repair tunnel programming, IS-IS uses rules to select one End.X value from the multiple values received in IS-IS link advertisements.</p> <p>Values assigned to loopback and system interfaces are not advertised in IS-IS.</p> <p>End.X SID functions for adjacencies over broadcast interfaces are always automatically allocated based on the configuration of the end.x-auto-allocate list.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[value] *number*

Synopsis	SRv6 SID function value
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end-x <i>number</i>
Tree	end-x
Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-name *reference*

Synopsis	Interface name
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end-x <i>number</i> interface-name <i>reference</i>
Tree	interface-name
Reference	configure router <i>string</i> interface <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protection keyword

Synopsis	Adjacency protection for SID function
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end-x <i>number</i> protection <i>keyword</i>
Tree	protection
Description	This command configures the adjacency protection type for the SID function.
Default	protected
Options	unprotected, protected
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode keyword

Synopsis	Segment Routing Header (SRH) mode
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end-x <i>number</i> srh-mode <i>keyword</i>
Tree	srh-mode
Description	This command configures the popping mode for the SID.
Default	psp
Options	psp, usp
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-x-auto-allocate [**srh-mode**] *keyword* **protection** *keyword*

Synopsis	Add a list entry for end-x-auto-allocate
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end-x-auto-allocate <i>keyword</i> protection <i>keyword</i>
Tree	end-x-auto-allocate
Description	<p>This command adds a list entry for the automatic allocation of the End.X SID function for all adjacencies over all network interfaces on the router (P2P and broadcast interfaces).</p> <p>A list entry is a combination of the protection type and the SRH mode. Any combinations in addition to the maximum supported by this command must be allocated statically under each P2P interface (end.x configuration).</p> <p>When no list entries are configured, no End.X function values are automatically allocated by default for a locator.</p>

Max. Instances	2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[srh-mode] *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end-x-auto-allocate <i>keyword</i> protection <i>keyword</i>
Tree	end-x-auto-allocate
Description	This command specifies the popping mode for the automatically allocated SID.
Options	psp, usp
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protection *keyword*

Synopsis	Adjacency protection for automatic SID function
Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end-x-auto-allocate <i>keyword</i> protection <i>keyword</i>
Tree	end-x-auto-allocate
Description	This command specifies the adjacency protection for the automatically allocated SID function.
Options	unprotected, protected
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [[locator-name](#)] *reference*

Synopsis	Enter the micro-segment-locator list instance
Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i>
Tree	micro-segment-locator

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis	SRv6 micro-segment locator name
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i>
Tree	micro-segment-locator
Description	This command references a micro-segment locator name defined in the configure router segment-routing segment-routing-v6 context. This command assigns a micro-segment locator to BGP for use with Base router routes.
Reference	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the function context
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function
Tree	function
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ua [value] *number*

Synopsis	Enter the ua list instance
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function ua <i>number</i>
Tree	ua
Description	Commands in this context configure the attributes of the uA micro-SID function associated with a P2P interface. The uA micro-SID function encodes the behavior of an adjacency SID.
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[value] *number*

Synopsis SRv6 SID function value

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua number*

Tree [ua](#)

Range 1 to 1048575

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-name *reference*

Synopsis Interface name

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua number interface-name reference*

Tree [interface-name](#)

Reference **configure** *router string interface string*

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protection *keyword*

Synopsis Adjacency protection for SID function

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua number protection keyword*

Tree [protection](#)

Description This command configures the adjacency protection type for the SID function.

Default protected

Options unprotected, protected

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> <i>function</i> ua <i>number</i> srh-mode <i>keyword</i>
Tree	srh-mode
Description	This command configures the popping mode for the SID.
Default	psp
Options	psp, usp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ua-auto-allocate [[srh-mode](#)] *keyword* [protection](#) *keyword*

Synopsis	Add a list entry for ua-auto-allocate
Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> <i>function</i> ua-auto-allocate <i>keyword</i> protection <i>keyword</i>
Tree	ua-auto-allocate
Description	Commands in this context define a list entry for the automatic allocation of the uA micro-SID function for all adjacencies over all network interfaces on the router (P2P and broadcast interfaces).
Max. Instances	2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[[srh-mode](#)] *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> <i>function</i> ua-auto-allocate <i>keyword</i> protection <i>keyword</i>
Tree	ua-auto-allocate
Description	This command specifies the popping mode for the automatically allocated SID.
Options	psp, usp
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protection keyword

Synopsis	Adjacency protection for automatic SID function
Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> <i>function</i> ua-auto-allocate <i>keyword</i> protection <i>keyword</i>
Tree	ua-auto-allocate
Description	This command specifies the adjacency protection for the automatically allocated SID function.
Options	unprotected, protected
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt4

Synopsis	Enable the udt4 context
Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> <i>function</i> udt4
Tree	udt4
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> <i>function</i> udt4 <i>value</i> <i>number</i>
Tree	value
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt46

Synopsis	Enable the udt46 context
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Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function udt46
Tree	udt46
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function udt46 <i>value number</i>
Tree	value
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt6

Synopsis	Enable the udt6 context
Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function udt6
Tree	udt6
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function udt6 <i>value number</i>
Tree	value
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [*locator-name*] *string*

Synopsis	Enter the locator list instance
Context	configure <i>router string segment-routing segment-routing-v6 locator string</i>
Tree	<i>locator</i>
Max. Instances	16
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *string*

Synopsis	SRv6 locator name
Context	configure <i>router string segment-routing segment-routing-v6 locator string</i>
Tree	<i>locator</i>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of the locator
Context	configure <i>router string segment-routing segment-routing-v6 locator string admin-state keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

algorithm *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP flexible algorithm ID
Context	configure <i>router string</i> <i>segment-routing segment-routing-v6 locator string</i> <i>algorithm number</i>
Tree	<i>algorithm</i>
Description	This command configures an IGP flexible algorithm for a locator. A locator can only be part of one algorithm but it can be used in multiple IGP instances.
Range	128 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block-length *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator block address length
Context	configure <i>router string</i> <i>segment-routing segment-routing-v6 locator string</i> <i>block-length number</i>
Tree	<i>block-length</i>
Range	0 to 96
Default	0
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function-length *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Function length
Context	configure <i>router string</i> <i>segment-routing segment-routing-v6 locator string</i> <i>function-length number</i>
Tree	<i>function-length</i>
Description	This command configures the size of the function length. The sum of the function length and the locator prefix length must not exceed 128 bits. Operators can configure the locator level label-block command before they configure a function length of 16. If the

function length is configured as 16, the locator level **label-block** must be configured rather than the static-function level **label-block**. The validation occurs when committed.

Range	16 20 to 96
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

label-block *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block name for service termination
Context	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i> label-block <i>reference</i>
Tree	label-block
Reference	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

prefix

Synopsis	Enter the prefix context
Context	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i> prefix
Tree	prefix
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator prefix
Context	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i> prefix ip-prefix <i>string</i>
Tree	ip-prefix

Description	This command configures the IPv6 prefix for the locator. For regular SRv6, the locator prefix length range is the sum of the length of the block field and the length of the node ID field. For micro-segment SRv6, the locator prefix length must be equal to the micro-SID block length.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

static-function

Synopsis	Enter the static-function context
Context	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i> static-function
Tree	static-function
Description	Commands in this context configure the attributes of the function field range reserved for static End.d, End.X, and service SID assignment.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

label-block *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Label block for the service SIDs of the SRv6 locator
Context	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i> static-function label-block <i>reference</i>
Tree	label-block
Reference	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

max-entries *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of static SID functions
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Context	configure <i>router string</i> segment-routing segment-routing-v6 <i>locator string</i> static-function max-entries <i>number</i>
Tree	max-entries
Description	This command configures the maximum number of values that are reserved from the function field to assign to static SID functions.
Range	1 to 1048575
Default	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

termination-fpe *reference*

Synopsis	List of the SRv6 termination FPE
Context	configure <i>router string</i> segment-routing segment-routing-v6 <i>locator string</i> termination-fpe <i>reference</i>
Tree	termination-fpe
Description	This command associates the Forwarding Path Extension (FPE) with the locator for terminating SRv6 in local services. Multiple locators can share the same FPE or each locator can use a different FPE. The FPE can be the same or different from the origination FPE.
Reference	configure fwd-path-ext <i>fpe number</i>
Max. Instances	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment

Synopsis	Enable the micro-segment context
Context	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment
Tree	micro-segment
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block [[block-name](#)] *string*

Synopsis	Enter the block list instance
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Context	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment <i>block string</i>
Tree	block
Max. Instances	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[block-name] *string*

Synopsis	Micro-SID block name
Context	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment <i>block string</i>
Tree	block
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of micro-SID block
Context	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment <i>block string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

label-block *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block
Context	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment <i>block string</i> label-block <i>reference</i>

Tree	label-block
Description	This command associates a pre-configured reserved label block with the micro-SID block.
Reference	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

prefix

Synopsis	Enter the prefix context
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i> prefix
Tree	prefix
Description	Commands in this context configure the IPv6 prefix for an SRv6 micro-segment locator.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator prefix
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i> prefix ip-prefix <i>string</i>
Tree	ip-prefix
Description	This command configures the IPv6 prefix for the locator. For regular SRv6, the locator prefix length range is the sum of the length of the block field and the length of the node ID field. For micro-segment SRv6, the locator prefix length must be equal to the micro-SID block length.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

static-function

Synopsis	Enter the static-function context
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Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i> static-function
Tree	static-function
Description	Commands in this context configure the function field parameters of a static uA or service micro-SID assignment.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

max-entries *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of static SID functions
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i> static-function max-entries <i>number</i>
Tree	max-entries
Description	This command configures the maximum number of values that are reserved from the function field to assign to static SID functions.
Range	1 to 1048575
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

termination-fpe *reference*

Synopsis	FPE ID for SRv6 termination
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i> termination-fpe <i>reference</i>
Tree	termination-fpe
Description	This command associates the FPE ID with the locator for SRv6 termination in local services.
Reference	configure fwd-path-ext fpe <i>number</i>
Max. Instances	1
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block-length *number*

Synopsis Micro-SID block length

Context **configure** *router string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) **block-length** *number*

Tree [block-length](#)

Description This command configures the length of the micro-SID blocks.

Range 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64

Default 32

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

global-sid-entries *number*

Synopsis Maximum number of micro-segment locators network wide

Context **configure** *router string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) **global-sid-entries** *number*

Tree [global-sid-entries](#)

Description This command defines the maximum number of unique micro-segment locators that can be configured network wide. The value is expressed in multiples of 1024 and must be the same on every platform network wide.

Range 4 to 60

Default 16

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

sid-length *number*

Synopsis Micro-SID length

Context **configure** *router string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) **sid-length** *number*

Tree [sid-length](#)

Description This command configures the length of the micro-SIDs.

Range 16

Default	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [*locator-name*] *string*

Synopsis	Enter the micro-segment-locator list instance
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i>
Tree	micro-segment-locator
Max. Instances	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *string*

Synopsis	SRv6 locator name
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i>
Tree	micro-segment-locator
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of the locator
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

algorithm *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP flexible algorithm ID
Context	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> algorithm <i>number</i>
Tree	algorithm
Description	This command configures an IGP flexible algorithm for a locator. A locator can only be part of one algorithm but it can be used in multiple IGP instances.
Range	128 to 255
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-defined micro-SID block
Context	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> block <i>reference</i>
Tree	block
Description	This command associates a pre-defined micro-SID block with the micro-segment SRv6 locator.
Reference	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

un

Synopsis	Enter the un context
Context	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> un
Tree	un

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment Routing Header (SRH) mode
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> un srh-mode <i>keyword</i>
Tree	srh-mode
Description	This command configures the popping mode for the SID.
Default	psp
Options	psp, usp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 function value
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> un value <i>number</i>
Tree	value
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

origination-fpe *reference*

Synopsis	List of the SRv6 origination FPEs
Context	configure router <i>string</i> segment-routing segment-routing-v6 origination-fpe <i>reference</i>

Tree	origination-fpe
Description	This command configures the origination Forwarding Path Extension (FPE) for SRv6 tunnels on local services. The origination FPE must be different from any of the SRv6 termination FPEs.
Reference	configure fwd-path-ext fpe <i>number</i>
Max. Instances	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address *string*

Synopsis	Source address used in the SRv6 packet
Context	configure router <i>string</i> segment-routing segment-routing-v6 source-address <i>string</i>
Tree	source-address
Description	<p>This command specifies the global default source IPv6 address used in the SA field of the outerIPv6 header of the SRv6 encapsulated packet.</p> <p>The value is inherited in the BGP and services contexts (for example, configure router "base" bgp segment-routing-v6 source-address and configure service vprn bgp-ipvprn segment-routing-v6 source-address), but is overwritten by the value configured in those contexts.</p> <p>A source IPv6 address must be configured in the global context or in the BGP or services context.</p> <p>The system does not check if the entered address is a valid local address.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

sr-mpls

Synopsis	Enter the sr-mpls context
Context	configure router <i>string</i> segment-routing sr-mpls
Tree	sr-mpls
Introduced	21.10.R1
Platforms	All

prefix-sids [[interface-name](#)] *reference*

Synopsis	Enter the prefix-sids list instance
Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids <i>reference</i>
Tree	prefix-sids
Description	Commands in this context configure the prefix SIDs for an interface.
Introduced	21.10.R1
Platforms	All

[interface-name] *reference*

Synopsis	Loopback interface name that owns the prefix to be advertised
Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids <i>reference</i>
Tree	prefix-sids
Reference	configure router <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

ipv4-sid

Synopsis	Enable the ipv4-sid context
Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv4-sid
Tree	ipv4-sid
Introduced	21.10.R1
Platforms	All

index *number*

Synopsis	Node SID index for the interface
Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv4-sid <i>index</i> <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	21.10.R1

Platforms All

label number

Synopsis Label value for the node SID

Context **configure** [router](#) *string* [segment-routing sr-mpls prefix-sids](#) *reference* [ipv4-sid label number](#)

Tree [label](#)

Range 32 to 1048575

Notes The following elements are part of a choice: **index** or **label**.

Introduced 21.10.R1

Platforms All

ipv6-sid

Synopsis Enable the **ipv6-sid** context

Context **configure** [router](#) *string* [segment-routing sr-mpls prefix-sids](#) *reference* [ipv6-sid](#)

Tree [ipv6-sid](#)

Introduced 21.10.R1

Platforms All

index number

Synopsis Node SID index for the interface

Context **configure** [router](#) *string* [segment-routing sr-mpls prefix-sids](#) *reference* [ipv6-sid index number](#)

Tree [index](#)

Range 0 to 4294967295

Notes The following elements are part of a choice: **index** or **label**.

Introduced 21.10.R1

Platforms All

label number

Synopsis Label value for the node SID

Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv6-sid label <i>number</i>
Tree	label
Range	32 to 1048575
Notes	The following elements are part of a choice: index or label .
Introduced	21.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Assign a node SID to the prefix referencing the router
Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids <i>reference</i> node-sid <i>boolean</i>
Tree	node-sid
Default	true
Introduced	21.10.R1
Platforms	All

sr-policies

Synopsis	Enter the sr-policies context
Context	configure router <i>string</i> segment-routing sr-policies
Tree	sr-policies
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing policies
Context	configure router <i>string</i> segment-routing sr-policies admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enable the egress-statistics context
Context	configure router <i>string</i> segment-routing sr-policies egress-statistics
Tree	egress-statistics
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the traffic statistics
Context	configure router <i>string</i> segment-routing sr-policies egress-statistics admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

ingress-statistics

Synopsis	Enable the ingress-statistics context
Context	configure router <i>string</i> segment-routing sr-policies ingress-statistics
Tree	ingress-statistics
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the traffic statistics
Context	configure router <i>string</i> segment-routing sr-policies ingress-statistics admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms All

reserved-label-block *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Reserved local block for segment routing policies

Context **configure** [router](#) *string* [segment-routing](#) [sr-policies](#) [reserved-label-block](#) *reference*

Tree [reserved-label-block](#)

Reference **configure** [router](#) *string* [mpls-labels](#) [reserved-label-block](#) *string*

Introduced 16.0.R1

Platforms All

static-policy [[name](#)] *string*

Synopsis Enter the **static-policy** list instance

Context **configure** [router](#) *string* [segment-routing](#) [sr-policies](#) [static-policy](#) *string*

Tree [static-policy](#)

Max. Instances 8192

Introduced 16.0.R1

Platforms All

[\[name\]](#) *string*

Synopsis Name for the segment routing static policy

Context **configure** [router](#) *string* [segment-routing](#) [sr-policies](#) [static-policy](#) *string*

Tree [static-policy](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis	Administrative state of segment routing static policy
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

binding-sid *number*

Synopsis	Segment ID that opaquely represents an SR policy to upstream routers
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> binding-sid <i>number</i>
Tree	binding-sid
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

color *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Traffic flows to be steered by this policy
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> color <i>number</i>
Tree	color
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

distinguisher *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique value for a policy
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> distinguisher <i>number</i>
Tree	distinguisher
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

endpoint (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination of the source-routed path
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> endpoint (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	endpoint
Introduced	16.0.R1
Platforms	All

head-end (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Head end address for this static policy
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> head-end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>keyword</i>)
Tree	head-end
Options	local
Introduced	16.0.R1

Platforms All

maintenance-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Policy name

Context **configure** *router* *string* *segment-routing* *sr-policies* *static-policy* *string* *maintenance-policy* *reference*

Tree [maintenance-policy](#)

Reference **configure** *router* *string* *segment-routing* *maintenance-policy* *string*

Introduced 20.10.R1

Platforms All

preference *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Preference value of this static policy

Context **configure** *router* *string* *segment-routing* *sr-policies* *static-policy* *string* *preference* *number*

Tree [preference](#)

Max. Range 0 to 4294967295

Default 100

Introduced 16.0.R1

Platforms All

segment-list [[seg-list-index](#)] *number*

Synopsis Enter the **segment-list** list instance

Context **configure** *router* *string* *segment-routing* *sr-policies* *static-policy* *string* *segment-list* *number*

Tree [segment-list](#)

Max. Instances	32
Introduced	16.0.R1
Platforms	All

[seg-list-index] *number*

Synopsis	Index for identifying a particular segment list
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-list <i>number</i>
Tree	segment-list
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment list for static policy
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-list <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

segment [**segment-index**] *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the segment list instance
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-list <i>number</i> segment <i>number</i>
Tree	segment

Max. Instances	11
Introduced	16.0.R1
Platforms	All

[segment-index] *number*

Synopsis	Index for identifying a particular segment list
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-list <i>number</i> segment <i>number</i>
Tree	segment
Range	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mpls-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Value for the MPLS label
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-list <i>number</i> segment <i>number</i> mpls-label <i>number</i>
Tree	mpls-label
Range	0 to 1048575
Introduced	16.0.R1
Platforms	All

srv6-sid *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment ID for segment routing IPv6
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Context	configure <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-list</i> <i>number</i> <i>segment</i> <i>number</i> <i>srv6-sid</i> <i>string</i>
Tree	<i>srv6-sid</i>
Description	This command defines the 128-bit SRv6 SID for the segment.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

weight *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Weight of this segment list
Context	configure <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-list</i> <i>number</i> <i>weight</i> <i>number</i>
Tree	<i>weight</i>
Max. Range	0 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

segment-routing-v6



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the segment-routing-v6 context
Context	configure <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-routing-v6</i>
Tree	<i>segment-routing-v6</i>
Description	Commands in this context configure a static SRv6 policy.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

binding-sid [*index*] *number*

Synopsis	Enter the binding-sid list instance
Context	configure <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-routing-v6</i> <i>binding-sid</i> <i>number</i>
Tree	<i>binding-sid</i>
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[*index*] *number*

Synopsis	Binding SID index
Context	configure <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-routing-v6</i> <i>binding-sid</i> <i>number</i>
Tree	<i>binding-sid</i>
Range	1
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-address *string*

Synopsis	Remote SRv6 binding SID
Context	configure <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-routing-v6</i> <i>binding-sid</i> <i>number</i> <i>ip-address</i> <i>string</i>
Tree	<i>ip-address</i>
Description	This command configures an SRv6 binding SID for a remote SRv6 policy. The command cannot be used with a local head end location (configure router segment-routing sr-policies static-policy head-end local). This command and the configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid locator command for a local SRv6 policy are mutually exclusive. The format of the binding SID is a 128-bit IPv6 address.
Notes	The following elements are part of a choice: ip-address or locator .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator

Synopsis	Enable the locator context
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-routing-v6 binding-sid <i>number</i> locator
Tree	locator
Description	Commands in this context configure a binding SID locator for a local SRv6 policy. This command and the configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid ip-address command for a non-local SRv6 policy are mutually exclusive.
Notes	The following elements are part of a choice: ip-address or locator .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function keyword

Synopsis	Local SRv6 binding SID locator function
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-routing-v6 binding-sid <i>number</i> locator function <i>keyword</i>
Tree	function
Description	This command configures an SRv6 binding SID function for a static SRv6 policy with a local head end location (configure router segment-routing sr-policies static-policy head-end local).
Options	end-b6-encaps-red
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function-value number

Synopsis	Local SRv6 binding SID locator function value
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-routing-v6 binding-sid <i>number</i> locator function-value <i>number</i>
Tree	function-value
Description	This command configures the function value for a static SRv6 policy with a local head end location (configure router segment-routing sr-policies static-policy head-end local). If a function value is configured, the router checks whether this function value is

available for the named locator. If no function value is configured, the router dynamically allocates a value.

Range	1 to 1048575
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator-name *reference*

Synopsis	Local SRv6 binding SID locator name
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-routing-v6 binding-sid <i>number</i> locator locator-name <i>reference</i>
Tree	locator-name
Description	This command configures an SRv6 binding SID locator for a static SRv6 policy with a local head end location (configure router segment-routing sr-policies static-policy head-end local). A corresponding locator must exist in the configure router segment-routing segment-routing-v6 context.
Reference	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

type *keyword*

Synopsis	Static policy type
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> type <i>keyword</i>
Tree	type
Description	This command configures the type of static policy. Only commands relevant to the type of the static policy can be executed. The type of the static policy can only be changed to a new type if there is no configuration present for the old type, or if all configuration for the old type is deleted.
Default	sr-mpls
Options	sr-mpls, srv6
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-fib *boolean*

Synopsis	Enable selective FIB
Context	configure <i>router</i> <i>string</i> selective-fib <i>boolean</i>
Tree	selective-fib
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sfm-overload

Synopsis	Enable the sfm-overload context
Context	configure <i>router</i> <i>string</i> sfm-overload
Tree	sfm-overload
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

holdoff-time *number*

Synopsis	Delay in detecting SFM failures and setting overload
Context	configure <i>router</i> <i>string</i> sfm-overload holdoff-time <i>number</i>
Tree	holdoff-time
Range	1 to 600
Units	seconds
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

sgt-qos

Synopsis	Enter the sgt-qos context
Context	configure <i>router</i> <i>string</i> sgt-qos
Tree	sgt-qos
Introduced	16.0.R1
Platforms	All

dot1p

Synopsis	Enter the dot1p context
Context	configure router string sgt-qos dot1p
Tree	dot1p
Introduced	16.0.R1
Platforms	All

application [[dot1p-app-name](#)] *keyword*

Synopsis	Enter the application list instance
Context	configure router string sgt-qos dot1p application keyword
Tree	application
Introduced	16.0.R1
Platforms	All

[[dot1p-app-name](#)] *keyword*

Synopsis	Dot1p application ID that generates control traffic
Context	configure router string sgt-qos dot1p application keyword
Tree	application
Options	arp, isis, pppoe
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dot1p (*keyword | number*)

Synopsis	Dot1p value to the traffic generated by this application
Context	configure router string sgt-qos dot1p application keyword dot1p (<i>keyword number</i>)
Tree	dot1p
Range	0 to 7
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

dscp

Synopsis	Enter the dscp context
Context	configure router string sgt-qos dscp
Tree	dscp
Introduced	16.0.R1
Platforms	All

application [[dscp-app-name](#)] *keyword*

Synopsis	Enter the application list instance
Context	configure router string sgt-qos dscp application keyword
Tree	application
Introduced	16.0.R1
Platforms	All

[[dscp-app-name](#)] *keyword*

Synopsis	DSCP application identifier on the NOKIA SR OS router that generates control traffic over IP
Context	configure router string sgt-qos dscp application keyword
Tree	application
Options	bgp, cflowd, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, igmp-reporter, gtp, sflow, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, mpls-udp-return, pfc, ibcp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dscp (*keyword* | *number*)

Synopsis	DSCP value to the traffic generated by this application
Context	configure router string sgt-qos dscp application keyword dscp (<i>keyword</i> <i>number</i>)
Tree	dscp
Range	0 to 63

Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dscp-map [**dscp-name**] *keyword*

Synopsis	Enter the dscp-map list instance
Context	configure router <i>string</i> sgt-qos dscp dscp-map <i>keyword</i>
Tree	dscp-map
Introduced	16.0.R2
Platforms	All

[dscp-name] *keyword*

Synopsis	DSCP name mapped to forwarding class
Context	configure router <i>string</i> sgt-qos dscp dscp-map <i>keyword</i>
Tree	dscp-map
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

fc *keyword*

Synopsis	Value for the forwarding class for this mapping
Context	configure router <i>string</i> sgt-qos dscp dscp-map <i>keyword</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R2

Platforms All

static-routes

Synopsis Enter the **static-routes** context
Context **configure router string static-routes**
Tree [static-routes](#)
Introduced 16.0.R1
Platforms All

hold-down

Synopsis Enable the **hold-down** context
Context **configure router string static-routes hold-down**
Tree [hold-down](#)
Introduced 16.0.R1
Platforms All

initial number

Synopsis Value for the initial hold down time
Context **configure router string static-routes hold-down initial number**
Tree [initial](#)
Range 1 to 65535
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

max-value number

Synopsis Maximum value of the hold down time
Context **configure router string static-routes hold-down max-value number**
Tree [max-value](#)
Range 1 to 65535
Notes This element is mandatory.

Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Value by which the previous hold-down time is multiplied to calculate the new one
Context	configure router <i>string</i> static-routes hold-down multiplier <i>number</i>
Tree	multiplier
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

route [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*

Synopsis	Enter the route list instance
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i>
Tree	route
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the static routes
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i>
Tree	route
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

route-type *keyword*

Synopsis	Static route type for unicast or multicast RPF
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i>
Tree	route

Options	unicast, multicast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

backup-tag *number*

Synopsis	Static route backup tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword backup-tag <i>number</i>
Tree	backup-tag
Description	<p>This command associates a 4-byte backup route tag with the static route when the backup next-hop functionality is activated. The tag value is used in route policies to control distribution of the static route into other protocols when the backup next-hop function is activated for the associated static route.</p> <p>The tag specified at this level of the static route causes the tag values that are configured under the next-hop, black-hole, and indirect contexts of the static route to be ignored.</p>
Range	1 to 4294967295
Introduced	21.2.R1
Platforms	All

blackhole

Synopsis	Enable the blackhole context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole
Tree	blackhole
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole community <i>string</i>
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dynamic-bgp *boolean*

Synopsis	Derive static route next hop from BGP next hop value
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole dynamic-bgp <i>boolean</i>
Tree	dynamic-bgp
Default	false
Introduced	16.0.R1
Platforms	All

generate-icmp *boolean*

Synopsis	Send ICMP unreachable messages when received packets match a static route with black-hole next-hop
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole generate-icmp <i>boolean</i>
Tree	generate-icmp
Default	false
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Static route metric
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole metric <i>number</i>
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole preference <i>number</i>
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the prefix-list context
----------	--------------------------------------

Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole prefix-list flag <i>keyword</i>
Tree	flag
Default	any
Options	any, all, none
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole prefix-list name <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Static route tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

community string

Synopsis	Community ID associated with the static route
Context	configure router string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword community string
Tree	community
String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

indirect [ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Enter the indirect list instance
Context	configure router string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	indirect
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Next-hop IP address used to reach the destination
Context	configure router string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	indirect
Description	This command specifies the next-hop IP address used to reach the destination. The specified IP address can be either on the network side or the access side and is typically at least one hop away from the node.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) community <i>string</i>
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

cpe-check [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Description	<p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p>Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-</p>

priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.

Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**address**] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to the target CPE IP address
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255

Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Default	56
Units	bytes
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

destination-class *number*

Synopsis Destination class for this static route

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **destination-class** *number*

Tree **destination-class**

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

metric *number*

Synopsis Static route metric

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **metric** *number*

Tree **metric**

Range 0 to 65535

Default 1

Introduced 16.0.R1

Platforms All

preference *number*

Synopsis Priority of this static route over the routes from different sources

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **preference** *number*

Tree **preference**

Range 1 to 255

Default 5

Introduced 16.0.R1

Platforms All

prefix-list

Synopsis	Enter the prefix-list context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag keyword

Synopsis	Static route match condition from prefix list
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list flag <i>keyword</i>
Tree	flag
Default	any
Options	any, all, none
Introduced	16.0.R1
Platforms	All

name reference

Synopsis	Prefix list name
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list name <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) qos
Tree	qos
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis Forwarding class associated with the static route

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **qos forwarding-class** *keyword*

Tree **forwarding-class**

Options be, l2, af, l1, h2, ef, h1, nc

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis Static route priority

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **qos priority** *keyword*

Tree **priority**

Options low, high

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis Source class for this static route

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-class** *number*

Tree **source-class**

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis Static route tag

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **tag** *number*

Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tunnel-next-hop

Synopsis	Enter the tunnel-next-hop context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop
Tree	tunnel-next-hop
Introduced	16.0.R1
Platforms	All

disallow-igp *boolean*

Synopsis	Do not resolve indirect static routes using IGP next-hops in RTM if no tunnel next-hops found in TTM
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop disallow-igp <i>boolean</i>
Tree	disallow-igp
Default	false
Introduced	16.0.R1
Platforms	All

flex-algo *number*

Synopsis	Flexible Algorithm ID
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Introduced	20.7.R1
Platforms	All

resolution *keyword*

Synopsis	Tunnel next hop resolution to resolve indirect static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution <i>keyword</i>
Tree	resolution
Default	none
Options	none, filter, any
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP Route Forwarding Equivalence Class (FEC) tunneling for next-hop resolution
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter ldp <i>boolean</i>
Tree	ldp
Default	false
Introduced	16.0.R1
Platforms	All

mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for tunnel-next-hop
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Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter mpls-fwd-policy <i>boolean</i>
Tree	mpls-fwd-policy
Default	false
Introduced	16.0.R4
Platforms	All

rib-api *boolean*

Synopsis	Set RIB API type for use with tunnel next-hop
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter rib-api <i>boolean</i>
Tree	rib-api
Default	false
Introduced	16.0.R4
Platforms	All

rsvp-te

Synopsis	Enable the rsvp-te context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter rsvp-te
Tree	rsvp-te
Introduced	16.0.R1
Platforms	All

lsp [*lsp-name*] *string*

Synopsis	Add a list entry for lsp
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter rsvp-te lsp <i>string</i>
Tree	lsp
Introduced	16.0.R1

Platforms All

[lsp-name] *string*

Synopsis Labeled Switch Path name

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **tunnel-next-hop** **resolution-filter** **rsvp-te lsp** *string*

Tree **lsp**

String Length 1 to 64

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

sr-isis *boolean*

Synopsis Use the SR ISIS tunneling mechanism to resolve next hop for the static route

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **tunnel-next-hop** **resolution-filter** **sr-isis** *boolean*

Tree **sr-isis**

Default false

Introduced 16.0.R1

Platforms All

sr-ospf *boolean*

Synopsis Use SR OSPF tunneling for next-hop resolution

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **tunnel-next-hop** **resolution-filter** **sr-ospf** *boolean*

Tree **sr-ospf**

Default false

Introduced 16.0.R1

Platforms All

sr-ospf3 *boolean*

Synopsis	Use SR OSPFv3 tunneling mechanism to resolve next-hop
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-ospf3 <i>boolean</i>
Tree	sr-ospf3
Default	false
Introduced	16.0.R6
Platforms	All

sr-te

Synopsis	Enable the sr-te context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-te
Tree	sr-te
Introduced	16.0.R1
Platforms	All

lsp [**lsp-name**] *string*

Synopsis	Add a list entry for lsp
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-te lsp <i>string</i>
Tree	lsp
Introduced	16.0.R1
Platforms	All

[**lsp-name**] *string*

Synopsis	Labeled Switch Path name
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-te lsp <i>string</i>
Tree	lsp

String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

interface [[interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Router interface name
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community string

Synopsis	Community ID associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> community <i>string</i>
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

cpe-check [address] (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	Enter the cpe-check list instance
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[address] (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	IP address of the target CPE device
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count number

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count

Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to the target CPE IP address
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Default	56

Units	bytes
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> destination-class <i>number</i>
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

metric number

Synopsis	Static route metric
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> metric number
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference number

Synopsis	Priority of this static route over the routes from different sources
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> preference number
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the prefix-list context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag keyword

Synopsis	Static route match condition from prefix list
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> prefix-list flag keyword
Tree	flag

Default	any
Options	any, all, none
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> prefix-list <i>name</i> <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> qos forwarding-class <i>keyword</i>
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> qos priority <i>keyword</i>
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for this static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> source-class <i>number</i>
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

ipsec-tunnel [**ipsec-tunnel-name**] *string*

Synopsis	Enter the ipsec-tunnel list instance
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i>
Tree	ipsec-tunnel
Introduced	22.7.R1

Platforms VSR

[ipsec-tunnel-name] *string*

Synopsis IPsec tunnel name.

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type keyword ipsec-tunnel** *string*

Tree **ipsec-tunnel**

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.7.R1

Platforms VSR

admin-state *keyword*

Synopsis Administrative state of the static route operation

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type keyword ipsec-tunnel** *string* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Introduced 22.7.R1

Platforms VSR

community *string*

Synopsis Community ID associated with the static route

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type keyword ipsec-tunnel** *string* **community** *string*

Tree **community**

String Length 1 to 72

Introduced 22.7.R1

Platforms VSR

description *string*

Synopsis Text description

Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

metric *number*

Synopsis	Static route metric
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i> metric <i>number</i>
Tree	metric
Range	0 to 65535
Default	1
Introduced	22.7.R1
Platforms	VSR

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	5
Introduced	22.7.R1
Platforms	VSR

tag *number*

Synopsis	Static route tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i> tag <i>number</i>
Tree	tag
Range	1 to 4294967295

Introduced 22.7.R1
Platforms VSR

next-hop [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis Enter the **next-hop** list instance
Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
Tree [next-hop](#)
Introduced 16.0.R1
Platforms All

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis IP address of the directly-connected next hop
Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
Tree [next-hop](#)
Description This command specifies the IP address of the directly-connected next hop. The IP address can either be on the network side or the access side on the node. The address must be associated with a network directly connected to a network configured on the node.
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the static route operation
Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **admin-state** *keyword*
Tree [admin-state](#)
Options enable, disable
Introduced 16.0.R1
Platforms All

backup-next-hop

Synopsis	Enter the backup-next-hop context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) backup-next-hop
Tree	backup-next-hop
Description	Commands in this context configure static route entry fast failover.
Introduced	21.2.R1
Platforms	All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Backup next-hop IP address
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) backup-next-hop address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Description	<p>This command specifies the backup IP forwarding address that is used for static route Fast ReRoute (FRR). The configured address, if reachable, acts as pre-installed backup forwarding information that can be used when the primary IP next-hop suddenly fails.</p> <p>The configured backup next-hop IP address can be directly or indirectly connected (using an IGP or tunnel) to the node. The backup next-hop forwarding information or the Next-hop Label Forwarding Entry (NHLFE) tunnel forwarding information from the IP Routing Table Manager (RTM) is used to preconfigure an IP fast-reroute backup path.</p> <p>One backup next-hop address can protect a single primary static route entry next-hop address without ECMP and it is only activated when the primary next-hop has no active ECMP.</p> <p>The configured IP address can be either on the network or the access side.</p>
Introduced	21.2.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Use Bidirectional Forwarding Detection on this static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	16.0.R1

Platforms All

community *string*

Synopsis Community ID associated with the static route

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **community** *string*

Tree **community**

String Length 1 to 72

Introduced 16.0.R1

Platforms All

cpe-check [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **cpe-check** list instance

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **cpe-check** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **cpe-check**

Description When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.

This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.

Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.

Max. Instances 1

Introduced 16.0.R1

Platforms All

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to the target CPE IP address
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Default	56
Units	bytes
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
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Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) destination-class <i>number</i>
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ldp-sync *boolean*

Synopsis	Use LDP synchronization feature for a static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ldp-sync <i>boolean</i>
Tree	ldp-sync
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Static route metric
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) metric <i>number</i>
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1

Platforms All

preference *number*

Synopsis Priority of this static route over the routes from different sources

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **preference number**

Tree [preference](#)

Range 1 to 255

Default 5

Introduced 16.0.R1

Platforms All

prefix-list

Synopsis Enter the **prefix-list** context

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **prefix-list**

Tree [prefix-list](#)

Introduced 16.0.R1

Platforms All

flag *keyword*

Synopsis Static route match condition from prefix list

Context **configure router** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **prefix-list flag** *keyword*

Tree [flag](#)

Default any

Options any, all, none

Introduced 16.0.R1

Platforms All

name *reference*

Synopsis Prefix list name

Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list name <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos forwarding-class <i>keyword</i>
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos priority <i>keyword</i>
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for this static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) source-class number
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) tag number
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

validate-next-hop *boolean*

Synopsis	Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) validate-next-hop boolean
Tree	validate-next-hop
Default	false
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Static route tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> tag number
Tree	tag

Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

triggered-policy *boolean*

Synopsis	Trigger route policy re-evaluation
Context	configure <i>router</i> <i>string</i> triggered-policy <i>boolean</i>
Tree	triggered-policy
Default	false
Introduced	16.0.R1
Platforms	All

ttl-propagate

Synopsis	Enter the ttl-propagate context
Context	configure <i>router</i> <i>string</i> ttl-propagate
Tree	ttl-propagate
Introduced	16.0.R1
Platforms	All

label-route-local *keyword*

Synopsis	TTL propagation from IP header into label stack for local packets
Context	configure <i>router</i> <i>string</i> ttl-propagate label-route-local <i>keyword</i>
Tree	label-route-local
Default	none
Options	none, all
Introduced	16.0.R1
Platforms	All

label-route-transit *keyword*

Synopsis	TTL propagation from IP header into label stack for transit packets
Context	configure <i>router</i> <i>string</i> ttl-propagate label-route-transit <i>keyword</i>

Tree	label-route-transit
Default	none
Options	none, all
Introduced	16.0.R1
Platforms	All

lsr-label-route *keyword*

Synopsis	TTL propagation from IP header into label stack
Context	configure router <i>string</i> ttl-propagate lsr-label-route <i>keyword</i>
Tree	lsr-label-route
Default	none
Options	none, all
Introduced	16.0.R1
Platforms	All

vprn-local *keyword*

Synopsis	TTL propagation from IP header into label stack for VPRN local packets
Context	configure router <i>string</i> ttl-propagate vprn-local <i>keyword</i>
Tree	vprn-local
Default	vc-only
Options	none, all, vc-only
Introduced	16.0.R1
Platforms	All

vprn-transit *keyword*

Synopsis	TTL propagation from IP header into label stack for VPRN transit packets
Context	configure router <i>string</i> ttl-propagate vprn-transit <i>keyword</i>
Tree	vprn-transit
Default	vc-only
Options	none, all, vc-only
Introduced	16.0.R1
Platforms	All

tunnel-interface

Synopsis	Enter the tunnel-interface context
Context	configure router <i>string</i> tunnel-interface
Tree	tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp-leaf [**p2mp-id**] *number* *sender-address* *string*

Synopsis	Enter the ldp-p2mp-leaf list instance
Context	configure router <i>string</i> tunnel-interface ldp-p2mp-leaf <i>number</i> <i>sender-address</i> <i>string</i>
Tree	ldp-p2mp-leaf
Introduced	16.0.R1
Platforms	All

[**p2mp-id**] *number*

Synopsis	Identifier used for signaling MLDP P2MP LSP
Context	configure router <i>string</i> tunnel-interface ldp-p2mp-leaf <i>number</i> <i>sender-address</i> <i>string</i>
Tree	ldp-p2mp-leaf
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sender-address *string*

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	configure router <i>string</i> tunnel-interface ldp-p2mp-leaf <i>number</i> sender-address <i>string</i>
Tree	ldp-p2mp-leaf
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure <i>router string tunnel-interface ldp-p2mp-leaf number sender-address string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ldp-p2mp-root [*p2mp-id*] *number sender-address string*

Synopsis	Enter the ldp-p2mp-root list instance
Context	configure <i>router string tunnel-interface ldp-p2mp-root number sender-address string</i>
Tree	<i>ldp-p2mp-root</i>
Introduced	16.0.R1
Platforms	All

[p2mp-id] *number*

Synopsis	Identifier used for signaling MLDP P2MP LSP
Context	configure <i>router string tunnel-interface ldp-p2mp-root number sender-address string</i>
Tree	<i>ldp-p2mp-root</i>
Range	1 to 8192
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sender-address *string*

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	configure <i>router string tunnel-interface ldp-p2mp-root number sender-address string</i>
Tree	<i>ldp-p2mp-root</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description
Context **configure** *router string tunnel-interface ldp-p2mp-root number sender-address string description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

rsvp-p2mp-leaf [*lsp-name*] *string sender-address string*

Synopsis Enter the **rsvp-p2mp-leaf** list instance
Context **configure** *router string tunnel-interface rsvp-p2mp-leaf string sender-address string*
Tree [rsvp-p2mp-leaf](#)
Introduced 16.0.R1
Platforms All

[lsp-name] *string*

Synopsis LSP name of the P2MP RSVP tunnel interface
Context **configure** *router string tunnel-interface rsvp-p2mp-leaf string sender-address string*
Tree [rsvp-p2mp-leaf](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

sender-address *string*

Synopsis Address of a sender for the P2MP RSVP tunnel interface instance
Context **configure** *router string tunnel-interface rsvp-p2mp-leaf string sender-address string*
Tree [rsvp-p2mp-leaf](#)

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> tunnel-interface rsvp-p2mp-leaf <i>string</i> sender-address <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

rsvp-p2mp-root [**lsp-name**] *string*

Synopsis	Enter the rsvp-p2mp-root list instance
Context	configure router <i>string</i> tunnel-interface rsvp-p2mp-root <i>string</i>
Tree	rsvp-p2mp-root
Introduced	16.0.R1
Platforms	All

[lsp-name] *string*

Synopsis	LSP name of the P2MP RSVP tunnel interface
Context	configure router <i>string</i> tunnel-interface rsvp-p2mp-root <i>string</i>
Tree	rsvp-p2mp-root
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
----------	------------------

Context	configure <i>router string tunnel-interface rsvp-p2mp-root string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

twamp-light

Synopsis	Enter the twamp-light context
Context	configure <i>router string twamp-light</i>
Tree	<i>twamp-light</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reflector

Synopsis	Enable the reflector context
Context	configure <i>router string twamp-light reflector</i>
Tree	<i>reflector</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of TWAMP Light functionality
Context	configure <i>router string twamp-light reflector admin-state keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	configure <i>router string twamp-light reflector allow-ipv6-udp-checksum-zero boolean</i>
Tree	allow-ipv6-udp-checksum-zero
Description	<p>When configured to true, this command allows the processing of IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior.</p> <p>When configured to false, IPv6 packets that arrive with a UDP checksum of zero are discarded.</p>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure <i>router string twamp-light reflector description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure <i>router string twamp-light reflector prefix (ipv4-prefix ipv6-prefix)</i>
Tree	prefix
Max. Instances	50
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source prefix for the TWAMP-Light reflector
Context	configure router <i>string</i> twamp-light reflector prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure router <i>string</i> twamp-light reflector prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

Synopsis	Processing behavior type for the reflector
Context	configure router <i>string</i> twamp-light reflector type <i>keyword</i>
Tree	type
Description	<p>This command configures the processing behavior of the TWAMP Light reflector. When the value is twamp-light the reflector does not check the received PDU as a traditional base TWAMP Light packet without TLV processing. When the value is stamp, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet.</p> <p>In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to stamp. When the reflector is operating in stamp mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.</p>
Default	twamp-light
Options	stamp, twamp-light
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

udp-port *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs
Context	configure router <i>string</i> twamp-light reflector udp-port <i>number</i>
Tree	udp-port
Range	862 64364 to 64373
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vrgw

Synopsis	Enter the vrgw context
Context	configure router <i>string</i> vrgw
Tree	vrgw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext

Synopsis	Enable the lanext context
Context	configure router <i>string</i> vrgw lanext
Tree	lanext
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Home LAN Extension
Context	configure router <i>string</i> vrgw lanext admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan-port *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port to be used by local or remote VXLAN VTEP
Context	configure router <i>string vrgw lanext vxlan-port number</i>
Tree	vxlan-port
Range	4789 8472
Default	4789
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan-vtep-range

Synopsis	Enter the vxlan-vtep-range context
Context	configure router <i>string vrgw lanext vxlan-vtep-range</i>
Tree	vxlan-vtep-range
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the VXLAN VTEP range
Context	configure router <i>string vrgw lanext vxlan-vtep-range end (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	end
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Lower bound of the VXLAN VTEP range

Context **configure** *router* *string* *vrgw lanext vxlan-vtep-range start* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [start](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis WLAN-GW group used for Home LAN Extension

Context **configure** *router* *string* *vrgw lanext wlan-gw-group reference*

Tree [wlan-gw-group](#)

Reference **configure** *isa wlan-gw-group number*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weighted-ecmp *keyword*

Synopsis Weighted load-balancing capability for ECMP routes

Context **configure** *router* *string* [weighted-ecmp](#) *keyword*

Tree [weighted-ecmp](#)

Default false

Options	false, true, strict
Introduced	16.0.R1
Platforms	All

wlan-gw

Synopsis	Enable the wlan-gw context
Context	configure router <i>string</i> wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

distributed-subscriber-mgmt

Synopsis	Enter the distributed-subscriber-mgmt context
Context	configure router <i>string</i> wlan-gw distributed-subscriber-mgmt
Tree	distributed-subscriber-mgmt
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-tcp-mss-adjust *number*

Synopsis	TCP-MSS adjustment value in upstream direction for DSM
Context	configure router <i>string</i> wlan-gw distributed-subscriber-mgmt ipv6-tcp-mss-adjust <i>number</i>
Tree	ipv6-tcp-mss-adjust
Range	160 to 10240
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility-triggered-accounting

Synopsis	Enter the mobility-triggered-accounting context
Context	configure router <i>string</i> wlan-gw mobility-triggered-accounting
Tree	mobility-triggered-accounting
Introduced	16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of mobility triggered accounting
Context **configure** **router** *string* **wlan-gw** **mobility-triggered-accounting** **admin-state** *keyword*
Tree **admin-state**
Default disable
Options enable, disable
Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-down *number*

Synopsis Hold additional mobility-triggered update until this timer expires
Context **configure** **router** *string* **wlan-gw** **mobility-triggered-accounting** **hold-down** *number*
Tree **hold-down**
Range 60 to 86400
Units seconds
Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-counters *boolean*

Synopsis Include counters in interim updates
Context **configure** **router** *string* **wlan-gw** **mobility-triggered-accounting** **include-counters** *boolean*
Tree **include-counters**
Default false
Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect

Synopsis Enter the **xconnect** context
Context **configure** **router** *string* **wlan-gw** **xconnect**

Tree	xconnect
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the WLAN-GW cross-connect
Context	configure router <i>string</i> wlan-gw xconnect admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-source-ip *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address and prefix for the tunnel source
Context	configure router <i>string</i> wlan-gw xconnect tunnel-source-ip <i>string</i>
Tree	tunnel-source-ip
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN-GW Group
Context	configure router <i>string</i> wlan-gw xconnect wlan-gw-group <i>reference</i>
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis Enable the **wpp** context

Context **configure** *router string wpp*

Tree *wpp*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of WPP

Context **configure** *router string wpp admin-state keyword*

Tree *admin-state*

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal [*name*] *string*

Synopsis Enter the **portal** list instance

Context **configure** *router string wpp portal string*

Tree *portal*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis Web portal name

Context **configure** *router string wpp portal string*

Tree *portal*

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack-auth-retry-count *number*

Synopsis Number of retransmissions of an ACK_OUT message
Context **configure** *router* *string* **wpp portal** *string* **ack-auth-retry-count** *number*
Tree **ack-auth-retry-count**
Range 0 to 5
Default 5
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis WPP portal address
Context **configure** *router* *string* **wpp portal** *string* **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree **address**
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the WPP portal server
Context **configure** *router* *string* **wpp portal** *string* **admin-state** *keyword*
Tree **admin-state**
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ntf-logout-retry-count *number*

Synopsis	Number of retransmissions of an NTF_LOGOUT message
Context	configure <i>router string wpp portal string ntf-logout-retry-count number</i>
Tree	ntf-logout-retry-count
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-format *keyword*

Synopsis	Format of the port in the ACK_INO message
Context	configure <i>router string wpp portal string port-format keyword</i>
Tree	port-format
Default	standard
Options	standard, vendor-specific
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-interval *number*

Synopsis	Time between two consecutive retransmissions
Context	configure <i>router string wpp portal string retry-interval number</i>
Tree	retry-interval
Range	10 to 2000
Default	2000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Message authentication between portal and BRAS by applying the secret used by WPPv2
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Context	configure <i>router</i> <i>string</i> <i>wpp portal</i> <i>string</i> <i>secret</i> <i>string</i>
Tree	<i>secret</i>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *number*

Synopsis	Protocol version to be expected by the WPP portal
Context	configure <i>router</i> <i>string</i> <i>wpp portal</i> <i>string</i> <i>version</i> <i>number</i>
Tree	<i>version</i>
Range	1 2
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

3.40 routing-options commands

```

configure
- routing-options
- admin-tags
  - admin-tag string
  - route-admin-tag-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - exclude reference
  - include reference
- apply-groups reference
- apply-groups-exclude reference
- flexible-algorithm-definitions
  - apply-groups reference
  - apply-groups-exclude reference
  - flex-algo string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - exclude
    - admin-group reference
  - flags-tlv boolean
  - include-all
    - admin-group reference
  - include-any
    - admin-group reference
  - metric-type keyword
  - priority number
- if-attribute
  - admin-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - value number
  - apply-groups reference
  - apply-groups-exclude reference
  - srlg-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - penalty-weight number
  - value number
- ip-fast-reroute boolean
- policy-accounting
  - apply-groups reference
  - apply-groups-exclude reference
  - policy-acct-template string
  - apply-groups reference
  - apply-groups-exclude reference
  - destination-class number
  - apply-groups reference
  - apply-groups-exclude reference
  - policer reference
  - policer number
  - apply-groups reference
  - apply-groups-exclude reference
  - max-burst-size (number | keyword)
  - peak-rate (number | keyword)
  - source-class number
- route-next-hop-policy
  - apply-groups reference

```

configure routing-options route-next-hop-policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **template** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **exclude-group** *reference*
- **include-group** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **preference** *number*
- **nh-type** *keyword*
- **protection-type** *keyword*
- **srlg** *boolean*

3.40.1 routing-options command descriptions

routing-options

Synopsis	Enter the routing-options context
Context	configure routing-options
Tree	routing-options
Introduced	16.0.R1
Platforms	All

admin-tags

Synopsis	Enter the admin-tags context
Context	configure routing-options admin-tags
Tree	admin-tags
Introduced	16.0.R1
Platforms	All

admin-tag [[tag](#)] *string*

Synopsis	Add a list entry for admin-tag
Context	configure routing-options admin-tags admin-tag <i>string</i>
Tree	admin-tag
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[[tag](#)] *string*

Synopsis	Administrative tag value
Context	configure routing-options admin-tags admin-tag <i>string</i>
Tree	admin-tag
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

route-admin-tag-policy [[policy-name](#)] *string*

Synopsis Enter the **route-admin-tag-policy** list instance
Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string*
Tree [route-admin-tag-policy](#)
Max. 2048
Instances
Introduced 16.0.R1
Platforms All

[policy-name] *string*

Synopsis Name of the route admin tag policy
Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string*
Tree [route-admin-tag-policy](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

exclude [[tag](#)] *reference*

Synopsis Add a list entry for **exclude**
Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string* [exclude](#) *reference*
Tree [exclude](#)
Max. 8
Instances
Introduced 16.0.R1
Platforms All

[tag] *reference*

Synopsis Administrative tag value

Context	configure routing-options admin-tags route-admin-tag-policy <i>string</i> exclude <i>reference</i>
Tree	exclude
Reference	configure routing-options admin-tags admin-tag <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

include [[tag](#)] *reference*

Synopsis	Add a list entry for include
Context	configure routing-options admin-tags route-admin-tag-policy <i>string</i> include <i>reference</i>
Tree	include
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[tag] *reference*

Synopsis	Administrative tag value
Context	configure routing-options admin-tags route-admin-tag-policy <i>string</i> include <i>reference</i>
Tree	include
Reference	configure routing-options admin-tags admin-tag <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

flexible-algorithm-definitions

Synopsis	Enter the flexible-algorithm-definitions context
Context	configure routing-options flexible-algorithm-definitions
Tree	flexible-algorithm-definitions
Description	Commands in this context enable locally-configured algorithm definitions and configure administrative groups.
Introduced	20.7.R1

Platforms All

flex-algo [[flex-algo-name](#)] *string*

Synopsis Enter the **flex-algo** list instance

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string*

Tree [flex-algo](#)

Description Commands in this context configure the definition context for a Flexible Algorithm Definition (FAD).

Max. Instances 256

Introduced 20.7.R1

Platforms All

[flex-algo-name] *string*

Synopsis Flexible Algorithm Definition (FAD) name

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string*

Tree [flex-algo](#)

Description This command specifies the name of the flexible algorithm definition that is used as a reference anchor for the configuration.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 20.7.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the FAD

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 20.7.R1

Platforms All

description *string*

Synopsis	Text description
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.7.R1
Platforms	All

exclude



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the exclude context
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> exclude
Tree	exclude
Description	<p>Commands in this context define administrative groups that are used to exclude links from the Flexible Algorithm topology graph.</p> <p>Administrative groups, also known as link colors, are attributes associated with a link. The exclude rule that is part of the FAD specifies that links with the named administrative groups set are to be excluded from the topology graph.</p>
Introduced	20.7.R1
Platforms	All

admin-group [[group-name](#)] *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for admin-group
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> exclude admin-group <i>reference</i>
Tree	admin-group
Introduced	20.7.R1
Platforms	All

[group-name] *reference*

Synopsis	Administrative group name
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> exclude admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

flags-tlv *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise the FAD Flags TLV
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> flags-tlv <i>boolean</i>
Tree	flags-tlv
Description	<p>When configured to true, the router advertises the FAD Flags TLV within the FAD. The M-flag within the TLV is set to 1, specifying the use of a Flex-Algorithm specific prefix metric. A router receiving the TLV modifies the constrained SPF (cSPF) based on the M-flag status.</p> <p>When configured to false, the FAD Flags TLV is not included with the FAD advertisement.</p>
Default	true
Introduced	20.10.R1
Platforms	All

include-all



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the include-all context
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-all

Tree	include-all
Description	<p>Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph.</p> <p>Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that all named administrative groups must be present in a link to be included in the topology graph.</p>
Introduced	20.7.R1
Platforms	All

admin-group [\[group-name\]](#) *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for admin-group
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-all admin-group <i>reference</i>
Tree	admin-group
Introduced	20.7.R1
Platforms	All

[group-name] *reference*

Synopsis	Administrative group name
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-all admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

include-any



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the include-any context
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-any
Tree	include-any
Description	<p>Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph.</p> <p>Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that any link with the named administrative groups is included in the topology graph</p>
Introduced	20.7.R1
Platforms	All

admin-group [[group-name](#)] *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for admin-group
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-any admin-group <i>reference</i>
Tree	admin-group
Introduced	20.7.R1
Platforms	All

[\[group-name\]](#) *reference*

Synopsis	Administrative group name
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-any admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1

Platforms All

metric-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD metric type
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> metric-type <i>keyword</i>
Tree	metric-type
Default	igp
Options	igp, delay, te-metric
Introduced	20.7.R1
Platforms	All

priority *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD priority
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> priority <i>number</i>
Tree	priority
Description	This command configures the priority of the FAD. The priority is used as a tie-breaker when the router has received multiple FADs for the same flexible algorithm.
Range	0 to 255
Default	100
Introduced	20.7.R1
Platforms	All

if-attribute

Synopsis	Enter the if-attribute context
Context	configure routing-options if-attribute

Tree	if-attribute
Introduced	16.0.R1
Platforms	All

admin-group [[group-name](#)] *string*

Synopsis	Enter the admin-group list instance
Context	configure routing-options if-attribute admin-group <i>string</i>
Tree	admin-group
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[group-name] *string*

Synopsis	Interface group name
Context	configure routing-options if-attribute admin-group <i>string</i>
Tree	admin-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

value *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Integer value associated with the group
Context	configure routing-options if-attribute admin-group <i>string</i> value <i>number</i>
Tree	value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

srlg-group *[name]* *string*

Synopsis Enter the **srlg-group** list instance
 Context **configure** [routing-options](#) [if-attribute srlg-group](#) *string*
 Tree [srlg-group](#)
 Max. Instances 1024
 Introduced 16.0.R1
 Platforms All

[name] *string*

Synopsis SRLG name
 Context **configure** [routing-options](#) [if-attribute srlg-group](#) *string*
 Tree [srlg-group](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

penalty-weight *number*

Synopsis Integer value of the penalty weight assigned to SRLG
 Context **configure** [routing-options](#) [if-attribute srlg-group](#) *string* [penalty-weight](#) *number*
 Tree [penalty-weight](#)
 Description This command specifies the penalty weight associated with a SRLG. The higher the penalty weight, the less desirable it is to use the link with a given SRLG.
 Range 0 to 65535
 Default 0
 Introduced 16.0.R1
 Platforms All

value *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Integer value associated with the SRLG
Context	configure routing-options if-attribute srlg-group <i>string</i> value <i>number</i>
Tree	value
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ip-fast-reroute *boolean*

Synopsis	Enable IP fast reroute capability
Context	configure routing-options ip-fast-reroute <i>boolean</i>
Tree	ip-fast-reroute
Default	false
Introduced	16.0.R1
Platforms	All

policy-accounting

Synopsis	Enter the policy-accounting context
Context	configure routing-options policy-accounting
Tree	policy-accounting
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

policy-acct-template [[name](#)] *string*

Synopsis	Enter the policy-acct-template list instance
Context	configure routing-options policy-accounting policy-acct-template <i>string</i>
Tree	policy-acct-template

Max. Instances	1024
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[name] *string*

Synopsis	Policy accounting template name
Context	configure routing-options policy-accounting policy-acct-template <i>string</i>
Tree	policy-acct-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

destination-class [[index](#)] *number*

Synopsis	Enter the destination-class list instance
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> destination-class <i>number</i>
Tree	destination-class
Max. Instances	255
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[index] *number*

Synopsis	Destination class index
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> destination-class <i>number</i>
Tree	destination-class
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

policer *reference*

Synopsis	Policer ID
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> destination-class <i>number</i> policer <i>reference</i>
Tree	policer
Reference	configure routing-options policy-accounting policy-acct-template <i>string</i> policer <i>number</i>
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

policer [[policer-id](#)] *number*

Synopsis	Enter the policer list instance
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> policer <i>number</i>
Tree	policer
Description	Commands in this context configure the policer definition for the instance. Policing by action of a policy accounting template is only supported by cards and systems that are FP4 and later.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[[policer-id](#)] *number*

Synopsis	Policer ID
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

max-burst-size (*number* | *keyword*)

Synopsis	Exceed threshold to drop packets from PIR leaky bucket
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> policer <i>number</i> max-burst-size (<i>number</i> <i>keyword</i>)

Tree	max-burst-size
Description	This command specifies the maximum burst size for the policer. When this value is exceeded, packets are considered violating and are dropped.
Range	0 to 16777216
Default	auto
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

peak-rate (*number* | *keyword*)

Synopsis	Peak rate of the policy accounting policer
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> policer <i>number</i> peak-rate (<i>number</i> <i>keyword</i>)
Tree	peak-rate
Description	This command configures the peak rate of the policy accounting policer, which is the fill or drain rate of the bucket.
Range	1 to 6400000000
Default	max
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

source-class [[index](#)] *number*

Synopsis	Add a list entry for source-class
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> source-class <i>number</i>
Tree	source-class
Max. Instances	255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[index] *number*

Synopsis	Source-class index
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> source-class <i>number</i>
Tree	source-class
Range	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

route-next-hop-policy

Synopsis	Enter the route-next-hop-policy context
Context	configure routing-options route-next-hop-policy
Tree	route-next-hop-policy
Introduced	16.0.R1
Platforms	All

template [[template-name](#)] *string*

Synopsis	Enter the template list instance
Context	configure routing-options route-next-hop-policy template <i>string</i>
Tree	template
Introduced	16.0.R1
Platforms	All

[[template-name](#)] *string*

Synopsis	Template name
Context	configure routing-options route-next-hop-policy template <i>string</i>
Tree	template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure routing-options route-next-hop-policy template <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

exclude-group [[group-name](#)] *reference*

Synopsis	Add a list entry for exclude-group
Context	configure routing-options route-next-hop-policy template <i>string</i> exclude-group <i>reference</i>
Tree	exclude-group
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[[group-name](#)] *reference*

Synopsis	Administrative group name
Context	configure routing-options route-next-hop-policy template <i>string</i> exclude-group <i>reference</i>
Tree	exclude-group
Description	This command specifies the name of the administrative group. If the same group name is part of both include and exclude statements, the exclude statement will win. In other words, the exclude statement can be viewed as having an implicit preference value of 0.
Reference	configure routing-options if-attribute admin-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

include-group [[group-name](#)] *reference*

Synopsis	Enter the include-group list instance
----------	--

Context	configure routing-options route-next-hop-policy template <i>string</i> include-group <i>reference</i>
Tree	include-group
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[group-name] *reference*

Synopsis	Administrative group name
Context	configure routing-options route-next-hop-policy template <i>string</i> include-group <i>reference</i>
Tree	include-group
Description	This command specifies the name of the administrative group. If the same group name is part of both include and exclude statements, the exclude statement will win. In other words, the exclude statement can be viewed as having an implicit preference value of 0.
Reference	configure routing-options if-attribute admin-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference number for configured admin-group.
Context	configure routing-options route-next-hop-policy template <i>string</i> include-group <i>reference</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

nh-type *keyword*

Synopsis	Preferred next hop
Context	configure routing-options route-next-hop-policy template <i>string</i> nh-type <i>keyword</i>

Tree	nh-type
Default	ip
Options	ip, tunnel
Introduced	16.0.R1
Platforms	All

protection-type *keyword*

Synopsis	Protection type used
Context	configure routing-options route-next-hop-policy template <i>string</i> protection-type <i>keyword</i>
Tree	protection-type
Default	node
Options	link, node
Introduced	16.0.R1
Platforms	All

srlg *boolean*

Synopsis	Select next hops from the SRLG
Context	configure routing-options route-next-hop-policy template <i>string</i> srlg <i>boolean</i>
Tree	srlg
Default	false
Introduced	16.0.R1
Platforms	All

3.41 saa commands

```

configure
-  saa
  -  apply-groups reference
  -  apply-groups-exclude reference
  -  owner string test string
    -  accounting-policy reference
    -  admin-state keyword
    -  apply-groups reference
    -  apply-groups-exclude reference
    -  continuous boolean
    -  description string
    -  jitter-event keyword threshold-type keyword
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  threshold number
    -  latency-event keyword threshold-type keyword
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  threshold number
    -  loss-event keyword threshold-type keyword
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  threshold number
    -  probe-history keyword
  -  type
    -  dns
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  count number
      -  interval number
      -  name-server (ipv4-address-no-zone | ipv6-address-no-zone)
      -  record-type keyword
      -  router-instance string
      -  source-address (ipv4-address-no-zone | ipv6-address-no-zone)
      -  target-address string
      -  timeout number
      -  trap-generation
        -  probe-fail boolean
        -  probe-fail-threshold number
        -  test-complete boolean
        -  test-fail boolean
        -  test-fail-threshold number
    -  icmp-ping
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  bypass-routing boolean
      -  count number
      -  destination-address (ipv4-address-no-zone | ipv6-address-no-zone | string-
not-all-spaces)
      -  do-not-fragment boolean
      -  interface string
      -  interval (number | decimal-number)
      -  next-hop-address (ipv4-address-no-zone | ipv6-address-no-zone)
      -  pattern (keyword | number)
    -  qos
      -  fc keyword
      -  tos number
      -  router-instance string
      -  size number

```

configure saa owner type icmp-ping source-address

```

- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- trap-generation
  - probe-fail boolean
  - probe-fail-threshold number
  - test-complete boolean
  - test-fail boolean
  - test-fail-threshold number
- ttl number
- lsp-ping
  - apply-groups reference
  - apply-groups-exclude reference
  - interval number
  - qos
    - fc keyword
    - profile keyword
  - send-count number
  - size number
  - source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - sub-type
    - bgp-label
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
      - ldp
        - path-destination
          - interface string
          - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
          - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
          - prefix (ipv4-prefix | ipv6-prefix)
      - rsvp-te
        - lsp-name string
        - path string
    - sr-isis
      - igp-instance number
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
    - sr-ospf
      - igp-instance number
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
    - sr-ospf3
      - igp-instance number
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
    - sr-policy
      - color number
      - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - segment-list number
  
```

configure saa owner type lsp-ping sub-type sr-te

- **sr-te**
- **lsp-name** *string*
- **path** *string*
- **path-destination**
 - **interface** *string*
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **timeout** *number*
- **trap-generation**
 - **probe-fail** *boolean*
 - **probe-fail-threshold** *number*
 - **test-complete** *boolean*
 - **test-fail** *boolean*
 - **test-fail-threshold** *number*
- **ttl** *number*

3.41.1 saa command descriptions

saa

Synopsis	Enter the saa context
Context	configure saa
Tree	saa
Description	Commands in this context configure the Service Assurance Agent (SAA) tests.
Introduced	16.0.R4
Platforms	All

owner [owner-name] string test string

Synopsis	Enter the owner list instance
Context	configure saa owner string test string
Tree	owner
Introduced	16.0.R4
Platforms	All

[owner-name] string

Synopsis	Optional owner name of the SAA operation
Context	configure saa owner string test string
Tree	owner
Description	This command configures the owner associated with the SAA operation. The owner is optional and "TiMOS CLI" is used if an owner is not specified.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

test string

Synopsis	SAA test name
Context	configure saa owner string test string

Tree	owner
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

accounting-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy associated with the SAA test
Context	configure saa owner <i>string</i> test <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAA test
Context	configure saa owner <i>string</i> test <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

continuous *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Execute the SAA tests as continuous
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Context	configure <i>saa owner string test string continuous boolean</i>
Tree	<i>continuous</i>
Description	<p>When configured to true, the SAA test execution is continuous, that is, it cannot be started or stopped with the oam saa test start or stop commands.</p> <p>The SAA test types supported by this command include the following:</p> <ul style="list-style-type: none"> • cpe-ping • dns • eth-cfm-loopback • eth-cfm-two-way-delay • eth-cfm-two-way-slm • icmp-ping (not applicable to rapid type) • lsp-ping • mac-ping • sdp-ping • vccv-ping • vprn-ping
Default	false
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure <i>saa owner string test string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

jitter-event [*direction*] *keyword threshold-type keyword*

Synopsis	Enter the jitter-event list instance
Context	configure <i>saa owner string test string jitter-event keyword threshold-type keyword</i>
Tree	<i>jitter-event</i>

Description	Commands in this context configure the jitter event thresholds used to evaluate the jitter event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

[direction] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	configure <i>saa owner string test string jitter-event keyword threshold-type keyword</i>
Tree	<i>jitter-event</i>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold-type *keyword*

Synopsis	Threshold type
Context	configure <i>saa owner string test string jitter-event keyword threshold-type keyword</i>
Tree	<i>jitter-event</i>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold *number*

Synopsis	Threshold jitter value
Context	configure <i>saa owner string test string jitter-event keyword threshold-type keyword threshold number</i>
Tree	<i>threshold</i>
Description	This command specifies the threshold jitter value. The system generates an SAA threshold event when the jitter value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

latency-event [*direction*] *keyword* **threshold-type** *keyword*

Synopsis	Enter the latency-event list instance
Context	configure <i>saa owner string test string latency-event keyword threshold-type keyword</i>
Tree	<i>latency-event</i>
Description	Commands in this context configure the latency event thresholds used to evaluate the latency event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

[direction] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	configure <i>saa owner string test string latency-event keyword threshold-type keyword</i>
Tree	<i>latency-event</i>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold-type *keyword*

Synopsis	Threshold type
Context	configure <i>saa owner string test string latency-event keyword threshold-type keyword</i>
Tree	<i>latency-event</i>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold *number*

Synopsis	Threshold latency value
Context	configure <i>saa owner string test string latency-event keyword threshold-type keyword threshold number</i>
Tree	threshold
Description	This command specifies the threshold latency value. The system generates an SAA threshold event when the latency value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

loss-event [*direction*] *keyword threshold-type keyword*

Synopsis	Enter the loss-event list instance
Context	configure <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	loss-event
Description	Commands in this context configure the loss event thresholds used to evaluate the loss event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

[direction] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	configure <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	loss-event
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold-type *keyword*

Synopsis	Threshold type
Context	configure <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	<i>loss-event</i>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold *number*

Synopsis	Threshold loss event value
Context	configure <i>saa owner string test string loss-event keyword threshold-type keyword threshold number</i>
Tree	<i>threshold</i>
Description	This command specifies the threshold loss value. The system generates an SAA threshold event when the loss value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	packets
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

probe-history *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	History probe behavior
Context	configure <i>saa owner string test string probe-history keyword</i>
Tree	<i>probe-history</i>
Default	auto
Options	keep, drop, auto
Introduced	16.0.R4
Platforms	All

type

Synopsis	Enter the type context
Context	configure <i>saa owner string test string type</i>
Tree	<i>type</i>
Introduced	16.0.R4
Platforms	All

dns

Synopsis	Enable the dns context
Context	configure <i>saa owner string test string type dns</i>
Tree	<i>dns</i>
Notes	The following elements are part of a choice: dns , icmp-ping , or lsp-ping .
Introduced	22.10.R1
Platforms	All

count *number*

Synopsis	Number of messages to send in a sample window
Context	configure <i>saa owner string test string type dns count number</i>
Tree	<i>count</i>
Description	This command specifies the number of messages to send. Each message request must either time out or receive a reply before the next message request is sent.
Range	1 to 100
Default	1
Units	packets
Introduced	22.10.R1
Platforms	All

interval *number*

Synopsis	Minimum time before the next message request is sent
Context	configure <i>saa owner string test string type dns interval number</i>
Tree	<i>interval</i>

Range	1 to 10
Default	1
Units	seconds
Introduced	22.10.R1
Platforms	All

name-server (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the DNS name server used for the test
Context	configure <i>saa owner string test string type dns name-server</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	name-server
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

record-type *keyword*

Synopsis	Record type
Context	configure <i>saa owner string test string type dns record-type keyword</i>
Tree	record-type
Default	ipv4-a-record
Options	ipv4-a-record, ipv6-aaaa-record
Introduced	22.10.R1
Platforms	All

router-instance *string*

Synopsis	Router name or VPRN service name
Context	configure <i>saa owner string test string type dns router-instance string</i>
Tree	router-instance
Default	_Base_and_management
Introduced	22.10.R1
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address on the local system
Context	configure <i>saa owner string test string type dns source-address</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Description	This command configures the IP address on the local system. If unconfigured, the router uses a system selected local IP address.
Introduced	22.10.R1
Platforms	All

target-address *string*

Synopsis	DNS name to be resolved to an IP address
Context	configure <i>saa owner string test string type dns target-address string</i>
Tree	target-address
String Length	1 to 255
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

timeout *number*

Synopsis	Maximum time to wait for a reply message
Context	configure <i>saa owner string test string type dns timeout number</i>
Tree	timeout
Description	This command specifies the maximum time the router waits for a message response after sending the message request. When the timeout expires, the requesting router assumes the message response is not received. Any response received after the request times out is silently discarded.
Range	1 to 120
Default	5
Units	seconds
Introduced	22.10.R1
Platforms	All

trap-generation

Synopsis	Enter the trap-generation context
Context	configure <i>saa owner string test string type dns trap-generation</i>
Tree	trap-generation
Introduced	22.10.R1
Platforms	All

probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	configure <i>saa owner string test string type dns trap-generation probe-fail boolean</i>
Tree	probe-fail
Description	When configured to true , the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test. This command is not applicable to SAA traceroute tests.
Default	false
Introduced	22.10.R1
Platforms	All

probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	configure <i>saa owner string test string type dns trap-generation probe-fail-threshold number</i>
Tree	probe-fail-threshold
Description	This command configures the number of consecutive ping probe failures required to generate a trap. This command has no effect if the probe-fail command is set to false . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

test-complete *boolean*

Synopsis	Enable generation of test complete notifications
Context	configure <i>saa owner string test string type dns trap-generation test-complete boolean</i>
Tree	test-complete
Default	false
Introduced	22.10.R1
Platforms	All

test-fail *boolean*

Synopsis	Enable the generation of test fail notifications
Context	configure <i>saa owner string test string type dns trap-generation test-fail boolean</i>
Tree	test-fail
Description	When configured to true , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the test-fail-threshold setting.
Default	false
Introduced	22.10.R1
Platforms	All

test-fail-threshold *number*

Synopsis	Total probe failures for trap generation
Context	configure <i>saa owner string test string type dns trap-generation test-fail-threshold number</i>
Tree	test-fail-threshold
Description	This command configures the number of consecutive test failures required to generate a trap. This command has no effect when test-fail is set to false . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

icmp-ping

Synopsis	Enable the icmp-ping context
Context	configure <i>saa owner string test string type icmp-ping</i>
Tree	icmp-ping
Description	Commands in this context configure an ICMP ping test.
Notes	The following elements are part of a choice: dns , icmp-ping , or lsp-ping .
Introduced	16.0.R4
Platforms	All

bypass-routing *boolean*

Synopsis	Bypass routing table for directly connected interfaces
Context	configure <i>saa owner string test string type icmp-ping bypass-routing boolean</i>
Tree	bypass-routing
Default	false
Notes	The following elements are part of a choice: bypass-routing , interface , or next-hop-address .
Introduced	16.0.R4
Platforms	All

count *number*

Synopsis	ICMP Echo Request packets to send in a sample window
Context	configure <i>saa owner string test string type icmp-ping count number</i>
Tree	count
Range	1 to 100000
Default	5
Units	packets
Introduced	16.0.R4
Platforms	All

destination-address (*ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces*)

Synopsis	Destination IP address or DNS name to send ping request
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Context	configure <i>saa owner string test string type icmp-ping destination-address</i> (<i>ipv4-address-no-zone ipv6-address-no-zone string-not-all-spaces</i>)
Tree	destination-address
String Length	1 to 128
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

do-not-fragment *boolean*

Synopsis	Prevent fragmentation of the ICMP Echo Request packet
Context	configure <i>saa owner string test string type icmp-ping do-not-fragment boolean</i>
Tree	do-not-fragment
Default	false
Introduced	16.0.R4
Platforms	All

interface *string*

Synopsis	Interface name
Context	configure <i>saa owner string test string type icmp-ping interface string</i>
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: bypass-routing , interface , or next-hop-address .
Introduced	16.0.R4
Platforms	All

interval (*number | decimal-number*)

Synopsis	Minimum time to expire before message request is sent
Context	configure <i>saa owner string test string type icmp-ping interval</i> (<i>number decimal-number</i>)
Tree	interval
Range	1 to 10000
Default	1

Units	seconds
Introduced	16.0.R4
Platforms	All

next-hop-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address to reach destination
Context	configure <i>saa owner string test string type icmp-ping next-hop-address</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop-address
Notes	The following elements are part of a choice: bypass-routing , interface , or next-hop-address .
Introduced	16.0.R4
Platforms	All

pattern (*keyword* | *number*)

Synopsis	Pattern to fill the data portion in a ping packet
Context	configure <i>saa owner string test string type icmp-ping pattern</i> (<i>keyword</i> <i>number</i>)
Tree	pattern
Range	0 to 65535
Default	sequential
Options	sequential
Introduced	16.0.R4
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure <i>saa owner string test string type icmp-ping qos</i>
Tree	qos
Introduced	16.0.R4
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure <i>saa owner string test string type icmp-ping qos fc keyword</i>
Tree	fc
Default	nc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R4
Platforms	All

tos number

Synopsis	Type of service
Context	configure <i>saa owner string test string type icmp-ping qos tos number</i>
Tree	tos
Range	0 to 255
Default	0
Introduced	16.0.R4
Platforms	All

router-instance string

Synopsis	Router name or VPRN service name
Context	configure <i>saa owner string test string type icmp-ping router-instance string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R4
Platforms	All

size number

Synopsis	Packet padding size
Context	configure <i>saa owner string test string type icmp-ping size number</i>
Tree	size
Description	This command configures the number of bytes in the combined ICMP Header (8 bytes) and ICMP Payload (variable size) of the ICMP Echo Request packets.

Range	0 to 16384
Default	56
Units	bytes
Introduced	16.0.R4
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address
Context	configure <i>saa owner string test string type icmp-ping source-address</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Description	This command configures the source IP address to be loaded into the IP header of the ICMP Echo Request packet. If unconfigured, the router uses a system-selected local address.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	Time router waits for a reply after sending last probe
Context	configure <i>saa owner string test string type icmp-ping timeout number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	16.0.R4
Platforms	All

trap-generation

Synopsis	Enter the trap-generation context
Context	configure <i>saa owner string test string type icmp-ping trap-generation</i>
Tree	trap-generation
Introduced	22.10.R1

Platforms All

probe-fail *boolean*

Synopsis Enable the generation of probe fail notifications

Context **configure** *saa owner string test string type icmp-ping trap-generation probe-fail boolean*

Tree [probe-fail](#)

Description When configured to **true**, the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test.
This command is not applicable to SAA traceroute tests.

Default false

Introduced 22.10.R1

Platforms All

probe-fail-threshold *number*

Synopsis Consecutive probe failure count

Context **configure** *saa owner string test string type icmp-ping trap-generation probe-fail-threshold number*

Tree [probe-fail-threshold](#)

Description This command configures the number of consecutive ping probe failures required to generate a trap.
This command has no effect if the **probe-fail** command is set to **false**.
This command is not applicable to SAA traceroute tests.

Range 0 to 15

Default 1

Introduced 22.10.R1

Platforms All

test-complete *boolean*

Synopsis Enable generation of test complete notifications

Context **configure** *saa owner string test string type icmp-ping trap-generation test-complete boolean*

Tree [test-complete](#)

Default false

Introduced 22.10.R1
Platforms All

test-fail *boolean*

Synopsis Enable the generation of test fail notifications
Context **configure** *saa owner string test string type icmp-ping trap-generation test-fail boolean*
Tree [test-fail](#)
Description When configured to **true**, the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the **test-fail-threshold** setting.
Default false
Introduced 22.10.R1
Platforms All

test-fail-threshold *number*

Synopsis Total probe failures for trap generation
Context **configure** *saa owner string test string type icmp-ping trap-generation test-fail-threshold number*
Tree [test-fail-threshold](#)
Description This command configures the number of consecutive test failures required to generate a trap.
This command has no effect when **test-fail** is set to **false**.
This command is not applicable to SAA traceroute tests.
Range 0 to 15
Default 1
Introduced 22.10.R1
Platforms All

ttl *number*

Synopsis Time to live in the IP header
Context **configure** *saa owner string test string type icmp-ping ttl number*
Tree [ttl](#)
Range 1 to 128

Default	64
Introduced	16.0.R4
Platforms	All

lsp-ping

Synopsis	Enable the lsp-ping context
Context	configure saa owner string test string type lsp-ping
Tree	lsp-ping
Description	Commands in this context configure the command options to perform in-band LSP connectivity tests. LSP ping uses the protocol and data structures defined in RFC 8029, <i>Detecting Multiprotocol Label Switched (MPLS) Data-Plane Failures</i> .
Notes	The following elements are part of a choice: dns , icmp-ping , or lsp-ping .
Introduced	22.10.R1
Platforms	All

interval number

Synopsis	Minimum time before the next lsp-ping request is sent
Context	configure saa owner string test string type lsp-ping interval number
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	22.10.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure saa owner string test string type lsp-ping qos
Tree	qos
Introduced	22.10.R1
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure <i>saa owner string test string type lsp-ping qos fc keyword</i>
Tree	<i>fc</i>
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	22.10.R1
Platforms	All

profile keyword

Synopsis	Profile
Context	configure <i>saa owner string test string type lsp-ping qos profile keyword</i>
Tree	<i>profile</i>
Default	out
Options	in, out
Introduced	22.10.R1
Platforms	All

send-count number

Synopsis	Number of request packets to send in a sample window
Context	configure <i>saa owner string test string type lsp-ping send-count number</i>
Tree	<i>send-count</i>
Range	1 to 100
Default	1
Units	packets
Introduced	22.10.R1
Platforms	All

size number

Synopsis	Packet pad size
Context	configure <i>saa owner string test string type lsp-ping size number</i>

Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	22.10.R1
Platforms	All

source-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	22.10.R1
Platforms	All

sub-type

Synopsis	Enter the sub-type context
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping sub-type
Tree	sub-type
Introduced	22.10.R1
Platforms	All

bgp-label

Synopsis	Enable the bgp-label context
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping sub-type bgp-label
Tree	bgp-label
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the path-destination context
Context	configure saa owner string test string type lsp-ping sub-type bgp-label path-destination
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	configure saa owner string test string type lsp-ping sub-type bgp-label path-destination interface string
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure saa owner string test string type lsp-ping sub-type bgp-label path-destination ip-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure saa owner string test string type lsp-ping sub-type bgp-label path-destination next-hop (ipv4-address-no-zone ipv6-address-no-zone)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1

Platforms All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination IP prefix for the test

Context **configure** *saa owner string test string type lsp-ping sub-type bgp-label prefix* (*ipv4-prefix* | *ipv6-prefix*)

Tree [prefix](#)

Notes This element is mandatory.

Introduced 22.10.R1

Platforms All

ldp

Synopsis Enable the **ldp** context

Context **configure** *saa owner string test string type lsp-ping sub-type ldp*

Tree [ldp](#)

Notes The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.

Introduced 22.10.R1

Platforms All

path-destination

Synopsis Enter the **path-destination** context

Context **configure** *saa owner string test string type lsp-ping sub-type ldp path-destination*

Tree [path-destination](#)

Introduced 22.10.R1

Platforms All

interface *string*

Synopsis Egress router interface used with the path destination

Context **configure** *saa owner string test string type lsp-ping sub-type ldp path-destination interface string*

Tree [interface](#)

String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping sub-type ldp path-destination ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping sub-type ldp path-destination next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping sub-type ldp prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

rsvp-te

Synopsis	Enable the rsvp-te context
Context	configure <i>saa owner string test string type lsp-ping sub-type rsvp-te</i>
Tree	<i>rsvp-te</i>
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	22.10.R1
Platforms	All

lsp-name *string*

Synopsis	Name of the LSP to be tested
Context	configure <i>saa owner string test string type lsp-ping sub-type rsvp-te lsp-name string</i>
Tree	<i>lsp-name</i>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

path *string*

Synopsis	Name of the MPLS path to be tested
Context	configure <i>saa owner string test string type lsp-ping sub-type rsvp-te path string</i>
Tree	<i>path</i>
String Length	1 to 64
Introduced	22.10.R1
Platforms	All

sr-isis

Synopsis	Enable the sr-isis context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-isis</i>
Tree	<i>sr-isis</i>
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .

Introduced 22.10.R1
Platforms All

igp-instance *number*

Synopsis IGP instance for the SR IS-IS test
Context **configure** *saa owner string test string type lsp-ping sub-type sr-isis igp-instance number*
Tree [igp-instance](#)
Range 0 to 127
Default 0
Introduced 22.10.R1
Platforms All

path-destination

Synopsis Enter the **path-destination** context
Context **configure** *saa owner string test string type lsp-ping sub-type sr-isis path-destination*
Tree [path-destination](#)
Introduced 22.10.R1
Platforms All

interface *string*

Synopsis Egress router interface used with the path destination
Context **configure** *saa owner string test string type lsp-ping sub-type sr-isis path-destination interface string*
Tree [interface](#)
String Length 1 to 32
Notes The following elements are part of a choice: **interface** or **next-hop**.
Introduced 22.10.R1
Platforms All

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis IP address of the path destination

Context	configure <i>saa owner string test string type lsp-ping sub-type sr-isis path-destination ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-isis path-destination next-hop (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-isis prefix (ipv4-prefix ipv6-prefix)</i>
Tree	prefix
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

sr-ospf

Synopsis	Enable the sr-ospf context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf</i>
Tree	sr-ospf
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	22.10.R1
Platforms	All

igp-instance *number*

Synopsis	IGP instance for the SR OSPF test
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf igp-instance number</i>
Tree	igp-instance
Range	0 to 31
Default	0
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the path-destination context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination</i>
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination interface string</i>
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ip-address

Introduced 22.10.R1
Platforms All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Egress IP next hop address used with path destination
Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf path-destination next-hop* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [next-hop](#)
Notes The following elements are part of a choice: **interface** or **next-hop**.
Introduced 22.10.R1
Platforms All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination IP prefix for the test
Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf prefix* (*ipv4-prefix* | *ipv6-prefix*)
Tree [prefix](#)
Notes This element is mandatory.
Introduced 22.10.R1
Platforms All

sr-ospf3

Synopsis Enable the **sr-ospf3** context
Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf3*
Tree [sr-ospf3](#)
Notes The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.
Introduced 22.10.R1
Platforms All

igp-instance *number*

Synopsis IGP instance for the SR OSPFv3 test

Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 igp-instance number</i>
Tree	igp-instance
Range	0 to 31 64 to 95
Default	0
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the path-destination context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination</i>
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination interface string</i>
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination next-hop</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 prefix</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

sr-policy

Synopsis	Enable the sr-policy context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-policy</i>
Tree	sr-policy
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	22.10.R1
Platforms	All

color number

Synopsis	Segment Routing color for the test
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-policy color number</i>
Tree	color
Range	0 to 4294967295

Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

endpoint (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Segment Routing endpoint for the test
Context	configure saa owner <i>string test string type lsp-ping sub-type sr-policy endpoint</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	endpoint
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the path-destination context
Context	configure saa owner <i>string test string type lsp-ping sub-type sr-policy path-destination</i>
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	configure saa owner <i>string test string type lsp-ping sub-type sr-policy path-destination interface string</i>
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
----------	------------------------------------

Context	configure <i>saa owner string test string type lsp-ping sub-type sr-policy path-destination ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-policy path-destination next-hop (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

segment-list *number*

Synopsis	Segment Routing segment list for the test
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-policy segment-list number</i>
Tree	segment-list
Range	1 to 32
Introduced	22.10.R1
Platforms	All

sr-te

Synopsis	Enable the sr-te context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-te</i>
Tree	sr-te
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	22.10.R1
Platforms	All

lsp-name *string*

Synopsis	Name of the LSP to be tested
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-te lsp-name string</i>
Tree	<i>lsp-name</i>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

path *string*

Synopsis	Name of the MPLS path to be tested
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-te path string</i>
Tree	<i>path</i>
String Length	1 to 64
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the path-destination context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-te path-destination</i>
Tree	<i>path-destination</i>
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-te path-destination interface string</i>
Tree	<i>interface</i>
String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .

Introduced 22.10.R1
Platforms All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the path destination
Context **configure** *saa owner string test string type lsp-ping sub-type sr-te path-destination ip-address* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [ip-address](#)
Introduced 22.10.R1
Platforms All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Egress IP next hop address used with path destination
Context **configure** *saa owner string test string type lsp-ping sub-type sr-te path-destination next-hop* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [next-hop](#)
Notes The following elements are part of a choice: **interface** or **next-hop**.
Introduced 22.10.R1
Platforms All

timeout *number*

Synopsis Time router waits for a reply to an echo request
Context **configure** *saa owner string test string type lsp-ping timeout number*
Tree [timeout](#)
Range 1 to 10
Default 5
Units seconds
Introduced 22.10.R1
Platforms All

trap-generation

Synopsis Enter the **trap-generation** context

Context	configure <i>saa owner string test string type lsp-ping trap-generation</i>
Tree	<i>trap-generation</i>
Introduced	22.10.R1
Platforms	All

probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	configure <i>saa owner string test string type lsp-ping trap-generation probe-fail boolean</i>
Tree	<i>probe-fail</i>
Description	When configured to true , the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test. This command is not applicable to SAA traceroute tests.
Default	false
Introduced	22.10.R1
Platforms	All

probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	configure <i>saa owner string test string type lsp-ping trap-generation probe-fail-threshold number</i>
Tree	<i>probe-fail-threshold</i>
Description	This command configures the number of consecutive ping probe failures required to generate a trap. This command has no effect if the probe-fail command is set to false . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

test-complete *boolean*

Synopsis	Enable generation of test complete notifications
----------	--

Context	configure <i>saa owner string test string type lsp-ping trap-generation test-complete boolean</i>
Tree	test-complete
Default	false
Introduced	22.10.R1
Platforms	All

test-fail *boolean*

Synopsis	Enable the generation of test fail notifications
Context	configure <i>saa owner string test string type lsp-ping trap-generation test-fail boolean</i>
Tree	test-fail
Description	When configured to true , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the test-fail-threshold setting.
Default	false
Introduced	22.10.R1
Platforms	All

test-fail-threshold *number*

Synopsis	Total probe failures for trap generation
Context	configure <i>saa owner string test string type lsp-ping trap-generation test-fail-threshold number</i>
Tree	test-fail-threshold
Description	This command configures the number of consecutive test failures required to generate a trap. This command has no effect when test-fail is set to false . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

t*tl number*

Synopsis	TTL value for the echo request MPLS label
Context	configure <i>saa owner string test string type lsp-ping</i> <i>ttl number</i>
Tree	<i>ttl</i>
Range	1 to 255
Default	255
Introduced	22.10.R1
Platforms	All

3.42 satellite commands

```
configure
- satellite
  - apply-groups reference
  - apply-groups-exclude reference
  - ethernet-satellite number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - client-down-delay number
    - console-access keyword
    - description string
    - dynamic-uplink boolean
    - feature keyword
    - mac-address string
    - port-map reference
      - apply-groups reference
      - apply-groups-exclude reference
      - primary reference
      - secondary reference
    - port-template string
    - ptp-tc boolean
    - sat-type keyword
    - software-repository reference
    - sync-e boolean
    - uplink-distribution keyword
  - file-transfer
    - apply-groups reference
    - apply-groups-exclude reference
    - ftp boolean
    - scp boolean
  - port-template string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - port string
      - apply-groups reference
      - apply-groups-exclude reference
      - role keyword
      - uplink reference
    - sat-type keyword
  - port-topology reference
    - apply-groups reference
    - apply-groups-exclude reference
    - far-end-port-id reference
```


3.42.1 satellite command descriptions

satellite

Synopsis	Enter the satellite context
Context	configure satellite
Tree	satellite
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ethernet-satellite [[satellite-id](#)] *number*

Synopsis	Enter the ethernet-satellite list instance
Context	configure satellite ethernet-satellite number
Tree	ethernet-satellite
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[\[satellite-id\]](#) *number*

Synopsis	The unique index identifying this satellite
Context	configure satellite ethernet-satellite number
Tree	ethernet-satellite
Range	1 to 20
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the satellite
Context	configure satellite ethernet-satellite number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-down-delay *number*

Synopsis Delay between uplink as unavailable and disabling ports
Context **configure** [satellite ethernet-satellite](#) *number* [client-down-delay](#) *number*
Tree [client-down-delay](#)
Range 0 to 1800
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

console-access *keyword*

Synopsis Satellite console interface access
Context **configure** [satellite ethernet-satellite](#) *number* [console-access](#) *keyword*
Tree [console-access](#)
Default disable
Options enable, disable
Introduced 20.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** [satellite ethernet-satellite](#) *number* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dynamic-uplink *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable dynamic uplink resilience for Ethernet satellite
Context	configure satellite ethernet-satellite <i>number</i> dynamic-uplink <i>boolean</i>
Tree	dynamic-uplink
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

feature *keyword*

Synopsis	Functionality to enable
Context	configure satellite ethernet-satellite <i>number</i> feature <i>keyword</i>
Tree	feature
Options	local-forward, ptp-tc
Max. Instances	2
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address for the satellite chassis
Context	configure satellite ethernet-satellite <i>number</i> mac-address <i>string</i>
Tree	mac-address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-map [[client-port-id](#)] *reference*

Synopsis	Enter the port-map list instance
Context	configure satellite ethernet-satellite <i>number</i> port-map <i>reference</i>
Tree	port-map

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[client-port-id] reference

Synopsis Satellite client port associated with the port mapping
Context **configure** [satellite ethernet-satellite](#) *number* [port-map](#) *reference*
Tree [port-map](#)
Reference **configure** [port](#) *string*
Notes This element is part of a list key.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary reference

Synopsis Primary satellite uplink for the associate client port
Context **configure** [satellite ethernet-satellite](#) *number* [port-map](#) *reference* [primary](#) *reference*
Tree [primary](#)
Reference **configure** [port](#) *string*
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary reference

Synopsis Secondary satellite uplink for associate client port
Context **configure** [satellite ethernet-satellite](#) *number* [port-map](#) *reference* [secondary](#) *reference*
Tree [secondary](#)
Reference **configure** [port](#) *string*
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-template *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port template name
Context	configure satellite ethernet-satellite <i>number</i> port-template <i>string</i>
Tree	port-template
String Length	1 to 32
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ptp-tc *boolean*

Synopsis	Enable the IEEE 1588 transparent clock function
Context	configure satellite ethernet-satellite <i>number</i> ptp-tc <i>boolean</i>
Tree	ptp-tc
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sat-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of satellite variant for the associated chassis
Context	configure satellite ethernet-satellite <i>number</i> sat-type <i>keyword</i>
Tree	sat-type
Options	es48-1gb-sfp, es24-1gb-sfp, es48-1gb-tx, es24-1gb-tx, es64-10gb-sfpp+4-100gb-cfp4, es24-sass-1gb-sfp, es48-sass-1gb-sfp, es24-sasmxp-1gb-sfp, es64-10gb-sfpp+4-100gb-qsfp28, es24-sfpp+8-sfp28+2-qsfp28, es32-qsfp28+4-qsfpdd, es6-qsfpdd+48-sfp56
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

software-repository *reference*

Synopsis	Software repository bound to the associated satellite
Context	configure satellite ethernet-satellite <i>number</i> software-repository <i>reference</i>
Tree	software-repository
Reference	configure system software-repository <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sync-e *boolean*

Synopsis	Enable the synchronous Ethernet operation
Context	configure satellite ethernet-satellite <i>number</i> sync-e <i>boolean</i>
Tree	sync-e
Description	<p>When configured to true, this command enables the Ethernet satellite for synchronous Ethernet operation so that the transmit timing of the satellite access ports use the frequency of the central clock of the host router.</p> <p>To enable this functionality, both host ports on the router that connect to the U1 and U2 ports of the satellite must be synchronous Ethernet-capable ports.</p> <p>When configured to false, the command disables the Ethernet satellite for synchronous Ethernet operation.</p>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

uplink-distribution *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding complex type for uplink distribution
Context	configure satellite ethernet-satellite <i>number</i> uplink-distribution <i>keyword</i>
Tree	uplink-distribution
Description	<p>This command specifies the forwarding complex used for the satellite uplink association to the ports.</p> <p>With single-complex, all uplinks for the associated satellite must be connected to ports using a single forwarding complex.</p>

With **dual-complex**, all uplinks for the associated satellite must be connected to ports using a double forwarding complex. This option optimizes the resources across the two complexes.

Options	single-complex, dual-complex
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

file-transfer

Synopsis	Enter the file-transfer context
Context	configure satellite file-transfer
Tree	file-transfer
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ftp boolean

Synopsis	Use FTP between host and satellite
Context	configure satellite file-transfer ftp boolean
Tree	ftp
Description	When configured to true , the file transfer FTP is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

scp boolean

Synopsis	Use FTP between host and satellite
Context	configure satellite file-transfer scp boolean
Tree	scp
Description	When configured to true , the file transfer SCP protocol is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite. When configured to false , the file transfer FTP protocol is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.
Default	false

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-template *[template-name] string*

Synopsis Enter the **port-template** list instance
Context **configure satellite port-template string**
Tree [port-template](#)
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[template-name] string

Synopsis Associated port template name
Context **configure satellite port-template string**
Tree [port-template](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state keyword

Synopsis Administrative state of the port template
Context **configure satellite port-template string admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis Text description
Context **configure satellite port-template string description string**

Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port [[sat-phys-port-id](#)] *string*

Synopsis	Enter the port list instance
Context	configure satellite port-template <i>string</i> port <i>string</i>
Tree	port
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[sat-phys-port-id] *string*

Synopsis	Satellite physical port ID
Context	configure satellite port-template <i>string</i> port <i>string</i>
Tree	port
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

role *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Satellite port role
Context	configure satellite port-template <i>string</i> port <i>string</i> role <i>keyword</i>
Tree	role
Options	none, uplink, client
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

uplink reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Uplink association used for associated satellite port
Context	configure satellite port-template <i>string</i> port <i>string</i> uplink reference
Tree	uplink
Reference	configure satellite port-template <i>string</i> port <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sat-type keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	The satellite type for the port template to use.
Context	configure satellite port-template <i>string</i> sat-type <i>keyword</i>
Tree	sat-type
Options	es48-1gb-sfp, es24-1gb-sfp, es48-1gb-tx, es24-1gb-tx, es64-10gb-sfpp+4-100gb-cfp4, es24-sass-1gb-sfp, es48-sass-1gb-sfp, es24-sasmxp-1gb-sfp, es64-10gb-sfpp+4-100gb-qsfp28, es24-sfpp+8-sfp28+2-qsfp28, es32-qsfp28+4-qsfpdd, es6-qsfpdd+48-sfp56
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-topology [[local-port-id](#)] reference

Synopsis	Enter the port-topology list instance
Context	configure satellite port-topology <i>reference</i>
Tree	port-topology

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[local-port-id] *reference*

Synopsis Local port identifier
Context **configure** [satellite port-topology reference](#)
Tree [port-topology](#)
Reference **configure** [port string](#)
Notes This element is part of a list key.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

far-end-port-id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Far end port identifier.
Context **configure** [satellite port-topology reference](#) [far-end-port-id reference](#)
Tree [far-end-port-id](#)
Reference **configure** [port string](#)
Notes This element is mandatory.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

3.43 service commands

```

configure
- service
- apply-groups reference
- apply-groups-exclude reference
- cpipe string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- customer reference
- description string
- endpoint string
- apply-groups reference
- apply-groups-exclude reference
- description string
- hold-time-active number
- revert-time (number | keyword)
- sap string
- accounting-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- cem
- packet
- jitter-buffer number
- payload-size number
- report-alarm
- buffer-overflow boolean
- buffer-underrun boolean
- malformed-packets boolean
- packet-loss boolean
- remote-fault boolean
- remote-packet-loss boolean
- remote-rdi boolean
- stray-packets boolean
- rtp-header boolean
- collect-stats boolean
- description string
- dist-cpu-protection reference
- egress
- agg-rate
- adaptation-rule keyword
- burst-limit (number | keyword)
- limit-unused-bandwidth boolean
- rate number
- qos
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- root
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-thresh-separation (number | keyword)
- priority number
- apply-groups reference
- apply-groups-exclude reference
- mbs-contribution (number | keyword)
- policy-name reference
- sap-egress

```

configure service cpipe sap egress qos sap-egress overrides

```

- overrides
- policer reference
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
- cir keyword
- pir keyword
- apply-groups reference
- apply-groups-exclude reference
- avg-frame-overhead decimal-number
- burst-limit (number | keyword)
- cbs (number | keyword)
- drop-tail
- low
- percent-reduction-from-mbs (number | keyword)
- hs-class-weight number
- hs-wred-queue
- policy reference
- hs-wrr-weight number
- mbs (number | keyword)
- monitor-queue-depth
- fast-polling boolean
- violation-threshold decimal-number
- parent
- cir-weight number
- weight number
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- policy-name reference
- scheduler-policy
- overrides
- scheduler string
- apply-groups reference
- apply-groups-exclude reference
- parent
- cir-weight number
- weight number
- rate
- cir (number | keyword)
- pir (number | keyword)
- policy-name reference
- endpoint reference
- ingress
- qos
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- root

```

configure service cpipe sap ingress qos policer-control-policy overrides root max-rate

```

    - max-rate (number | keyword)
    - priority-mbs-thresholds
      - min-thresh-separation (number | keyword)
      - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
  - policy-name reference
- sap-ingress
- overrides
  - ip-criteria
    - activate-entry-tag number
  - ipv6-criteria
    - activate-entry-tag number
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - drop-tail
      - low
      - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
  - queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- lag

```

configure service cpipe sap multi-service-site

- **multi-service-site** *reference*
- **service-id** *number*
- **service-mtu** *number*
- **spoke-sdp** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** (*number* | *keyword*)
 - **bfd**
 - **bfd-liveness**
 - **encap** *keyword*
 - **bfd-template** *reference*
 - **control-word** *boolean*
 - **description** *string*
 - **egress**
 - **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **vc-label** *number*
- **endpoint**
 - **icb** *boolean*
 - **name** *reference*
 - **precedence** (*number* | *keyword*)
- **ingress**
 - **qos**
 - **network**
 - **fp-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **policy-name** *reference*
 - **vc-label** *number*
- **test** *boolean*
- **vc-switching** *boolean*
- **vc-type** *keyword*
- **vpn-id** *number*
- **customer** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **contact** *string*
 - **customer-id** *number*
 - **description** *string*
 - **multi-service-site** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **assignment**
 - **card** *number*
 - **fpe** *reference*
 - **port** *string*
 - **description** *string*
 - **egress**
 - **agg-rate**
 - **limit-unused-bandwidth** *boolean*
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
 - **policer-control-policy** *reference*
 - **scheduler-policy**
 - **overrides**
 - **scheduler** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent**

configure service customer multi-service-site egress scheduler-policy overrides scheduler parent cir-weight

```

        - cir-weight number
        - weight number
    - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
- ingress
- policer-control-policy reference
- scheduler-policy
- overrides
    - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
        - cir-weight number
        - weight number
    - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
- phone string
- epipe string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bgp number
    - adv-service-mtu number
    - apply-groups reference
    - apply-groups-exclude reference
    - pw-template-binding reference
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness boolean
    - bfd-template reference
    - endpoint reference
    - import-rt string
- route-distinguisher (keyword | vpn-route-distinguisher)
- route-target
    - export string
    - import string
- vsi-export reference
- vsi-import reference
- bgp-evpn
    - apply-groups reference
    - apply-groups-exclude reference
    - evi number
- local-attachment-circuit string
    - apply-groups reference
    - apply-groups-exclude reference
    - endpoint reference
    - eth-tag number
- mpls number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - auto-bind-tunnel
        - allow-flex-algo-fallback boolean
        - ecmp number
        - enforce-strict-tunnel-tagging boolean
        - resolution keyword
        - resolution-filter
            - bgp boolean
            - ldp boolean
            - mpls-fwd-policy boolean

```


configure service epipe bgp-evpn mpls auto-bind-tunnel resolution-filter rib-api

- **rib-api** *boolean*
- **rsvp** *boolean*
- **sr-isis** *boolean*
- **sr-ospf** *boolean*
- **sr-ospf3** *boolean*
- **sr-policy** *boolean*
- **sr-te** *boolean*
- **udp** *boolean*
- **weighted-ecmp** *boolean*
- **control-word** *boolean*
- **default-route-tag** *string*
- **dynamic-egress-label-limit** *boolean*
- **ecmp** *number*
- **entropy-label** *boolean*
- **evi-three-byte-auto-rt** *boolean*
- **force-vc-forwarding** *keyword*
- **oper-group** *reference*
- **route-next-hop**
 - **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **system-ipv4**
 - **system-ipv6**
- **send-tunnel-encap**
 - **mpls** *boolean*
 - **mpls-over-udp** *boolean*
- **remote-attachment-circuit** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **endpoint** *reference*
 - **eth-tag** *number*
- **segment-routing-v6** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-route-tag** *string*
 - **ecmp** *number*
 - **evi-three-byte-auto-rt** *boolean*
 - **force-vc-forwarding** *keyword*
 - **oper-group** *reference*
 - **resolution** *keyword*
 - **route-next-hop**
 - **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **system-ipv4**
 - **system-ipv6**
 - **source-address** *string*
 - **srv6**
 - **default-locator** *string*
 - **instance** *reference*
- **vlan** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-route-tag** *string*
 - **ecmp** *number*
 - **evi-three-byte-auto-rt** *boolean*
 - **send-tunnel-encap** *boolean*
 - **vlan-instance** *reference*
- **bgp-mh-site** *string*
 - **activation-timer** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **boot-timer** *number*
 - **id** *number*
 - **min-down-timer** *number*

configure service epipe bgp-mh-site preference

- **preference** *number*
- **sap** *string*
- **bgp-vpws**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-ve**
 - **id** *number*
 - **name** *string*
 - **remote-ve** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **id** *number*
- **customer** *reference*
- **description** *string*
- **endpoint** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **hold-time-active** *number*
 - **revert-time** (*number* | *keyword*)
 - **standby-signaling** *keyword*
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **ignore-l2vpn-mtu-mismatch** *boolean*
- **load-balancing**
 - **lbl-eth-or-ip-l4-teid** *boolean*
 - **per-service-hashing** *boolean*
- **nat-outside** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **oper-group** *reference*
- **pbb**
 - **force-qtag-forwarding** *boolean*
 - **local-switch-service-state** *keyword*
 - **tunnel**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backbone-dest-mac** *string*
 - **backbone-dest-mac-name** *reference*
 - **backbone-vpls-service-name** *reference*
 - **isid** *number*
- **sap** *string*
 - **aarp**
 - **id** *reference*
 - **type** *keyword*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **cflowd** *boolean*
 - **collect-stats** *boolean*
 - **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **description** *string*
 - **dist-cpu-protection** *reference*

configure service epipe sap egress

```

- egress
  - agg-rate
    - adaptation-rule keyword
    - burst-limit (number | keyword)
    - limit-unused-bandwidth boolean
    - queue-frame-based-accounting boolean
    - rate number
  - filter
    - ip reference
    - ipv6 reference
    - mac reference
  - qos
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
      - root
        - max-rate (number | keyword)
        - priority-mbs-thresholds
          - min-thresh-separation (number | keyword)
          - priority number
            - apply-groups reference
            - apply-groups-exclude reference
            - mbs-contribution (number | keyword)
        - policy-name reference
    - qinq-mark-top-only boolean
  - sap-egress
    - overrides
      - hs-secondary-shaper string
      - hs-wrr-group reference
        - apply-groups reference
        - apply-groups-exclude reference
        - hs-class-weight number
        - percent-rate decimal-number
        - rate (number | keyword)
      - policer reference
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - mbs (number | keyword)
        - packet-byte-offset number
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
        - stat-mode keyword
      - queue reference
        - adaptation-rule
          - cir keyword
          - pir keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - avg-frame-overhead decimal-number
        - burst-limit (number | keyword)
        - cbs (number | keyword)
        - drop-tail
          - low
            - percent-reduction-from-mbs (number | keyword)
        - hs-class-weight number
        - hs-wred-queue
          - policy reference
        - hs-wrr-weight number

```

configure service epipe sap egress qos sap-egress overrides queue mbs

```

    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
      - violation-threshold decimal-number
    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
  - port-redirect-group
    - group-name reference
    - instance number
  - scheduler-policy
    - overrides
      - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
      - parent
        - cir-weight number
        - weight number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
  - endpoint reference
  - eth-cfm
    - ais boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-lmm-fc-stats
      - fc keyword
      - fc-in-profile keyword
    - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
    - ais
      - client-meg-level number
      - interface-support boolean
      - interval number
      - low-priority-defect keyword
      - priority number
    - alarm-notification
      - fng-alarm-time number
      - fng-reset-time number
    - apply-groups reference
    - apply-groups-exclude reference
    - ccm boolean
    - ccm-ltm-priority number
    - ccm-padding-size number
    - cfm-vlan-tag string
    - csf
      - multiplier decimal-number
    - description string
    - direction keyword
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword

```

configure service epipe sap eth-cfm mep fault-propagation

```

- fault-propagation keyword
- grace
- eth-ed
  - max-rx-defect-window number
  - priority number
  - rx-eth-ed boolean
  - tx-eth-ed boolean
- eth-vsm-grace
  - rx-eth-vsm-grace boolean
  - tx-eth-vsm-grace boolean
- lbm-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- snmpch-ingress-ctag-levels number
- snmpch-ingress-levels number
- ethernet
- llf
  - admin-state keyword
- ignore-oper-down boolean
- ingress
- filter
  - ip reference
  - ipv6 reference
  - mac reference
- qos
- match-qinq-dot1p keyword
- policer-control-policy
  - overrides
    - apply-groups reference
    - apply-groups-exclude reference
    - root
      - max-rate (number | keyword)
      - priority-mbs-thresholds
        - min-thresh-separation (number | keyword)
        - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
      - policy-name reference
  - sap-ingress
  - fp-redirect-group
    - group-name reference
    - instance number
  - overrides
    - ip-criteria
      - activate-entry-tag number
    - ipv6-criteria
      - activate-entry-tag number
    - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number

```

configure service epipe sap ingress qos sap-ingress overrides policer rate

```

- rate
  - cir (number | keyword)
  - pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
  - cir keyword
  - pir keyword
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- drop-tail
  - low
    - percent-reduction-from-mbs (number | keyword)
- mbs (number | keyword)
- monitor-queue-depth
  - fast-polling boolean
- parent
  - cir-weight number
  - weight number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- policy-name reference
- queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- qtag-manipulation
  - c-tag (number | keyword)
  - push-dot1q-vlan (number | keyword)
  - s-tag number
- l2tpv3-session
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - pseudo-wire
    - ethernet
    - ethernet-vlan-id number
  - router
    - group string
    - router-instance string
  - vc-id number
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- mc-ring
  - apply-groups reference
  - apply-groups-exclude reference
  - ring-node string

```

configure service epipe sap monitor-oper-group

- **monitor-oper-group** *reference*
- **multi-service-site** *reference*
- **oper-group** *reference*
- **transit-policy**
 - **ip** *reference*
 - **prefix** *reference*
- **segment-routing-v6** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **end-dx2**
 - **value** *number*
- **micro-segment-locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **udx2**
 - **value** *number*
- **service-id** *number*
- **service-mtu** *number*
- **spoke-sdp** *string*
- **aarp**
 - **id** *reference*
 - **type** *keyword*
- **accounting-policy** *reference*
- **admin-state** *keyword*
- **adv-service-mtu** *number*
- **app-profile** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bandwidth** (*number* | *keyword*)
- **bfd**
 - **bfd-liveness**
 - **encap** *keyword*
 - **bfd-template** *reference*
 - **failure-action** *keyword*
 - **wait-for-up-timer** *number*
- **collect-stats** *boolean*
- **control-word** *boolean*
- **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **mac-monitoring**
 - **policy-id** *reference*
- **description** *string*
- **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **mac** *reference*
 - **l2tpv3**
 - **cookie** *string*
 - **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **vc-label** *number*
 - **endpoint**

configure service epipe spoke-sdp endpoint icb

```

- icb boolean
- name reference
- precedence (number | keyword)
- entropy-label
- eth-cfm
- apply-groups reference
- apply-groups-exclude reference
- collect-lmm-fc-stats
- fc keyword
- fc-in-profile keyword
- collect-lmm-stats boolean
- mep md-admin-name reference ma-admin-name reference mep-id number
- admin-state keyword
- ais
- client-meg-level number
- interface-support boolean
- interval number
- low-priority-defect keyword
- priority number
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- cfm-vlan-tag string
- csf
- multiplier decimal-number
- description string
- direction keyword
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- fault-propagation keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- lbm-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- snelch-ingress-ctag-levels number
- snelch-ingress-levels number
- force-vc-forwarding keyword
- hash-label
- signal-capability
- ingress
- filter

```


configure service epipe spoke-sdp ingress filter ip

```

    - ip reference
    - ipv6 reference
    - mac reference
  - l2tpv3
    - cookie
      - cookie1 string
      - cookie2 string
    - qos
      - network
        - fp-redirect-group
          - group-name reference
          - instance number
          - policy-name reference
    - vc-label number
  - monitor-oper-group reference
  - oper-group reference
  - pw-status
    - block-on-peer-fault boolean
    - signaling boolean
    - standby-signaling-slave boolean
  - source-bmac
    - use-sdp-bmac-lsb boolean
  - transit-policy
    - ip reference
    - prefix reference
  - vc-type keyword
  - vlan-vc-tag number
  - test boolean
  - vc-switching boolean
  - vpn-id number
  - vxlan
    - instance number
    - apply-groups reference
    - apply-groups-exclude reference
    - egress-vtep
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - oper-group reference
      - vni number
    - source-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
  - ies string
    - aa-interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - ip-mtu number
    - ipv4
      - primary
        - address string
        - apply-groups reference
        - apply-groups-exclude reference
        - prefix-length number
    - sap string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - egress
        - filter
          - ip reference
        - qos
          - sap-egress
            - policy-name reference
    - fwd-wholesale

```

configure service ies aa-interface sap fwd-wholesale pppoe-service

```

    - pppoe-service reference
  - ingress
    - qos
      - sap-ingress
        - overrides
        - policy-name reference
    - lag
  - aarp-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ip-mtu number
  - spoke-sdp string
    - aarp
      - id reference
      - type keyword
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - egress
        - filter
          - ip reference
          - vc-label number
      - ingress
        - filter
          - ip reference
          - vc-label number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - customer reference
    - description string
  - eth-cfm
    - apply-groups reference
    - apply-groups-exclude reference
  - igmp-host-tracking
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - expiry-time number
  - interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - cflowd-parameters
    - sampling keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - direction keyword
      - sample-profile (keyword | number)
      - type keyword
    - cpu-protection reference
  - description string
  - dynamic-tunnel-redundant-nexthop string
  - hold-time
    - ipv4
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
    - ipv6

```

configure service ies interface hold-time ipv6 down

```

- down
  - init-only boolean
  - seconds number
- up
  - seconds number
- if-attribute
  - admin-group reference
  - srlg-group reference
- ingress
  - destination-class-lookup boolean
  - policy-accounting reference
- ingress-stats boolean
- ip-mtu number
- ipsec
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-exception reference
  - ipsec-tunnel string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip string
      - interface string
      - service-name string
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description string
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - interval number
      - message-count number
  - ip-mtu number
  - key-exchange
    - dynamic
      - auto-establish boolean
      - cert
        - cert-profile reference
        - status-verify
          - default-result keyword
          - primary keyword
          - secondary keyword
          - trust-anchor-profile reference
      - id
        - fqdn string
        - ipv4 string
        - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
      - ike-policy reference
      - ipsec-transform reference
      - pre-shared-key string
    - manual
      - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference

```

configure service ies interface ipsec ipsec-tunnel key-exchange manual keys authentication-key

```

zone)
    - authentication-key string
    - encryption-key string
    - ipsec-transform reference
    - spi number
    - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
- zone)
    - max-history-key-records
      - esp number
      - ike number
    - pmtu-discovery-aging number
    - private-sap number
    - private-service string
    - private-tcp-mss-adjust number
    - propagate-pmtu-v4 boolean
    - propagate-pmtu-v6 boolean
    - public-tcp-mss-adjust (number | keyword)
    - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - replay-window number
    - security-policy
      - id number
      - strict-match boolean
    - ipv6-exception reference
    - public-sap number
    - tunnel-group reference
- ipv4
  - addresses
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix-length number
  - allow-directed-broadcasts boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - gi-address string
    - lease-populate
      - max-leases number
    - option-82
      - action keyword
      - circuit-id
        - ascii-tuple
        - ifindex
        - none
        - sap-id
        - vlan-ascii-tuple
      - remote-id
        - ascii-string string
        - mac
        - none
    - vendor-specific-option
      - client-mac-address boolean
      - pool-name boolean
      - sap-id boolean
      - service-id boolean
      - string string

```

configure service ies interface ipv4 dhcp option-82 vendor-specific-option system-id

```

    - system-id boolean
  - proxy-server
    - admin-state keyword
    - emulated-server string
    - lease-time
      - radius-override boolean
      - value number
  - python-policy reference
  - relay-plain-bootp boolean
  - relay-proxy
    - release-update-src-ip boolean
    - siaddr-override string
  - release-include-gi-address boolean
  - server string
  - src-ip-addr keyword
  - trusted boolean
  - use-arp boolean
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
  - unreachables
    - admin-state keyword
    - number number
    - seconds number
- ip-helper-address string
- local-dhcp-server reference
- neighbor-discovery
  - host-route
    - populate keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - route-tag number
  - learn-unsolicited boolean
- limit
  - log-only boolean
  - max-entries number
  - threshold number
- local-proxy-arp boolean
- populate boolean
- proactive-refresh boolean
- proxy-arp-policy reference
- remote-proxy-arp boolean
- retry-timer number
- static-neighbor string
  - apply-groups reference
  - apply-groups-exclude reference
  - mac-address string
- static-neighbor-unnumbered
  - mac-address string
- timeout number
- primary
  - address string
  - apply-groups reference

```

configure service ies interface ipv4 primary apply-groups-exclude

```

- apply-groups-exclude reference
- broadcast keyword
- prefix-length number
- track-srrp number
- qos-route-lookup keyword
- secondary string
- apply-groups reference
- apply-groups-exclude reference
- broadcast keyword
- igp-inhibit boolean
- prefix-length number
- track-srrp number
- tcp-mss number
- unnumbered
- ip-address string
- ip-int-name string
- system
- urpf-check
- ignore-default boolean
- mode keyword
- vrrp number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- backup string
- bfd-liveness
- apply-groups reference
- apply-groups-exclude reference
- dest-ip string
- interface-name string
- service-name string
- init-delay number
- mac string
- master-int-inherit boolean
- message-interval number
- monitor-oper-group reference
- ntp-reply boolean
- oper-group reference
- owner boolean
- passive boolean
- ping-reply boolean
- policy reference
- preempt boolean
- priority number
- ssh-reply boolean
- standby-forwarding boolean
- telnet-reply boolean
- traceroute-reply boolean
- ipv6
- address string
- apply-groups reference
- apply-groups-exclude reference
- duplicate-address-detection boolean
- eui-64 boolean
- prefix-length number
- primary-preference number
- track-srrp number
- bfd
- admin-state keyword
- echo-receive number
- multiplier number
- receive number
- transmit-interval number

```

configure service ies interface ipv6 bfd type

- **type** *keyword*
- **dhcp6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **relay**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **lease-populate**
 - **max-nbr-of-leases** *number*
 - **route-populate**
 - **na** *boolean*
 - **pd**
 - **exclude** *boolean*
 - **ta** *boolean*
 - **link-address** *string*
 - **neighbor-resolution** *boolean*
 - **option**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-id**
 - **ascii-tuple**
 - **if-index**
 - **sap-id**
 - **string** *string*
 - **remote-id** *boolean*
 - **python-policy** *reference*
 - **server** *string*
 - **source-address** *string*
 - **user-db** *reference*
 - **server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **max-nbr-of-leases** *number*
 - **prefix-delegation**
 - **admin-state** *keyword*
 - **prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **client-id**
 - **duid** *string*
 - **iaid** *number*
 - **preferred-lifetime** (*number* | *keyword*)
 - **valid-lifetime** (*number* | *keyword*)
 - **duplicate-address-detection** *boolean*
 - **forward-ipv4-packets** *boolean*
 - **icmp6**
 - **packet-too-big**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **time-exceeded**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*

configure service ies interface ipv6 icmp6 unreachablees

- **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **link-local-address**
 - **address** *string*
 - **duplicate-address-detection** *boolean*
 - **local-dhcp-server** *reference*
 - **neighbor-discovery**
 - **host-route**
 - **populate** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **learn-unsolicited** *keyword*
 - **limit**
 - **log-only** *boolean*
 - **max-entries** *number*
 - **threshold** *number*
 - **local-proxy-nd** *boolean*
 - **proactive-refresh** *keyword*
 - **proxy-nd-policy** *reference*
 - **reachable-time** *number*
 - **secure-nd**
 - **admin-state** *keyword*
 - **allow-unsecured-msgs** *boolean*
 - **public-key-min-bits** *number*
 - **security-parameter** *number*
 - **stale-time** *number*
 - **static-neighbor** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *string*
- **qos-route-lookup** *keyword*
- **tcp-mss** *number*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup** *string*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **interface-name** *string*
 - **service-name** *string*
 - **init-delay** *number*
 - **mac** *string*
 - **master-int-inherit** *boolean*
 - **message-interval** *number*
 - **monitor-oper-group** *reference*
 - **ntp-reply** *boolean*
 - **oper-group** *reference*
 - **owner** *boolean*
 - **passive** *boolean*
 - **ping-reply** *boolean*
 - **policy** *reference*
 - **preempt** *boolean*
 - **priority** *number*
 - **standby-forwarding** *boolean*
 - **telnet-reply** *boolean*

configure service ies interface ipv6 vrrp traceroute-reply

- **traceroute-reply** *boolean*
- **load-balancing**
 - **flow-label-load-balancing** *boolean*
 - **ip-load-balancing** *keyword*
 - **spi-load-balancing** *boolean*
 - **teid-load-balancing** *boolean*
- **loopback** *boolean*
- **mac** *string*
- **mac-accounting** *boolean*
- **monitor-oper-group** *reference*
- **multi-chassis-shunting-profile** *reference*
- **multicast-network-domain** *reference*
- **ping-template**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **destination-address** *string*
 - **name** *reference*
- **ptp-hw-assist**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **radius-auth-policy** *reference*
- **sap** *string*
 - **aarp**
 - **id** *reference*
 - **type** *keyword*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **anti-spoof** *keyword*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **calling-station-id** *string*
 - **collect-stats** *boolean*
 - **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **description** *string*
 - **dist-cpu-protection** *reference*
 - **egress**
 - **agg-rate**
 - **adaptation-rule** *keyword*
 - **burst-limit** (*number* | *keyword*)
 - **limit-unused-bandwidth** *boolean*
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **policer-control-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **root**
 - **max-rate** (*number* | *keyword*)
 - **priority-mbs-thresholds**
 - **min-thresh-separation** (*number* | *keyword*)

configure service ies interface sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority

```

    - priority number
      - apply-groups reference
      - apply-groups-exclude reference
      - mbs-contribution (number | keyword)
- policy-name reference
- qinq-mark-top-only boolean
- sap-egress
- overrides
  - hs-secondary-shaper string
  - hs-wrr-group reference
    - apply-groups reference
    - apply-groups-exclude reference
    - hs-class-weight number
    - percent-rate decimal-number
    - rate (number | keyword)
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
    - burst-limit (number | keyword)
    - cbs (number | keyword)
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
    - hs-class-weight number
    - hs-wred-queue
      - policy reference
    - hs-wrr-weight number
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
      - violation-threshold decimal-number
    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
  - port-redirect-group
    - group-name reference
    - instance number
- scheduler-policy
  - overrides
    - scheduler string

```

configure service ies interface sap egress qos scheduler-policy overrides scheduler apply-groups

```

    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
  - queue-group-redirect-list reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais boolean
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - csf
    - multiplier decimal-number
  - description string
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean
    - low-priority-defect keyword
    - one-way-delay-threshold number
  - snelch-ingress-levels number
- fwd-wholesale
  - pppoe-service reference
- host-admin-state keyword
- host-lockout-policy reference
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - root

```

configure service ies interface sap ingress qos policer-control-policy overrides root max-rate

- **max-rate** (number | keyword)
- **priority-mbs-thresholds**
 - **min-thresh-separation** (number | keyword)
 - **priority** number
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **mbs-contribution** (number | keyword)
- **policy-name** reference
- **sap-ingress**
 - **fp-redirect-group**
 - **group-name** reference
 - **instance** number
 - **overrides**
 - **ip-criteria**
 - **activate-entry-tag** number
 - **ipv6-criteria**
 - **activate-entry-tag** number
 - **policer** reference
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **cbs** (number | keyword)
 - **mbs** (number | keyword)
 - **packet-byte-offset** number
 - **percent-rate**
 - **cir** decimal-number
 - **pir** decimal-number
 - **rate**
 - **cir** (number | keyword)
 - **pir** (number | keyword)
 - **stat-mode** keyword
 - **queue** reference
 - **adaptation-rule**
 - **cir** keyword
 - **pir** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **cbs** (number | keyword)
 - **drop-tail**
 - **low**
 - **percent-reduction-from-mbs** (number | keyword)
 - **mbs** (number | keyword)
 - **monitor-queue-depth**
 - **fast-polling** boolean
 - **parent**
 - **cir-weight** number
 - **weight** number
 - **percent-rate**
 - **cir** decimal-number
 - **pir** decimal-number
 - **rate**
 - **cir** (number | keyword)
 - **pir** (number | keyword)
 - **policy-name** reference
 - **queuing-type** keyword
 - **scheduler-policy**
 - **overrides**
 - **scheduler** string
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **parent**
 - **cir-weight** number
 - **weight** number
 - **rate**
 - **cir** (number | keyword)

configure service ies interface sap ingress qos scheduler-policy overrides scheduler rate pir

```

    - pir (number | keyword)
      - policy-name reference
    - queue-group-redirect-list reference
- ip-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - clear-df-bit boolean
  - delivery-service string
  - description string
  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - dscp keyword
  - encapsulated-ip-mtu number
  - gre-header
    - admin-state keyword
    - key
      - admin-state keyword
      - receive number
      - send number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - number number
      - seconds number
  - ip-mtu number
  - ipsec-transport-mode-profile reference
  - local-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - pmtu-discovery-aging number
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - reassembly (number | keyword)
  - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- ipsec-gateway string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cert
    - cert-profile reference
    - status-verify
      - default-result keyword
      - primary keyword
      - secondary keyword
    - trust-anchor-profile reference
  - client-db
    - fallback boolean
    - name reference
  - default-secure-service
    - interface string
    - service-name string
  - default-tunnel-template reference
  - dhcp-address-assignment
    - dhcpv4
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - gi-address string

```

configure service ies interface sap ipsec-gateway dhcp-address-assignment dhcpv4 send-release

```

    - send-release boolean
    - server
      - address string
      - router-instance string
  - dhcpv6
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - link-address string
    - send-release boolean
    - server
      - address string
      - router-instance string
  - ike-policy reference
  - local
    - address-assignment
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - ipv4
        - dhcp-server string
        - pool string
        - router-instance string
        - secondary-pool string
      - ipv6
        - dhcp-server string
        - pool string
        - router-instance string
    - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - id
      - auto
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
  - max-history-key-records
    - esp number
    - ike number
  - pre-shared-key string
  - radius
    - accounting-policy reference
    - authentication-policy reference
  - ts-list reference
  - lag
    - link-map-profile number
    - per-link-hash
      - class number
      - weight number
  - multi-service-site reference
  - static-host
    - ipv4 string mac string
    - admin-state keyword
    - ancp-string string
    - app-profile
      - profile reference
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - string string
      - use-sap-id
  - transit-policy
    - ip reference

```

configure service ies interface sap transit-policy prefix

- **prefix** *reference*
- **shcv-policy-ipv4** *reference*
- **spoke-sdp** *string*
- **aarp**
 - **id** *reference*
 - **type** *keyword*
- **accounting-policy** *reference*
- **admin-state** *keyword*
- **app-profile** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bfd**
 - **bfd-liveness**
 - **encap** *keyword*
 - **bfd-template** *reference*
 - **failure-action** *keyword*
 - **wait-for-up-timer** *number*
- **collect-stats** *boolean*
- **control-word** *boolean*
- **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
- **description** *string*
- **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **vc-label** *number*
- **entropy-label**
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-lmm-fc-stats**
 - **fc** *keyword*
 - **fc-in-profile** *keyword*
 - **collect-lmm-stats** *boolean*
 - **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **ais** *boolean*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **ccm-padding-size** *number*
 - **csf**
 - **multiplier** *decimal-number*
 - **description** *string*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*

configure service ies interface spoke-sdp eth-cfm mep eth-test test-pattern pattern

- **pattern** *keyword*
- **fault-propagation** *keyword*
- **grace**
 - **eth-ed**
 - **max-rx-defect-window** *number*
 - **priority** *number*
 - **rx-eth-ed** *boolean*
 - **tx-eth-ed** *boolean*
 - **eth-vsm-grace**
 - **rx-eth-vsm-grace** *boolean*
 - **tx-eth-vsm-grace** *boolean*
 - **low-priority-defect** *keyword*
 - **one-way-delay-threshold** *number*
- **snelch-ingress-levels** *number*
- **hash-label**
 - **signal-capability**
- **ingress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **network**
 - **fp-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **policy-name** *reference*
 - **vc-label** *number*
 - **transit-policy**
 - **ip** *reference*
 - **prefix** *reference*
 - **vc-type** *keyword*
- **static-tunnel-redundant-nexthop** *string*
- **tos-marking-state** *keyword*
- **tunnel** *boolean*
- **vas-if-type** *keyword*
- **vpls** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **egress**
 - **reclassify-using-qos** *reference*
 - **routed-override-filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **evpn**
 - **arp**
 - **advertise** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **flood-garp-and-unknown-req** *boolean*
 - **learn-dynamic** *boolean*
 - **nd**
 - **advertise** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **learn-dynamic** *boolean*
 - **ingress**
 - **routed-override-filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **redundant-interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure service ies redundant-interface apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- hold-time
  - ipv4
    - down
      - init-only boolean
      - seconds number
    - up
      - seconds number
- ip-mtu number
- ipv4
  - primary
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix-length number
    - remote-ip string
- spoke-sdp string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - control-word boolean
  - description string
  - egress
    - filter
      - ip reference
    - vc-label number
  - ingress
    - filter
      - ip reference
    - vc-label number
- service-id number
- subscriber-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fwd-service reference
  - fwd-subscriber-interface reference
- group-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bonding-parameters
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - connection number
      - apply-groups reference
      - apply-groups-exclude reference
      - service string
    - fpe reference
    - multicast
      - connection (number | keyword)
  - brg
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - cflowd-parameters
    - sampling keyword
      - apply-groups reference
      - apply-groups-exclude reference

```

configure service ies subscriber-interface group-interface cflowd-parameters sampling direction

- **direction** *keyword*
- **sample-profile** (*keyword | number*)
- **type** *keyword*
- **data-trigger**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **description** *string*
- **dynamic-routes-track-srrp**
 - **hold-time** *number*
- **gtp-parameters**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fpe** *reference*
- **gx-policy** *reference*
- **ingress**
 - **policy-accounting** *reference*
- **ingress-stats** *boolean*
- **ip-mtu** *number*
- **ipoe-linking**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **gratuitous-router-advertisement** *boolean*
 - **shared-circuit-id** *boolean*
- **ipoe-session**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **force-auth**
 - **cid-change** *boolean*
 - **rid-change** *boolean*
 - **ipoe-session-policy** *reference*
 - **min-auth-interval** (*keyword | number*)
 - **radius-session-timeout** *keyword*
 - **sap-session-limit** *number*
 - **session-limit** *number*
 - **stateless-redundancy** *boolean*
 - **user-db** *reference*
- **ipv4**
 - **arp-host**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **host-limit** *number*
 - **min-auth-interval** *number*
 - **sap-host-limit** *number*
 - **dhcp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **client-applications**
 - **dhcp** *boolean*
 - **ppp** *boolean*
 - **description** *string*
 - **filter** *reference*
 - **gi-address** *string*
 - **lease-populate**
 - **l2-header**
 - **mac** *string*
 - **max-leases** *number*
 - **match-circuit-id** *boolean*

configure service ies subscriber-interface group-interface ipv4 dhcp offer-selection

- **offer-selection**
 - **client-mac**
 - **discover-delay** *number*
 - **mac-address** *keyword*
 - **discover-delay** *number*
 - **server** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **discover-delay** *number*
- **option-82**
 - **action** *keyword*
 - **circuit-id**
 - **ascii-tuple**
 - **ifindex**
 - **none**
 - **sap-id**
 - **vlan-ascii-tuple**
 - **remote-id**
 - **ascii-string** *string*
 - **mac**
 - **none**
 - **vendor-specific-option**
 - **client-mac-address** *boolean*
 - **pool-name** *boolean*
 - **sap-id** *boolean*
 - **service-id** *boolean*
 - **string** *string*
 - **system-id** *boolean*
- **proxy-server**
 - **admin-state** *keyword*
 - **emulated-server** *string*
 - **lease-time**
 - **radius-override** *boolean*
 - **value** *number*
- **python-policy** *reference*
- **relay-proxy**
 - **release-update-src-ip** *boolean*
 - **siaddr-override** *string*
- **release-include-gi-address** *boolean*
- **server** *string*
- **src-ip-addr** *keyword*
- **trusted** *boolean*
- **user-db** *reference*

- **icmp**
 - **mask-reply** *boolean*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **ttl-expired**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **use-matching-address** *boolean*
- **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **ignore-df-bit** *boolean*
- **neighbor-discovery**

configure service ies subscriber-interface group-interface ipv4 neighbor-discovery local-proxy-arp

```

- local-proxy-arp boolean
- populate boolean
- proxy-arp-policy reference
- remote-proxy-arp boolean
- timeout number
- qos-route-lookup keyword
- urpf-check
- mode keyword
- ipv6
- allow-multiple-wan-addresses boolean
- auto-reply
- neighbor-solicitation boolean
- router-solicitation boolean
- dhcp6
- apply-groups reference
- apply-groups-exclude reference
- filter reference
- option
- apply-groups reference
- apply-groups-exclude reference
- interface-id
- ascii-tuple
- if-index
- sap-id
- string string
- remote-id boolean
- override-slaac boolean
- pd-managed-route
- next-hop keyword
- proxy-server
- admin-state keyword
- client-applications
- dhcp boolean
- ppp boolean
- preferred-lifetime (number | keyword)
- rebind-timer number
- renew-timer number
- server-id
- apply-groups reference
- apply-groups-exclude reference
- duid-en-ascii string
- duid-en-hex string
- duid-ll
- valid-lifetime (number | keyword)
- python-policy reference
- relay
- admin-state keyword
- advertise-selection
- client-mac
- mac-address keyword
- preference-option
- value number
- solicit-delay number
- preference-option
- value number
- server string
- apply-groups reference
- apply-groups-exclude reference
- preference-option
- value number
- solicit-delay number
- solicit-delay number
- client-applications
- dhcp boolean

```

configure service ies subscriber-interface group-interface ipv6 dhcp6 relay client-applications ppp

```

    - ppp boolean
    - description string
    - lease-split
      - admin-state keyword
      - valid-lifetime number
    - link-address string
    - server string
    - source-address string
  - snooping
    - admin-state keyword
  - user-db reference
  - user-ident keyword
- ipoe-bridged-mode boolean
- neighbor-discovery
  - apply-groups reference
  - apply-groups-exclude reference
  - dad-snooping boolean
  - neighbor-limit number
- qos-route-lookup keyword
- router-advertisements
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - force-mcast keyword
  - max-advertisement-interval number
  - min-advertisement-interval number
  - options
    - current-hop-limit number
    - dns
      - include-rdnss boolean
      - rdnss-lifetime (number | keyword)
    - managed-configuration boolean
    - mtu (number | keyword)
    - other-stateful-configuration boolean
    - reachable-time number
    - retransmit-timer number
    - router-lifetime (number | keyword)
  - prefix-options
    - autonomous boolean
    - on-link boolean
    - preferred-lifetime (number | keyword)
    - valid-lifetime (number | keyword)
- router-solicit
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - inactivity-timer (number | keyword)
  - min-auth-interval number
  - user-db reference
- urpf-check
  - mode keyword
- local-address-assignment
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- ipv4
  - client-applications
    - ipoe boolean
    - ppp boolean
  - default-pool string
  - server reference
- ipv6
  - client-applications
    - ipoe-slaac boolean

```

configure service ies subscriber-interface group-interface local-address-assignment ipv6 client-applications ipoe-wan

```

    - ipoe-wan boolean
    - ppp-slaac boolean
  - server reference
- mac string
- nasreq-auth-policy reference
- oper-up-while-empty boolean
- pppoe
  - admin-state keyword
  - anti-spoof keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - dhcp-client
    - client-id keyword
  - policy reference
  - python-policy reference
  - sap-session-limit number
  - session-limit number
  - user-db reference
- radius-auth-policy reference
- redundant-interface reference
- sap string
  - accounting-policy reference
  - admin-state keyword
  - anti-spoof keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - calling-station-id string
  - collect-stats boolean
  - cpu-protection
    - eth-cfm-monitoring
      - aggregate
      - car
    - ip-src-monitoring
    - mac-monitoring
    - policy-id reference
  - default-host
    - ipv4 reference prefix-length number
      - apply-groups reference
      - apply-groups-exclude reference
      - next-hop string
    - ipv6 string prefix-length number
      - apply-groups reference
      - apply-groups-exclude reference
      - next-hop string
  - description string
  - dist-cpu-protection reference
- egress
  - agg-rate
    - adaptation-rule keyword
    - burst-limit (number | keyword)
    - limit-unused-bandwidth boolean
    - queue-frame-based-accounting boolean
    - rate number
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - policer-control-policy
      - policy-name reference
    - qinq-mark-top-only boolean
    - sap-egress
      - policy-name reference

```

configure service ies subscriber-interface group-interface sap egress qos scheduler-policy

```

    - scheduler-policy
      - policy-name reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
  - ais boolean
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - csf
    - multiplier decimal-number
  - description string
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean
  - low-priority-defect keyword
  - one-way-delay-threshold number
  - squelch-ingress-levels number
- fwd-wholesale
  - pppoe-service reference
- host-admin-state keyword
- host-lockout-policy reference
- igmp-host-tracking
  - apply-groups reference
  - apply-groups-exclude reference
  - expiry-time number
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - router-alert-check boolean
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - policy-name reference
    - sap-ingress
      - policy-name reference

```

configure service ies subscriber-interface group-interface sap ingress qos sap-ingress queuing-type

```

    - queuing-type keyword
    - scheduler-policy
    - policy-name reference
- lag
- link-map-profile number
- per-link-hash
  - class number
  - weight number
- monitor-oper-group reference
- multi-service-site reference
- oper-group reference
- static-host
  - ipv4 string mac string
    - admin-state keyword
    - ancp-string string
    - app-profile
      - profile reference
      - scope keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - managed-route string
      - apply-groups reference
      - apply-groups-exclude reference
    - cpe-check
      - apply-groups reference
      - apply-groups-exclude reference
      - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
      - drop-count number
      - failed-action
        - metric number
        - preference number
        - tag number
        - withdraw boolean
      - interval number
      - log boolean
      - padding-size number
      - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
      - timeout number
    - metric number
    - preference number
    - tag number
  - rip-policy reference
  - shcv
  - sla-profile reference
  - sub-profile reference
  - subscriber-id
    - string string
    - use-sap-id
- ipv6 string mac string
  - admin-state keyword
  - ancp-string string
  - app-profile
    - profile reference
    - scope keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - int-dest-id string
  - mac-linking string
  - managed-route string
    - apply-groups reference
    - apply-groups-exclude reference

```


configure service ies subscriber-interface group-interface sap static-host ipv6 managed-route cpe-check

```

no-zone)
    - cpe-check
      - apply-groups reference
      - apply-groups-exclude reference
      - destination-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - drop-count number
      - failed-action
        - metric number
        - preference number
        - tag number
        - withdraw boolean
      - interval number
      - log boolean
      - padding-size number
      - source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
zone)
    - timeout number
    - metric number
    - preference number
    - tag number
    - retail-svc-id number
    - shcv
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - string string
      - use-sap-id
    - mac-learning
      - data-triggered boolean
      - single-mac boolean
    - sub-sla-mgmt
    - admin-state keyword
    - defaults
      - app-profile reference
      - int-dest-id
        - string string
        - top-q-tag
      - sla-profile reference
      - sub-profile reference
      - subscriber-id
        - auto-id
        - sap-id
        - string string
    - single-sub-parameters
      - non-sub-traffic
        - app-profile reference
        - sla-profile reference
        - sub-profile reference
        - subscriber-id string
        - profiled-traffic-only boolean
      - sub-ident-policy reference
      - subscriber-limit (keyword | number)
    - sap-parameters
      - anti-spoof keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - sub-sla-mgmt
        - defaults
          - app-profile reference
          - sla-profile reference
          - sub-profile reference
          - subscriber-id
            - auto-id

```

configure service ies subscriber-interface group-interface sap-parameters sub-sla-mgmt defaults subscriber-id string

```

    - string string
    - sub-ident-policy reference
- shcv-policy reference
- shcv-policy-ipv4 reference
- shcv-policy-ipv6 reference
- srrp number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bfd-liveness
    - apply-groups reference
    - apply-groups-exclude reference
    - dest-ip string
    - interface-name string
    - service-name string
- description string
- gw-mac string
- keep-alive-interval number
- message-path reference
- monitor-oper-group
    - group-name reference
    - priority-step number
- one-garp-per-sap boolean
- policy reference
- preempt boolean
- priority number
- send-fib-population-packets keyword
- suppress-aa-sub boolean
- tos-marking-state keyword
- type keyword
- wlan-gw
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - apply-groups reference
        - apply-groups-exclude reference
        - purpose
            - xconnect boolean
- gateway-router string
- group-encryption
    - encryption-keygroup-inbound reference
    - encryption-keygroup-outbound reference
- L2-ap
    - access-point string
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - encap-type keyword
        - epipe-sap-template reference
    - auto-sub-id-fmt keyword
    - default-encap-type keyword
- lanext
    - max-bd number
- learn-ap-mac
    - delay-auth boolean
- mobility
    - hold-time number
    - inter-tunnel-type boolean
    - inter-vlan boolean
    - trigger
        - control boolean
        - data boolean
        - iapp boolean

```

configure service ies subscriber-interface group-interface wlan-gw oper-down-on-group-degrade

```

- oper-down-on-group-degrade boolean
- tcp-mss-adjust number
- tunnel-egress-qos
  - admin-state keyword
  - agg-rate-limit (number | keyword)
  - granularity keyword
  - hold-time (number | keyword)
  - multi-client-only boolean
  - qos reference
  - scheduler-policy reference
- tunnel-encaps
  - learn-l2tp-cookie (keyword | hex-string)
- vlan-range string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - hold-time number
    - local
      - coa-policy reference
      - default-ue-state keyword
    - on-control-plane boolean
    - policy reference
    - vlan-mismatch-timeout number
  - data-triggered-ue-creation
    - admin-state keyword
    - arp boolean
    - create-proxy-cache-entry
      - mac-format string
      - proxy-server
        - name string
        - router-instance string
  - dhcp4
    - admin-state keyword
    - dns string
    - l2-aware-ip-address (ipv4-unicast-address | keyword)
    - lease-time
      - active number
      - initial number
    - nbns string
  - dhcp6
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - preferred-lifetime
      - active number
      - initial number
    - valid-lifetime
      - active number
      - initial number
  - dsm
    - accounting-policy reference
    - accounting-update
      - interval number
    - admin-state keyword
    - application-assurance
      - accounting-statistics boolean
      - profile reference
      - url-parameter string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress
      - policer reference
    - ingress
      - ip-filter reference

```

configure service ies subscriber-interface group-interface wlan-gw vlan-range dsm ingress policer

```

    - policer reference
    - soft-quota-exhausted-filter reference
- one-time-redirect
  - port number
  - url string
- volume-quota-direction keyword
- extension string
- http-redirect-policy reference
- idle-timeout-action keyword
- l2-service
  - admin-state keyword
  - description string
  - service reference
- nat-policy reference
- retail-service string
- slaac
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preferred-lifetime
    - active number
    - initial number
  - valid-lifetime
    - active number
    - initial number
- vrgw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - brg
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - lanext
    - access
      - max-mac number
      - multi-access boolean
      - policer reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - assistive-address-resolution boolean
      - bd-mac-prefix string
      - mac-translation boolean
      - network
        - admin-state keyword
        - max-mac number
        - policer reference
    - xconnect
      - accounting
        - mobility-updates boolean
        - policy reference
        - update-interval number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
- wlan-gw-group reference
- wpp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - initial
    - app-profile reference
    - sla-profile reference
    - sub-profile reference

```

configure service ies subscriber-interface group-interface wpp lease-time

```

- lease-time number
- portal
  - name string
  - portal-group reference
  - router-instance string
- restore-to-initial-on-disconnect boolean
- triggered-hosts boolean
- user-db reference
- hold-time
- ipv4
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ipv6
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ipoe-linking
- apply-groups reference
- apply-groups-exclude reference
- gratuitous-router-advertisement boolean
- ipoe-session
- apply-groups reference
- apply-groups-exclude reference
- session-limit number
- ipv4
- address string
- apply-groups reference
- apply-groups-exclude reference
- gateway string
- holdup-time number
- populate-host-routes boolean
- prefix-length number
- track-srrp number
- allow-unmatching-subnets boolean
- default-dns string
- dhcp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - client-applications
    - dhcp boolean
    - ppp boolean
  - description string
  - gi-address string
  - lease-populate
    - max-leases number
  - option-82
    - vendor-specific-option
      - client-mac-address boolean
      - sap-id boolean
      - service-id boolean
      - string string
      - system-id boolean
  - proxy-server
    - admin-state keyword
    - emulated-server string
  - lease-time
    - radius-override boolean
    - value number

```

configure service ies subscriber-interface ipv4 dhcp python-policy

```

- python-policy reference
- relay-proxy
  - release-update-src-ip boolean
  - siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- virtual-subnet boolean
- export-host-routes boolean
- unnumbered
  - ip-address string
  - ip-int-name string
- ipv6
  - address string
  - apply-groups reference
  - apply-groups-exclude reference
  - host-type keyword
  - prefix-length number
- allow-multiple-wan-addresses boolean
- allow-unmatching-prefixes boolean
- default-dns string
- delegated-prefix-length (number | keyword)
- dhcp6
  - apply-groups reference
  - apply-groups-exclude reference
  - override-slaac boolean
  - pd-managed-route
    - next-hop keyword
  - proxy-server
    - admin-state keyword
    - client-applications
      - dhcp boolean
      - ppp boolean
    - preferred-lifetime (number | keyword)
    - rebind-timer number
    - renew-timer number
    - server-id
      - apply-groups reference
      - apply-groups-exclude reference
      - duid-en-ascii string
      - duid-en-hex string
      - duid-ll
    - valid-lifetime (number | keyword)
- python-policy reference
- relay
  - admin-state keyword
  - client-applications
    - dhcp boolean
    - ppp boolean
  - description string
  - lease-split
    - admin-state keyword
    - valid-lifetime number
  - link-address string
  - server string
  - source-address string
- ipoe-bridged-mode boolean
- link-local-address
  - address string
- prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - holdup-time number
  - host-type keyword

```

configure service ies subscriber-interface ipv6 prefix track-srrp

- **track-srrp** *number*
- **router-advertisements**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **force-mcast** *keyword*
 - **max-advertisement-interval** *number*
 - **min-advertisement-interval** *number*
 - **options**
 - **current-hop-limit** *number*
 - **dns**
 - **include-rdnss** *boolean*
 - **rdnss-lifetime** (*number* | *keyword*)
 - **managed-configuration** *boolean*
 - **mtu** (*number* | *keyword*)
 - **other-stateful-configuration** *boolean*
 - **reachable-time** *number*
 - **retransmit-timer** *number*
 - **router-lifetime** (*number* | *keyword*)
 - **prefix-options**
 - **autonomous** *boolean*
 - **on-link** *boolean*
 - **preferred-lifetime** (*number* | *keyword*)
 - **valid-lifetime** (*number* | *keyword*)
- **router-solicit**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inactivity-timer** (*number* | *keyword*)
- **local-address-assignment**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4**
 - **client-applications**
 - **ppp** *boolean*
 - **default-pool** *string*
 - **server** *reference*
 - **ipv6**
 - **client-applications**
 - **ipoe-slaac** *boolean*
 - **ipoe-wan** *boolean*
 - **ppp-slaac** *boolean*
 - **server** *reference*
- **pppoe**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **session-limit** *number*
- **wan-mode** *keyword*
- **wlan-gw**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **pool-manager**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcp6-client**
 - **dhcpv4-nat**
 - **admin-state** *keyword*
 - **link-address** *string*
 - **pool-name** *string*
 - **ia-na**
 - **admin-state** *keyword*
 - **link-address** *string*
 - **pool-name** *string*

configure service ies subscriber-interface wlan-gw pool-manager dhcp6-client lease-query

```

- lease-query
  - max-retries number
  - servers string
  - slaac
    - admin-state keyword
    - link-address string
    - pool-name string
    - source-ip (keyword | ipv6-address)
- watermarks
  - high number
  - low number
- wlan-gw-group reference
- redundancy
  - admin-state keyword
  - export string
  - monitor string
- subscriber-mgmt
  - apply-groups reference
  - apply-groups-exclude reference
  - multi-chassis-shunt-id number
  - up-resiliency
    - monitor-oper-group reference
    - apply-groups reference
    - apply-groups-exclude reference
    - health-drop number
- video-interface string
- accounting-policy reference
- address string
- adi
  - scte30
    - ad-server string
    - local-address
    - apply-groups reference
    - apply-groups-exclude reference
    - control string
    - data string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- channel string source string
  - apply-groups reference
  - apply-groups-exclude reference
  - channel-name string
  - description string
  - scte35-action keyword
  - zone-channel string zone-source string
    - adi-channel-name string
    - apply-groups reference
    - apply-groups-exclude reference
- cpu-protection reference
- description string
- multicast-service number
- output-format keyword
- rt-client
  - apply-groups reference
  - apply-groups-exclude reference
  - src-address string
- video-sap
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - apply-groups reference
    - apply-groups-exclude reference
  - filter

```


configure service ies video-interface video-sap egress filter ip

```

    - ip reference
    - qos
      - policy-name reference
  - ingress
    - apply-groups reference
    - apply-groups-exclude reference
    - filter
      - ip reference
    - qos
      - policy-name reference
    - video-group-id reference
  - vpn-id number
- ipfix
  - apply-groups reference
  - apply-groups-exclude reference
  - export-policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - collector router-instance string ip-address string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - mtu number
      - refresh-timeout number
      - source-ip-address string
  - description string
  - template-format keyword
- ipipe string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ce-address-discovery
  - customer reference
  - description string
  - endpoint string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - hold-time-active number
    - revert-time (number | keyword)
    - standby-signaling keyword
- sap string
  - accounting-policy reference
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth number
  - ce-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - collect-stats boolean
  - cpu-protection
    - mac-monitoring
    - policy-id reference
  - description string
  - dist-cpu-protection reference
  - egress
    - agg-rate
      - adaptation-rule keyword
      - burst-limit (number | keyword)
      - limit-unused-bandwidth boolean
      - rate number
    - filter
      - ip reference
      - ipv6 reference

```

configure service ipipe sap egress qos

```

- qos
  - policer-control-policy
    - overrides
      - apply-groups reference
      - apply-groups-exclude reference
      - root
        - max-rate (number | keyword)
        - priority-mbs-thresholds
          - min-thresh-separation (number | keyword)
          - priority number
            - apply-groups reference
            - apply-groups-exclude reference
            - mbs-contribution (number | keyword)
      - policy-name reference
    - qinq-mark-top-only boolean
  - sap-egress
    - overrides
      - hs-secondary-shaper string
      - hs-wrr-group reference
        - apply-groups reference
        - apply-groups-exclude reference
        - hs-class-weight number
        - percent-rate decimal-number
        - rate (number | keyword)
      - policer reference
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - mbs (number | keyword)
        - packet-byte-offset number
        - percent-rate
          - cir decimal-number
          - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - stat-mode keyword
    - queue reference
      - adaptation-rule
        - cir keyword
        - pir keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - avg-frame-overhead decimal-number
        - burst-limit (number | keyword)
        - cbs (number | keyword)
      - drop-tail
        - low
          - percent-reduction-from-mbs (number | keyword)
      - hs-class-weight number
      - hs-wred-queue
        - policy reference
        - hs-wrr-weight number
      - mbs (number | keyword)
      - monitor-queue-depth
        - fast-polling boolean
        - violation-threshold decimal-number
      - parent
        - cir-weight number
        - weight number
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate

```

configure service ipipe sap egress qos sap-egress overrides queue rate cir

```

        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
    - port-redirect-group
      - group-name reference
      - instance number
    - scheduler-policy
    - overrides
      - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
      - parent
        - cir-weight number
        - weight number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - policy-name reference
    - endpoint reference
    - ingress
    - filter
      - ip reference
      - ipv6 reference
    - qos
      - match-qinq-dot1p keyword
      - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
      - root
        - max-rate (number | keyword)
      - priority-mbs-thresholds
        - min-thresh-separation (number | keyword)
        - priority number
          - apply-groups reference
          - apply-groups-exclude reference
          - mbs-contribution (number | keyword)
      - policy-name reference
    - sap-ingress
    - fp-redirect-group
      - group-name reference
      - instance number
    - overrides
      - policer reference
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - mbs (number | keyword)
        - packet-byte-offset number
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
        - stat-mode keyword
      - queue reference
        - adaptation-rule
          - cir keyword
          - pir keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - drop-tail

```

configure service ipipe sap ingress qos sap-ingress overrides queue drop-tail low

```

    - low
      - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
  - queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- mac string
- mac-refresh number
- multi-service-site reference
- transit-policy
  - prefix reference
- use-broadcast-mac boolean
- service-id number
- service-mtu number
- spoke-sdp string
  - aarp
    - id reference
    - type keyword
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth (number | keyword)
  - bfd
    - bfd-liveness
      - encap keyword
    - bfd-template reference
  - ce-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - control-word boolean
  - description string
  - egress
    - filter
      - ip reference
      - ipv6 reference
    - qos
      - network
        - policy-name reference

```

configure service ipipe spoke-sdp egress qos network port-redirect-group

```

    - port-redirect-group
      - group-name reference
      - instance number
  - vc-label number
- endpoint
  - name reference
  - precedence (number | keyword)
- entropy-label
- hash-label
  - signal-capability
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - network
      - fp-redirect-group
        - group-name reference
        - instance number
        - policy-name reference
      - vc-label number
  - transit-policy
    - prefix reference
- vc-switching boolean
- vpn-id number
- mac-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - mac string
    - apply-groups reference
    - apply-groups-exclude reference
    - mask string
- md-auto-id
  - customer-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
  - pw-template-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
  - service-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
- mrp
  - policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action keyword
    - description string
    - entry number
      - action keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - match
        - isid number
        - apply-groups reference
        - apply-groups-exclude reference

```

configure service mrp policy entry match isid higher-value

```

    - higher-value number
  - scope keyword
- nat
- apply-groups reference
- apply-groups-exclude reference
- classifier string
- apply-groups reference
- apply-groups-exclude reference
- default
  - action
    - destination-nat
      - ip-address string
    - forward
  - dnat-ip-address string
- description string
- entry number
  - action
    - destination-nat
      - ip-address string
    - forward
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - match
    - dst-port-range
      - end number
      - start number
    - foreign-ip-address string
    - protocol keyword
- deterministic-script
- location string
- firewall-policy string
  - alg
    - ftp boolean
    - rtsp boolean
    - sip boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - domain
    - name string
    - router-instance string
  - filtering keyword
  - l2-outside
  - port-limits
    - forwarding number
- priority-sessions
  - fc
    - af boolean
    - be boolean
    - ef boolean
    - h1 boolean
    - h2 boolean
    - l1 boolean
    - l2 boolean
    - nc boolean
  - session-limits
    - max number
    - reserved number
  - watermarks
    - high number
    - low number
- tcp
  - mss-adjust number

```

configure service nat firewall-policy timeouts

```
- timeouts
  - icmp6-query number
  - sip number
  - tcp
    - established number
    - rst number
    - syn number
    - time-wait number
    - transitory number
  - udp
    - dns number
    - initial number
    - normal number
  - unknown-protocol number
- udp
  - inbound-refresh boolean
- unknown-protocols
  - all
  - protocol number
- map-t
  - domain string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - dmr-prefix string
  - ip-fragmentation
    - v6-frag-header boolean
  - mapping-rule string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ea-length number
  - ipv4-prefix string
  - psid-offset number
  - rule-prefix string
  - mtu number
  - tcp-mss-adjust number
- nat-policy string
  - alg
    - ftp boolean
    - pptp boolean
    - rtsp boolean
    - sip boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - block-limit number
  - description string
  - dnat
    - classifier reference
  - dnat-only
    - nat-group reference
    - router-instance string
    - wlan-gw-group reference
  - filtering keyword
  - flow-log-policy
    - ipfix reference
    - syslog reference
  - l2-outside
  - pool
    - name string
    - router-instance string
  - port-forwarding-range-end number
```

configure service nat nat-policy port-limits

- **port-limits**
 - **forwarding** *number*
 - **reserved** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
- **priority-sessions**
 - **fc**
 - **af** *boolean*
 - **be** *boolean*
 - **ef** *boolean*
 - **h1** *boolean*
 - **h2** *boolean*
 - **l1** *boolean*
 - **l2** *boolean*
 - **nc** *boolean*
- **session-limits**
 - **max** *number*
 - **reserved** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
- **tcp**
 - **mss-adjust** *number*
 - **reset-unknown** *boolean*
- **timeouts**
 - **icmp-query** *number*
 - **sip** *number*
 - **subscriber-retention** *number*
 - **tcp**
 - **established** *number*
 - **rst** *number*
 - **syn** *number*
 - **time-wait** *number*
 - **transitory** *number*
 - **udp**
 - **dns** *number*
 - **initial** *number*
 - **normal** *number*
- **udp**
 - **inbound-refresh** *boolean*
- **pcp-server-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **lifetime**
 - **maximum** *number*
 - **minimum** *number*
 - **max-description-size** *number*
 - **opcode**
 - **announce** *boolean*
 - **get** *boolean*
 - **map** *boolean*
 - **option**
 - **description** *boolean*
 - **next** *boolean*
 - **port-reservation** *boolean*
 - **port-set** *boolean*
 - **prefer-failure** *boolean*
 - **third-party** *boolean*
- **reuse-external-ip-address** *boolean*
- **version**
 - **maximum** *number*
 - **minimum** *number*

configure service nat prefix-list

- **prefix-list** *string*
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **nat-policy** *reference*
- **syslog**
 - **export-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collector router-instance** *string ip-address string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **destination-port** *number*
 - **ipv4-source-address** *string*
 - **description** *string*
 - **facility** *keyword*
 - **include**
 - **destination-ip** *boolean*
 - **foreign-ip** *boolean*
 - **foreign-port** *boolean*
 - **nat-policy-name** *boolean*
 - **sub-id** *boolean*
 - **log-prefix** *string*
 - **max-tx-delay** *number*
 - **mtu** *number*
 - **rate-limit** *number*
 - **severity-level** *keyword*
- **up-nat-policy** *string*
 - **alg**
 - **ftp** *boolean*
 - **pptp** *boolean*
 - **rtsp** *boolean*
 - **sip** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-host**
 - **inside-router-instance** *string*
 - **ip-address** *string*
 - **rate-limit** *number*
 - **description** *string*
 - **filtering** *keyword*
 - **flow-log-policy**
 - **ipfix** *reference*
 - **icmp-echo-reply** *boolean*
 - **port-limits**
 - **reserved** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
 - **priority-sessions**
 - **fc**
 - **af** *boolean*
 - **be** *boolean*
 - **ef** *boolean*
 - **h1** *boolean*
 - **h2** *boolean*
 - **l1** *boolean*
 - **l2** *boolean*
 - **nc** *boolean*
 - **session-limits**

configure service nat up-nat-policy session-limits max

- **max** *number*
- **reserved** *number*
- **watermarks**
 - **high** *number*
 - **low** *number*
- **tcp**
 - **mss-adjust** *number*
 - **reset-unknown** *boolean*
- **timeouts**
 - **icmp-query** *number*
 - **sip** *number*
 - **subscriber-retention** *number*
 - **tcp**
 - **established** *number*
 - **rst** *number*
 - **syn** *number*
 - **time-wait** *number*
 - **transitory** *number*
 - **udp**
 - **dns** *number*
 - **initial** *number*
 - **normal** *number*
- **udp**
 - **inbound-refresh** *boolean*
- **oper-group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** *string*
 - **interface-name** *string*
 - **router-instance** *string*
 - **hold-time**
 - **down** *number*
 - **up** *number*
- **pbb**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac** *string*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-notification**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **count** *number*
 - **interval** *number*
 - **source-bmac**
 - **address** *string*
 - **evpn-etree-leaf-address** *string*
- **proxy-arp-nd**
 - **mac-list**
 - **list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac** *string*
- **pw-template** *string*
 - **accounting-policy** *number*
 - **allow-fragmentation** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-gre-sdp** *boolean*
 - **block-on-peer-fault** *boolean*

configure service pw-template collect-stats

```

- collect-stats boolean
- control-word boolean
- egress
  - filter
    - ip string
    - ipv6 string
    - mac string
  - mfib-allowed-mda-destinations
    - mda string
  - qos
    - network
      - policy-name string
      - port-redirect-group
        - group-name string
        - instance number
- encryption-keygroup
  - inbound number
  - outbound number
- entropy-label
- fdb
  - auto-learn-mac-protect boolean
  - auto-learn-mac-protect-exclude-list string
  - discard-unknown-source boolean
  - limit-mac-move keyword
  - mac-learning
    - aging boolean
    - learning boolean
  - mac-pinning boolean
  - maximum-mac-addresses number
  - protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
  - signal-capability
- igmp-snooping
  - fast-leave boolean
  - import-policy string
  - maximum-number-groups number
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - send-queries boolean
  - version keyword
- ingress
  - filter
    - ip string
    - ipv6 string
    - mac string
  - qos
    - network
      - fp-redirect-group
        - group-name string
        - instance number
      - policy-name string
- l2pt
  - termination
    - protocols
      - cdp boolean
      - dtp boolean
      - pagp boolean
      - stp boolean
      - udld boolean
      - vtp boolean
  - provisioned-sdp keyword

```

configure service pw-template pw-template-id

```

- pw-template-id number
- sdp-exclude reference
- sdp-include reference
- split-horizon-group
  - description string
  - fdb
    - saps
      - auto-learn-mac-protect boolean
      - discard-unprotected-dest-mac boolean
      - protected-src-mac-violation-action keyword
    - name string
- stp
  - admin-state keyword
  - auto-edge boolean
  - edge-port boolean
  - link-type keyword
  - path-cost number
  - priority number
  - root-guard boolean
- vc-type keyword
- vlan-vc-tag number
- sdp number
  - accounting-policy reference
  - admin-state keyword
  - adv-mtu-override boolean
  - allow-fragmentation boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp-tunnel boolean
  - booking-factor number
  - class-forwarding
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - default-lsp reference
    - enforce-diffserv-lsp-fc boolean
    - fc keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - lsp reference
    - multicast-lsp reference
  - collect-stats boolean
  - delivery-type keyword
  - description string
  - far-end
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - keep-alive
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - hello-time number
    - hold-down-time number
    - maximum-drop-count number
    - message-length number
    - timeout number
  - ldp boolean
  - local-end (ipv4-address-no-zone | ipv6-address-no-zone)
  - lsp string
  - metric number
  - mixed-lsp-mode
    - revert-time (number | keyword)
  - network-domain reference
  - path-mtu number
  - pbb-etype string

```

configure service sdp pw-port

```

- pw-port
  - binding-port string
  - sdp-group reference
  - signaling keyword
  - source-bmac-lsb
    - control-pw-vc-id number
    - value string
  - sr-isis boolean
  - sr-ospf boolean
  - tunnel-far-end (ipv4-address-no-zone | ipv6-address-no-zone)
  - vlan-vc-etype string
  - weighted-ecmp boolean
- sdp-group
  - apply-groups reference
  - apply-groups-exclude reference
  - group-name string
    - apply-groups reference
    - apply-groups-exclude reference
    - value number
- system
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp
    - evpn
      - ad-per-es-route
        - extended-evi-range boolean
        - route-distinguisher-ip-address string
        - route-target-type keyword
      - ethernet-segment string
        - ac-df-capability keyword
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - association
          - lag reference
            - apply-groups reference
            - apply-groups-exclude reference
            - virtual-ranges
              - dot1q
                - q-tag (number | keyword)
                - apply-groups reference
                - apply-groups-exclude reference
                - end (number | keyword)
              - qinq
                - s-tag (number | keyword)
                - apply-groups reference
                - apply-groups-exclude reference
                - end (number | keyword)
                - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
                - apply-groups reference
                - apply-groups-exclude reference
                - c-tag-end (number | keyword)
          - network-interconnect-vxlan number
            - apply-groups reference
            - apply-groups-exclude reference
            - virtual-ranges
              - service-id number
                - apply-groups reference
                - apply-groups-exclude reference
                - end number
      - port reference
        - apply-groups reference
        - apply-groups-exclude reference
        - virtual-ranges

```

configure service system bgp evpn ethernet-segment association port virtual-ranges dot1q

```

- dot1q
  - q-tag (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - end (number | keyword)
  - qinq
    - s-tag (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - end (number | keyword)
    - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - c-tag-end (number | keyword)
- pw-port reference
  - apply-groups reference
  - apply-groups-exclude reference
  - pw-port-headend boolean
- virtual-ranges
  - dot1q
    - q-tag (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - end (number | keyword)
    - qinq
      - s-tag (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - end (number | keyword)
      - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - c-tag-end (number | keyword)
- sdp reference
  - apply-groups reference
  - apply-groups-exclude reference
- virtual-ranges
  - vc-id number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
- vprn-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - virtual-ranges
    - evi number
- auto-esi keyword
- df-election
  - es-activation-timer number
- manual
  - evi number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
  - isid number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
  - preference
    - apply-groups reference
    - apply-groups-exclude reference
    - mode keyword
    - value number
- service-carving-mode keyword

```

configure service system bgp evpn ethernet-segment esi

- esi string
- multi-homing-mode keyword
- oper-group reference
- orig-ip (ipv4-address-no-zone | ipv6-address-no-zone)
- pbb
 - es-bmac-table-size number
 - source-bmac-lsb string
- route-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- type keyword
- etree-leaf-label boolean
- etree-leaf-label-value (number | keyword)
- ip-prefix-routes
 - d-path-length-ignore boolean
 - iff-attribute-uniform-propagation boolean
 - iff-bgp-path-selection boolean
- multicast-leave-sync-propagation number
- route-distinguisher string
- bgp-auto-rd-range
 - apply-groups reference
 - apply-groups-exclude reference
 - community-value
 - end number
 - start number
 - ip-address string
- extended-default-qinq-sap-lookup boolean
- fdb
 - apply-groups reference
 - apply-groups-exclude reference
 - table-size number
- gre-eth-bridged
 - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
 - apply-groups reference
 - apply-groups-exclude reference
 - fpe-id reference
- pw-port-list
 - port string
- vpn-gre-source-ip string
- vxlan
 - assisted-replication
 - apply-groups reference
 - apply-groups-exclude reference
 - ip-address string
 - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
 - apply-groups reference
 - apply-groups-exclude reference
 - fpe-id reference
- template
 - epipe-sap-template string
 - apply-groups reference
 - apply-groups-exclude reference
 - egress
 - filter
 - ip reference
 - ipv6 reference
 - mac reference
 - qos
 - policy-name reference
 - ingress
 - filter
 - ip reference
 - ipv6 reference
 - mac reference
 - qos
 - policy-name reference

configure service template epipe-sap-template ingress qos queuing-type

- queuing-type keyword
- upnp
 - policy string
 - apply-groups reference
 - apply-groups-exclude reference
 - description string
 - mapping-limit number
 - port number
 - strict-mode boolean
- vpls string
 - admin-state keyword
 - apply-groups reference
 - apply-groups-exclude reference
 - bgp number
 - adv-service-mtu number
 - apply-groups reference
 - apply-groups-exclude reference
 - pw-template-binding reference
 - apply-groups reference
 - apply-groups-exclude reference
 - bfd-liveness boolean
 - bfd-template reference
 - import-rt string
 - monitor-oper-group reference
 - oper-group reference
 - split-horizon-group string
 - route-distinguisher (keyword | vpn-route-distinguisher)
 - route-target
 - export string
 - import string
 - vsi-export reference
 - vsi-import reference
- bgp-ad
 - admin-state keyword
 - apply-groups reference
 - apply-groups-exclude reference
 - vpls-id string
 - vsi-id-prefix string
- bgp-evpn
 - accept-ivpls-evpn-flush boolean
 - apply-groups reference
 - apply-groups-exclude reference
 - evi number
 - incl-mcast-orig-ip string
 - isid-route-target
 - range number
 - apply-groups reference
 - apply-groups-exclude reference
 - end number
 - route-target string
 - type keyword
- mac-duplication
 - blackhole boolean
 - detect
 - num-moves number
 - window number
 - retry (number | keyword)
- mpls number
 - admin-state keyword
 - apply-groups reference
 - apply-groups-exclude reference
 - auto-bind-tunnel
 - allow-flex-algo-fallback boolean
 - ecmp number

configure service vpls bgp-evpn mpls auto-bind-tunnel enforce-strict-tunnel-tagging

```

- enforce-strict-tunnel-tagging boolean
- resolution keyword
- resolution-filter
  - bgp boolean
  - ldp boolean
  - mpls-fwd-policy boolean
  - rib-api boolean
  - rsvp boolean
  - sr-isis boolean
  - sr-ospf boolean
  - sr-ospf3 boolean
  - sr-policy boolean
  - sr-te boolean
  - udp boolean
- weighted-ecmp boolean
- control-word boolean
- default-route-tag string
- dynamic-egress-label-limit boolean
- ecmp number
- entropy-label boolean
- evi-three-byte-auto-rt boolean
- fdb
  - protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- ingress-replication-bum-label boolean
- mh-mode keyword
- oper-group reference
- route-next-hop
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - system-ipv4
  - system-ipv6
- send-tunnel-encap
  - mpls boolean
  - mpls-over-udp boolean
- split-horizon-group reference
- routes
- incl-mcast
  - advertise-ingress-replication boolean
- ip-prefix
  - advertise boolean
  - domain-id string
  - include-direct-interface-host boolean
  - link-bandwidth
    - advertise
      - max-dynamic-weight number
      - weight (number | keyword)
    - weighted-ecmp boolean
- mac-ip
  - advertise boolean
  - cfm-mac boolean
  - unknown-mac boolean
- sel-mcast
  - advertise boolean
- segment-routing-v6 number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- default-route-tag string
- ecmp number
- evi-three-byte-auto-rt boolean
- fdb
  - protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- mh-mode keyword

```

configure service vpls bgp-evpn segment-routing-v6 oper-group

- **oper-group** *reference*
- **resolution** *keyword*
- **route-next-hop**
 - **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **system-ipv4**
 - **system-ipv6**
- **source-address** *string*
- **split-horizon-group** *reference*
- **srv6**
 - **default-locator** *string*
 - **instance** *reference*
- **vxlan** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-route-tag** *string*
 - **ecmp** *number*
 - **evi-three-byte-auto-rt** *boolean*
 - **mh-mode** *keyword*
 - **oper-group** *reference*
 - **routes**
 - **auto-disc**
 - **advertise** *boolean*
 - **send-incl-mcast-ir-on-ndf** *boolean*
 - **send-tunnel-encap** *boolean*
 - **vxlan-instance** *reference*
- **bgp-mh-site** *string*
 - **activation-timer** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **boot-timer** *number*
 - **failed-threshold** (*number | keyword*)
 - **id** *number*
 - **mesh-sdp-binds**
 - **min-down-timer** *number*
 - **monitor-oper-group** *reference*
 - **sap** *string*
 - **shg-name** *string*
 - **spoke-sdp** *string*
- **bgp-vpls**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **maximum-ve-id** *number*
 - **ve**
 - **id** *number*
 - **name** *string*
- **capture-sap** *string*
 - **admin-state** *keyword*
 - **allow-dot1q-msaps** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **cpu-protection**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **description** *string*
 - **dhcp**
 - **python-policy** *reference*
 - **user-db** *reference*
 - **dhcp6**
 - **python-policy** *reference*
 - **user-db** *reference*

configure service vpls capture-sap dist-cpu-protection

- **dist-cpu-protection** *reference*
- **host-lockout-policy** *reference*
- **ingress**
 - **filter**
 - **mac** *reference*
- **ipoe-session**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **ipoe-session-policy** *reference*
 - **user-db** *reference*
- **msap-defaults**
 - **group-interface** *string*
 - **policy** *reference*
 - **service-name** *string*
- **nasreq-auth-policy** *reference*
- **pfc**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **association** *reference*
 - **l2-access-id-alias** *string*
 - **up-resiliency**
 - **monitor-oper-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **health-drop** *number*
- **pppoe**
 - **policy** *reference*
 - **python-policy** *reference*
 - **user-db** *reference*
- **radius-auth-policy** *reference*
- **router-solicit**
 - **user-db** *reference*
- **track-srrp** *number*
- **trigger-packet**
 - **arp** *boolean*
 - **data** *boolean*
 - **dhcp** *boolean*
 - **dhcp6** *boolean*
 - **pppoe** *boolean*
 - **rtr-solicit** *boolean*
- **customer** *reference*
- **description** *string*
- **endpoint** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block-on-mesh-failure** *boolean*
 - **description** *string*
- **fdb**
 - **auto-learn-mac-protect** *boolean*
 - **mac-pinning** *boolean*
 - **maximum-mac-addresses** *number*
 - **protected-src-mac-violation-action** *keyword*
- **ignore-standby-signaling** *boolean*
- **mc-endpoint** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mc-ep-peer**
 - **name** *string*
 - **peer-address** *reference*
- **revert-time** (*number* | *keyword*)
- **suppress-standby-signaling** *boolean*
- **eth-cfm**

configure service vpls eth-cfm apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **ccm-padding-size** *number*
 - **cfm-vlan-tag** *string*
 - **description** *string*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
 - **grace**
 - **eth-ed**
 - **max-rx-defect-window** *number*
 - **priority** *number*
 - **rx-eth-ed** *boolean*
 - **tx-eth-ed** *boolean*
 - **eth-vsm-grace**
 - **rx-eth-vsm-grace** *boolean*
 - **tx-eth-vsm-grace** *boolean*
 - **low-priority-defect** *keyword*
 - **mac-address** *string*
 - **one-way-delay-threshold** *number*
- **etree** *boolean*
- **fdb**
 - **discard-unknown** *boolean*
 - **mac-learning**
 - **aging** *boolean*
 - **learning** *boolean*
 - **local-age-time** *number*
 - **remote-age-time** *number*
 - **mac-move**
 - **admin-state** *keyword*
 - **hold-down-time** *number*
 - **move-frequency** *number*
 - **primary-cumulative-factor** *number*
 - **retry-count** (*number* | *keyword*)
 - **sap** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *keyword*
 - **secondary-cumulative-factor** *number*
 - **spoke-sdp** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *keyword*
 - **mac-subnet-length** *number*
 - **selective-learning** *boolean*
 - **static-mac**
 - **mac** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **blackhole**
 - **endpoint** *reference*
 - **mesh-sdp** *reference*
 - **monitor** *keyword*

configure service vpls fdb static-mac mac sap

```

    - sap reference
    - spoke-sdp reference
- table
  - high-wmark number
  - low-wmark number
  - size number
- gsmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - group string
    - admin-state keyword
    - ancp
      - dynamic-topology-discovery boolean
      - oam boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - hold-multiplier number
    - idle-filter boolean
    - keepalive number
    - neighbor string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - local-address string
      - priority-marking
        - dscp keyword
        - prec number
      - persistency boolean
  - igmp-host-tracking
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - expiry-time number
  - igmp-snooping
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - evpn-proxy
      - admin-state keyword
  - mvr
    - admin-state keyword
    - description string
    - group-policy string
  - query-interval number
  - query-source-address (keyword | ipv4-address)
  - report-source-address string
  - robust-count number
- ignore-l2vpn-mtu-mismatch boolean
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - hold-time
    - ipv4
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
  - ipv4

```

configure service vpls interface ipv4 neighbor-discovery

- **neighbor-discovery**
 - **static-neighbor** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *string*
 - **timeout** *number*
- **primary**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **prefix-length** *number*
- **mac** *string*
- **isid-policy**
 - **entry** *number*
 - **advertise-local** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **use-def-mcast** *boolean*
- **load-balancing**
 - **lbl-eth-or-ip-l4-teid** *boolean*
 - **per-service-hashing** *boolean*
 - **spl-load-balancing** *boolean*
 - **teid-load-balancing** *boolean*
- **m-vpls** *boolean*
- **mac-flush**
 - **tldp**
 - **propagate** *boolean*
 - **send-on-failure** *boolean*
- **mac-protect**
 - **mac** *string*
- **mcast-ipv6-snooping-scope** *keyword*
- **mcr-default-gtw**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip** *string*
 - **mac** *string*
- **mesh-sdp** *string*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **bfd**
 - **bfd-liveness**
 - **encap** *keyword*
 - **bfd-template** *reference*
- **collect-stats** *boolean*
- **control-word** *boolean*
- **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **mac-monitoring**
 - **policy-id** *reference*
- **description** *string*
- **dhcp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **snoop** *boolean*
- **egress**
 - **filter**

configure service vpls mesh-sdp egress filter ip

```

- ip reference
- ipv6 reference
- mac reference
- mfib-allowed-mds-destinations
- mda string
- qos
- network
- policy-name reference
- port-redirect-group
- group-name reference
- instance number
- vc-label number
- entropy-label
- eth-cfm
- apply-groups reference
- apply-groups-exclude reference
- collect-lmm-fc-stats
- fc keyword
- fc-in-profile keyword
- collect-lmm-stats boolean
- mep md-admin-name reference ma-admin-name reference mep-id number
- admin-state keyword
- ais
- client-meg-level number
- interface-support boolean
- interval number
- low-priority-defect keyword
- priority number
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- cfm-vlan-tag string
- csf
- multiplier decimal-number
- description string
- direction keyword
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- fault-propagation keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- lbm-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference

```

configure service vpls mesh-sdp eth-cfm mip cfm-vlan-tag

```

    - cfm-vlan-tag string
    - mac-address string
  - squelch-ingress-ctag-levels number
  - squelch-ingress-levels number
  - vmep-filter boolean
- etree-leaf boolean
- etree-root-leaf-tag boolean
- fdb
  - auto-learn-mac-protect boolean
  - auto-learn-mac-protect-exclude-list reference
  - mac-pinning boolean
  - protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
  - signal-capability
- igmp-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - mrouter-port boolean
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - router-alert-check boolean
  - send-queries boolean
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
    - version keyword
- ingress
  - filter
    - ip reference
    - ipv6 reference
    - mac reference
  - qos
    - network
      - fp-redirect-group
        - group-name reference
        - instance number
      - policy-name reference
  - vc-label number
- mld-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-groups number
  - mrouter-port boolean
  - query-interval number
  - query-last-member-interval number

```


configure service vpls mesh-sdp mld-snooping query-response-interval

```

- query-response-interval number
- robust-count number
- router-alert-check boolean
- send-queries boolean
- static
  - group string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
  - version keyword
- mrp
  - apply-groups reference
  - apply-groups-exclude reference
  - join-time number
  - leave-all-time number
  - leave-time number
  - periodic-time number
  - periodic-timer boolean
  - policy reference
- pbb
  - fault-propagation
    - backbone-mac-address string
    - backbone-mac-name reference
- vc-type keyword
- vlan-vc-tag number
- mfib
  - table
    - high-wmark number
    - low-wmark number
    - size number
- mld-snooping
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - evpn-proxy
    - admin-state keyword
- mvr
  - admin-state keyword
  - description string
  - group-policy string
  - query-interval number
  - query-source-address (keyword | ipv6-address)
  - report-source-address string
  - robust-count number
- mrp
  - admin-state keyword
- mgrp
  - admin-state keyword
  - attribute-table
    - high-wmark number
    - low-wmark number
    - size number
  - end-station-only boolean
  - flood-time number
- multicast-info-policy reference
- pbb
  - backbone-vpls reference
  - apply-groups reference
  - apply-groups-exclude reference
  - fdb
    - protected-src-mac-violation-action keyword
  - igmp-snooping
  - mrouter-destination reference

```

configure service vpls pbb backbone-vpls isid

- **isid** *number*
- **mesh-sdp** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **igmp-snooping**
 - **mrouter-port** *boolean*
 - **mld-snooping**
 - **mrouter-port** *boolean*
- **mld-snooping**
 - **mrouter-destination** *reference*
- **sap** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **igmp-snooping**
 - **mrouter-port** *boolean*
 - **mld-snooping**
 - **mrouter-port** *boolean*
- **spoke-sdp** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **igmp-snooping**
 - **mrouter-port** *boolean*
 - **mld-snooping**
 - **mrouter-port** *boolean*
- **force-qtag-forwarding** *boolean*
- **i-vpls-mac-flush**
 - **bgp-evpn**
 - **send-to-bvpls** *boolean*
 - **tldp**
 - **propagate-from-bvpls** *boolean*
 - **send-on-bvpls-failure** *boolean*
 - **send-to-bvpls**
 - **all-but-mine** *boolean*
 - **all-from-me** *boolean*
- **mac-notification**
 - **admin-state** *keyword*
 - **count** *number*
 - **interval** *number*
 - **renotify** (*number* | *keyword*)
- **source-bmac**
 - **address** *string*
 - **use-es-bmac-lsb** *boolean*
 - **use-mclag-bmac-lsb** *boolean*
- **pbb-type** *keyword*
- **pim-snooping**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group-policy** *string*
 - **hold-time** *number*
 - **ipv4**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv6**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **provider-tunnel**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inclusive**
 - **admin-state** *keyword*
 - **data-delay-interval** *number*
 - **mldp**

configure service vpls provider-tunnel inclusive owner

- **owner** *keyword*
- **root-and-leaf** *boolean*
- **rsvp**
 - **lsp-template** *reference*
- **proxy-arp**
 - **admin-state** *keyword*
 - **age-time** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duplicate-detect**
 - **anti-spoof-mac** *string*
 - **hold-down-time** (*number* | *keyword*)
 - **num-moves** *number*
 - **static-blackhole** *boolean*
 - **window** *number*
 - **dynamic-arp**
 - **ip-address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-list** *reference*
 - **resolve-retry-time** *number*
 - **dynamic-populate** *boolean*
 - **evpn**
 - **flood**
 - **gratuitous-arp** *boolean*
 - **unknown-arp-req** *boolean*
 - **route-tag** *number*
 - **process-arp-probes** *boolean*
 - **send-refresh** (*number* | *keyword*)
 - **static-arp**
 - **ip-address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac** *string*
 - **table-size** *number*
- **proxy-nd**
 - **admin-state** *keyword*
 - **age-time** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duplicate-detect**
 - **anti-spoof-mac** *string*
 - **hold-down-time** (*number* | *keyword*)
 - **num-moves** *number*
 - **static-blackhole** *boolean*
 - **window** *number*
 - **dynamic-neighbor**
 - **ip-address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-list** *reference*
 - **resolve-retry-time** *number*
 - **dynamic-populate** *boolean*
 - **evpn**
 - **advertise-neighbor-type** *keyword*
 - **flood**
 - **unknown-neighbor-advertise-host** *boolean*
 - **unknown-neighbor-advertise-router** *boolean*
 - **unknown-neighbor-solicitation** *boolean*
 - **route-tag** *number*
 - **process-dad-neighbor-solicitations** *boolean*
 - **send-refresh** (*number* | *keyword*)
 - **static-neighbor**
 - **ip-address** *string*

configure service vpls proxy-nd static-neighbor ip-address apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mac** *string*
- **type** *keyword*
- **table-size** *number*
- **routed-vpls**
- **evpn-mpls-ecmp** *boolean*
- **multicast**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **evpn-gateway**
- **admin-state** *keyword*
- **advertise** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **dr-activation-timer** *number*
- **non-dr-attract-traffic** *keyword*
- **ip-multicast-ecmp** *boolean*
- **ipv4**
- **forward-to-ip-interface** *boolean*
- **igmp-snooping**
- **mrouter-port** *boolean*
- **ipv6**
- **forward-to-ip-interface** *boolean*
- **mld-snooping**
- **mrouter-port** *boolean*
- **vxlan-ipv4-tep-ecmp** *boolean*
- **sap** *string*
- **accounting-policy** *reference*
- **admin-state** *keyword*
- **anti-spoof** *keyword*
- **app-profile** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **arp-host**
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **host-limit** *number*
- **min-auth-interval** *number*
- **arp-reply-agent** *keyword*
- **bandwidth** *number*
- **bgp-vpls-mh-veid** *number*
- **bpdu-translation** *keyword*
- **calling-station-id** *string*
- **cflowd** *boolean*
- **collect-stats** *boolean*
- **cpu-protection**
- **eth-cfm-monitoring**
- **aggregate**
- **car**
- **mac-monitoring**
- **policy-id** *reference*
- **description** *string*
- **dhcp**
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **lease-populate**
- **max-leases** *number*
- **option-82**
- **action** *keyword*
- **circuit-id**

configure service vpls sap dhcp option-82 circuit-id ascii-tuple

```

    - ascii-tuple
    - hex-string string
    - none
    - vlan-ascii-tuple
- remote-id
  - ascii-string string
  - hex-string string
  - mac
  - none
- vendor-specific-option
  - client-mac-address boolean
  - sap-id boolean
  - service-id boolean
  - string string
  - system-id boolean
- proxy-server
  - admin-state keyword
  - emulated-server string
  - lease-time
    - radius-override boolean
    - value number
- snoop boolean
- dist-cpu-protection reference
- egress
  - agg-rate
    - adaptation-rule keyword
    - burst-limit (number | keyword)
    - limit-unused-bandwidth boolean
    - queue-frame-based-accounting boolean
    - rate number
  - dest-mac-rewrite string
  - filter
    - ip reference
    - ipv6 reference
    - mac reference
  - qos
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - root
          - max-rate (number | keyword)
          - priority-mbs-thresholds
            - min-thresh-separation (number | keyword)
            - priority number
              - apply-groups reference
              - apply-groups-exclude reference
              - mbs-contribution (number | keyword)
        - policy-name reference
      - qinq-mark-top-only boolean
    - sap-egress
      - overrides
        - hs-secondary-shaper string
        - hs-wrr-group reference
          - apply-groups reference
          - apply-groups-exclude reference
          - hs-class-weight number
          - percent-rate decimal-number
          - rate (number | keyword)
        - policer reference
          - apply-groups reference
          - apply-groups-exclude reference
          - cbs (number | keyword)
          - mbs (number | keyword)

```

configure service vpls sap egress qos sap-egress overrides policer packet-byte-offset

```

- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
  - stat-mode keyword
- queue reference
  - adaptation-rule
    - cir keyword
    - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - avg-frame-overhead decimal-number
  - burst-limit (number | keyword)
  - cbs (number | keyword)
  - drop-tail
    - low
      - percent-reduction-from-mbs (number | keyword)
  - hs-class-weight number
  - hs-wred-queue
    - policy reference
  - hs-wrr-weight number
  - mbs (number | keyword)
  - monitor-queue-depth
    - fast-polling boolean
    - violation-threshold decimal-number
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
- policy-name reference
- port-redirect-group
  - group-name reference
  - instance number
- scheduler-policy
  - overrides
    - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais
    - client-meg-level number

```

configure service vpls sap eth-cfm mep ais interface-support

```

- interface-support boolean
- interval number
- low-priority-defect keyword
- priority number
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- cfm-vlan-tag string
- csf
- multiplier decimal-number
- description string
- direction keyword
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- fault-propagation keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- lbn-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- snelch-ingress-ctag-levels number
- snelch-ingress-levels number
- vmep-filter boolean
- eth-ring number
- etree-leaf boolean
- etree-root-leaf-tag
- leaf number
- fdb
- auto-learn-mac-protect boolean
- auto-learn-mac-protect-exclude-list reference
- discard-unknown-source boolean
- discard-unprotected-dest-mac boolean
- limit-mac-move keyword
- mac-learning
- aging boolean
- learning boolean
- mac-pinning boolean
- maximum-mac-addresses number
- protected-src-mac-violation-action keyword
- host-admin-state keyword
- host-lockout-policy reference
- i-vpls-mac-flush

```

configure service vpls sap i-vpls-mac-flush bgp-evpn

- **bgp-evpn**
 - **send-to-bvpls** *boolean*
 - **igmp-host-tracking**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **expiry-time** *number*
 - **import-policy** *reference*
 - **maximum-number-group-sources** *number*
 - **maximum-number-groups** *number*
 - **maximum-number-sources** *number*
 - **router-alert-check** *boolean*
 - **igmp-snooping**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fast-leave** *boolean*
 - **import-policy** *reference*
 - **maximum-number-group-sources** *number*
 - **maximum-number-groups** *number*
 - **maximum-number-sources** *number*
 - **mcac**
 - **bandwidth**
 - **mandatory** (*number* | *keyword*)
 - **total** (*number* | *keyword*)
 - **interface-policy** *reference*
 - **mc-constraints**
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **number-down** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **use-lag-port-weight** *boolean*
 - **policy** *reference*
- **mrouter-port** *boolean*
- **mvr**
 - **from-vpls** *reference*
 - **to-sap** *string*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **router-alert-check** *boolean*
- **send-queries** *boolean*
- **static**
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
- **version** *keyword*
- **ingress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **mac** *reference*
 - **qos**
 - **match-qinq-dot1p** *keyword*
 - **policer-control-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **root**

configure service vpls sap ingress qos policer-control-policy overrides root max-rate

```

    - max-rate (number | keyword)
    - priority-mbs-thresholds
      - min-thresh-separation (number | keyword)
      - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
  - policy-name reference
- sap-ingress
- fp-redirect-group
  - group-name reference
  - instance number
- overrides
  - ip-criteria
    - activate-entry-tag number
  - ipv6-criteria
    - activate-entry-tag number
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
  - queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)

```

configure service vpls sap ingress qos scheduler-policy overrides scheduler rate pir

- **pir** (number | keyword)
 - **policy-name** reference
- **qtag-manipulation**
 - **c-tag** (number | keyword)
 - **push-dot1q-vlan** (number | keyword)
 - **s-tag** number
- **l2pt**
 - **force-boundary**
 - **protocols**
 - **cdp** boolean
 - **dtp** boolean
 - **pagp** boolean
 - **stp** boolean
 - **udld** boolean
 - **vtp** boolean
 - **termination**
 - **protocols**
 - **cdp** boolean
 - **dtp** boolean
 - **pagp** boolean
 - **stp** boolean
 - **udld** boolean
 - **vtp** boolean
- **l2tpv3-session**
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **pseudo-wire**
 - **ethernet**
 - **ethernet-vlan-id** number
 - **router**
 - **group** string
 - **router-instance** string
 - **vc-id** number
- **lag**
 - **link-map-profile** number
 - **per-link-hash**
 - **class** number
 - **weight** number
- **managed-vlan-list**
 - **range** string
- **mc-ring**
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **ring-node** string
- **mld-snooping**
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **fast-leave** boolean
 - **import-policy** reference
 - **maximum-number-groups** number
 - **mrouter-port** boolean
 - **mvr**
 - **from-vpls** reference
 - **to-sap** string
 - **query-interval** number
 - **query-last-member-interval** number
 - **query-response-interval** number
 - **robust-count** number
 - **router-alert-check** boolean
 - **send-queries** boolean
 - **static**
 - **group** string
 - **apply-groups** reference

configure service vpls sap mld-snooping static group apply-groups-exclude

- **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
- **version** *keyword*
- **monitor-oper-group** *reference*
- **mrp**
 - **join-time** *number*
 - **leave-all-time** *number*
 - **leave-time** *number*
 - **periodic-time** *number*
 - **periodic-timer** *boolean*
 - **policy** *reference*
- **multi-service-site** *reference*
- **oper-group** *reference*
- **pbb**
 - **fault-propagation**
 - **backbone-mac-address** *string*
 - **backbone-mac-name** *reference*
- **pim-snooping**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **maximum-number-groups** *number*
- **process-cpm-traffic-on-sap-down** *boolean*
- **radius-auth-policy** *reference*
- **shcv-policy-ipv4** *reference*
- **spb**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hello-interval** *number*
 - **hello-multiplier** *number*
 - **metric** *number*
 - **lsp-pacing-interval** *number*
 - **retransmit-interval** *number*
- **split-horizon-group** *reference*
- **static-host**
 - **ipv4** *string* **mac** *string*
 - **admin-state** *keyword*
 - **ancp-string** *string*
 - **app-profile**
 - **profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **int-dest-id** *string*
 - **shcv**
 - **sla-profile** *reference*
 - **sub-profile** *reference*
 - **subscriber-id**
 - **string** *string*
 - **use-sap-id**
- **static-isid**
 - **range** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** *number*
 - **start** *number*
- **stp**
 - **admin-state** *keyword*
 - **auto-edge** *boolean*
 - **edge-port** *boolean*
 - **link-type** *keyword*

configure service vpls sap stp mst-instance

- **mst-instance** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mst-path-cost** *number*
- **mst-port-priority** *number*
- **path-cost** *number*
- **port-num** *number*
- **priority** *number*
- **root-guard** *boolean*
- **sub-sla-mgmt**
- **admin-state** *keyword*
- **defaults**
- **app-profile** *reference*
- **int-dest-id**
- **string** *string*
- **top-q-tag**
- **sla-profile** *reference*
- **sub-profile** *reference*
- **subscriber-id**
- **auto-id**
- **sap-id**
- **string** *string*
- **mac-da-hashing** *boolean*
- **single-sub-parameters**
- **non-sub-traffic**
- **app-profile** *reference*
- **sla-profile** *reference*
- **sub-profile** *reference*
- **subscriber-id** *string*
- **profiled-traffic-only** *boolean*
- **sub-ident-policy** *reference*
- **subscriber-limit** (*keyword* | *number*)
- **transit-policy**
- **ip** *reference*
- **prefix** *reference*
- **segment-routing-v6** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **locator** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **function**
- **end-dt2m**
- **value** *number*
- **end-dt2u**
- **value** *number*
- **micro-segment-locator** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **function**
- **udt2m**
- **value** *number*
- **udt2u**
- **value** *number*
- **service-id** *number*
- **service-mtu** *number*
- **shcv-policy-ipv4** *reference*
- **spb**
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fid** *number*
- **isis-instance** *number*
- **level** *number*

configure service vpls spb level apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- bridge-priority number
- ect-high-path-fid number
- forwarding-tree
  - topology keyword
- lsp-lifetime number
- lsp-refresh-interval
  - half-lifetime boolean
  - interval number
- overload
  - timeout number
- overload-on-boot
  - timeout number
- timers
  - lsp-wait
    - initial-wait number
    - max-wait number
    - second-wait number
  - spf-wait
    - initial-wait number
    - max-wait number
    - second-wait number
- spbm-control-vpls
  - fid number
  - service-name string
- split-horizon-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fdb
    - saps
      - auto-learn-mac-protect boolean
      - auto-learn-mac-protect-exclude-list reference
      - discard-unprotected-dest-mac boolean
      - protected-src-mac-violation-action keyword
  - residential boolean
- spoke-sdp string
  - accounting-policy reference
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-liveness
      - encap keyword
    - bfd-template reference
    - failure-action keyword
    - wait-for-up-timer number
  - block-on-mesh-failure boolean
  - bpdu-translation keyword
  - collect-stats boolean
  - control-word boolean
  - cpu-protection
    - eth-cfm-monitoring
      - aggregate
      - car
    - mac-monitoring
  - policy-id reference
  - description string
  - dhcp
    - apply-groups reference
    - apply-groups-exclude reference
    - description string

```

configure service vpls spoke-sdp dhcp snoop

```

- snoop boolean
- egress
- filter
  - ip reference
  - ipv6 reference
  - mac reference
- mfib-allowed-mda-destinations
  - mda string
- qos
  - network
    - policy-name reference
    - port-redirect-group
      - group-name reference
      - instance number
  - vc-label number
- endpoint
  - name reference
  - precedence (number | keyword)
- entropy-label
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
  - ais
    - client-meg-level number
    - interface-support boolean
    - interval number
    - low-priority-defect keyword
    - priority number
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - cfm-vlan-tag string
  - csf
    - multiplier decimal-number
  - description string
  - direction keyword
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean
  - lbm-svc-act-responder boolean
  - low-priority-defect keyword

```

configure service vpls spoke-sdp eth-cfm mep mac-address

```

- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- squelch-ingress-ctag-levels number
- squelch-ingress-levels number
- vmep-filter boolean
- etree-leaf boolean
- etree-root-leaf-tag boolean
- fdb
- auto-learn-mac-protect boolean
- auto-learn-mac-protect-exclude-list reference
- discard-unknown-source boolean
- limit-mac-move keyword
- mac-learning
- aging boolean
- learning boolean
- mac-pinning boolean
- maximum-mac-addresses number
- protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
- signal-capability
- i-vpls-mac-flush
- bgp-evpn
- send-to-bvpls boolean
- igmp-snooping
- apply-groups reference
- apply-groups-exclude reference
- fast-leave boolean
- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- mcac
- bandwidth
- mandatory (number | keyword)
- total (number | keyword)
- interface-policy reference
- policy reference
- mrouter-port boolean
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- router-alert-check boolean
- send-queries boolean
- static
- group string
- apply-groups reference
- apply-groups-exclude reference
- source string
- starg
- version keyword
- ignore-standby-signaling boolean
- ingress
- filter
- ip reference
- ipv6 reference
- mac reference

```

configure service vpls spoke-sdp ingress qos

```

- qos
  - network
    - fp-redirect-group
      - group-name reference
      - instance number
      - policy-name reference
    - vc-label number
- l2pt
  - termination
    - protocols
      - cdp boolean
      - dtp boolean
      - pagp boolean
      - stp boolean
      - udld boolean
      - vtp boolean
- mld-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-groups number
  - mrouter-port boolean
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - router-alert-check boolean
  - send-queries boolean
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
  - version keyword
- monitor-oper-group reference
- mrp
  - apply-groups reference
  - apply-groups-exclude reference
  - join-time number
  - leave-all-time number
  - leave-time number
  - periodic-time number
  - periodic-timer boolean
  - policy reference
- oper-group reference
- pbb
  - fault-propagation
    - backbone-mac-address string
    - backbone-mac-name reference
- pim-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - maximum-number-groups number
- pw-status
  - signaling boolean
- spb
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - level number
    - apply-groups reference
    - apply-groups-exclude reference

```


configure service vpls spoke-sdp spb level hello-interval

```

    - hello-interval number
    - hello-multiplier number
    - metric number
  - lsp-pacing-interval number
  - retransmit-interval number
- split-horizon-group reference
- static-isid
  - range number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
- stp
  - admin-state keyword
  - auto-edge boolean
  - edge-port boolean
  - link-type keyword
  - path-cost number
  - port-num number
  - priority number
  - root-guard boolean
- transit-policy
  - prefix reference
- vc-type keyword
- vlan-vc-tag number
- stp
  - admin-state keyword
  - forward-delay number
  - hello-time number
  - hold-count number
  - maximum-age number
  - mode keyword
  - mst-instance number
    - apply-groups reference
    - apply-groups-exclude reference
    - mst-priority number
    - vlan-range string
  - mst-maximum-hops number
  - mst-name string
  - mst-revision number
  - priority number
- temp-flooding number
- vpn-id number
- vxlan
  - instance number
    - apply-groups reference
    - apply-groups-exclude reference
    - assisted-replication
      - leaf
        - acttime number
      - replicator
    - egress-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
    - fdb
      - discard-unknown-source boolean
      - mac-learning
        - aging boolean
        - learning boolean
        - maximum-mac-addresses number
        - protected-src-mac-violation-action keyword
      - igmp-snooping
        - mrouter-port boolean
      - mld-snooping
        - mrouter-port boolean
    - network

```

configure service vpls vxlan instance network ingress

```

    - ingress
      - qos
        - network
          - fp-redirect-group
            - group-name reference
            - instance number
            - policy-name reference
          - rx-discard-on-ndf keyword
          - source-vtep-security boolean
          - vni number
        - source-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
  - wlan-gw
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - vprn string
    - aa-interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - ip-mtu number
    - ipv4
      - primary
        - address string
        - apply-groups reference
        - apply-groups-exclude reference
        - prefix-length number
    - sap string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - egress
      - filter
        - ip reference
      - qos
        - sap-egress
          - policy-name reference
    - fwd-wholesale
    - pppoe-service reference
    - ingress
      - qos
        - sap-ingress
          - overrides
          - policy-name reference
    - lag
  - aaa
    - remote-servers
      - radius
        - access-algorithm keyword
        - accounting boolean
        - accounting-port number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - authorization boolean
        - interactive-authentication boolean
        - port number
        - server number
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - apply-groups reference
        - apply-groups-exclude reference

```

configure service vprn aaa remote-servers radius server authenticator

- **authenticator** *keyword*
- **secret** *string*
- **tls-client-profile** *reference*
- **server-retry** *number*
- **server-timeout** *number*
- **use-default-template** *boolean*
- **tacplus**
 - **accounting**
 - **record-type** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authorization**
 - **request-format**
 - **access-operation-cmd** *keyword*
 - **use-priv-lvl** *boolean*
 - **interactive-authentication** *boolean*
 - **priv-lvl-map**
 - **priv-lvl** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **user-profile-name** *reference*
 - **server** *number*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **port** *number*
 - **secret** *string*
 - **server-timeout** *number*
 - **use-default-template** *boolean*
- **aarp-interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **ip-mtu** *number*
 - **spoke-sdp** *string*
 - **aarp**
 - **id** *reference*
 - **type** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **egress**
 - **filter**
 - **ip** *reference*
 - **vc-label** *number*
 - **ingress**
 - **filter**
 - **ip** *reference*
 - **vc-label** *number*
- **admin-state** *keyword*
- **aggregates**
 - **aggregate** (*ipv4-prefix* | *ipv6-prefix*)
 - **aggregator**
 - **address** *string*
 - **as-number** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **as-set** *boolean*
 - **blackhole**
 - **generate-icmp** *boolean*
 - **community** *string*

configure service vpn aggregates aggregate description

```

- description string
- discard-component-communities boolean
- indirect (ipv4-address-no-zone | ipv6-address-no-zone)
- local-preference number
- policy reference
- summary-only boolean
- tunnel-group number
- apply-groups reference
- apply-groups-exclude reference
- allow-export-bgp-vpn boolean
- apply-groups reference
- apply-groups-exclude reference
- autonomous-system number
- bgp
- admin-state keyword
- advertise-inactive boolean
- advertise-ipv6-next-hops
- ipv4 boolean
- aggregator-id-zero boolean
- apply-groups reference
- apply-groups-exclude reference
- asn-4-byte boolean
- authentication-key string
- authentication-keychain reference
- backup-path
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- best-path-selection
- always-compare-med
- med-value keyword
- strict-as boolean
- as-path-ignore
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- compare-origin-validation-state boolean
- d-path-length-ignore boolean
- deterministic-med boolean
- ebgp-ibgp-equal
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- ignore-nh-metric boolean
- ignore-router-id
- origin-invalid-unusable boolean
- bfd-liveness boolean
- client-reflect boolean
- cluster
- cluster-id string
- connect-retry number
- convergence
- family keyword
- apply-groups reference
- apply-groups-exclude reference
- max-wait-to-advertise number
- min-wait-to-advertise number
- damp-peer-oscillations
- error-interval number
- idle-hold-time
- initial-wait number

```

configure service vprn bgp damp-peer-oscillations idle-hold-time max-wait

- **max-wait** *number*
- **second-wait** *number*
- **damping** *boolean*
- **default-label-preference**
 - **ebgp** *number*
 - **ibgp** *number*
- **default-preference**
 - **ebgp** *number*
 - **ibgp** *number*
- **description** *string*
- **domain-id** *string*
- **dynamic-neighbor-limit** *number*
- **ebgp-default-reject-policy**
 - **export** *boolean*
 - **import** *boolean*
- **eibgp-loadbalance** *boolean*
- **enforce-first-as** *boolean*
- **error-handling**
 - **update-fault-tolerance** *boolean*
- **export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
 - **ipv4** *boolean*
- **family**
 - **flow-ipv4** *boolean*
 - **flow-ipv6** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **flowspec**
 - **validate-dest-prefix** *boolean*
 - **validate-redirect-ip** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
 - **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*
 - **restart-time** *number*
 - **stale-routes-time** *number*
- **group** *string*
 - **admin-state** *keyword*
 - **advertise-inactive** *boolean*
 - **advertise-ipv6-next-hops**
 - **ipv4** *boolean*
 - **aggregator-id-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **as-override** *boolean*
 - **asn-4-byte** *boolean*
 - **authentication-key** *string*

configure service vpn bgp group authentication-keychain

- **authentication-keychain** *reference*
- **bfd-liveness** *boolean*
- **capability-negotiation** *boolean*
- **client-reflect** *boolean*
- **cluster**
 - **cluster-id** *string*
- **connect-retry** *number*
- **damp-peer-oscillations**
 - **error-interval** *number*
 - **idle-hold-time**
 - **initial-wait** *number*
 - **max-wait** *number*
 - **second-wait** *number*
- **damping** *boolean*
- **default-label-preference**
 - **ebgp** *number*
 - **ibgp** *number*
- **default-preference**
 - **ebgp** *number*
 - **ibgp** *number*
- **description** *string*
- **dynamic-neighbor**
 - **interface** *reference*
 - **allowed-peer-as** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **max-sessions** *number*
 - **match**
 - **prefix** (*ipv4-prefix | ipv6-prefix*)
 - **allowed-peer-as** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **dynamic-neighbor-limit** *number*
- **ebgp-default-reject-policy**
 - **export** *boolean*
 - **import** *boolean*
- **enforce-first-as** *boolean*
- **error-handling**
 - **update-fault-tolerance** *boolean*
- **evpn-link-bandwidth**
 - **add-to-received-bgp** *number*
- **export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string | string*)
- **extended-nh-encoding**
 - **ipv4** *boolean*
- **family**
 - **flow-ipv4** *boolean*
 - **flow-ipv6** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
 - **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*

configure service vprn bgp group graceful-restart long-lived family apply-groups-exclude

```

    - apply-groups-exclude reference
    - helper-override-stale-time number
    - forwarding-bits-set keyword
    - helper-override-restart-time number
    - helper-override-stale-time number
    - without-no-export boolean
- restart-time number
- stale-routes-time number
- hold-time
- minimum-hold-time number
- seconds number
- import
- apply-groups reference
- apply-groups-exclude reference
- policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
- accept-from-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- add-to-received-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- aggregate-used-paths
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- send-to-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
- as-number number
- prepend-global-as boolean
- private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
- admin-state keyword
- all-stations boolean
- apply-groups reference
- apply-groups-exclude reference
- route-monitoring
- post-policy boolean
- pre-policy boolean
- station reference
- multihop number
- multipath-eligible boolean
- next-hop-self boolean
- origin-validation
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- passive boolean
- path-mtu-discovery boolean
- peer-as number

```

configure service vprn bgp group peer-ip-tracking

```

- peer-ip-tracking boolean
- preference number
- prefix-limit keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - idle-timeout number
  - log-only boolean
  - maximum number
  - post-import boolean
  - threshold number
- remove-private
  - limited boolean
  - replace boolean
  - skip-peer-as boolean
- send-communities
  - extended boolean
  - large boolean
  - standard boolean
- send-default
  - export-policy reference
  - ipv4 boolean
  - ipv6 boolean
- split-horizon boolean
- static-group boolean
- tcp-mss (number | keyword)
- third-party-nexthop boolean
- ttl-security number
- type keyword
- hold-time
  - minimum-hold-time number
  - seconds number
- ibgp-multipath boolean
- import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
  - admin-state keyword
  - all-stations boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - route-monitoring
    - post-policy boolean
    - pre-policy boolean
  - station reference
- multihop number
- multipath
  - ebgp number
  - family keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ebgp number

```


configure service vprn bgp multipath family ibgp

```

- ibgp number
- max-paths number
- restrict keyword
- unequal-cost boolean
- ibgp number
- max-paths number
- restrict keyword
- unequal-cost boolean
- neighbor (ipv4-address-with-zone | ipv6-address-with-zone)
- admin-state keyword
- advertise-inactive boolean
- advertise-ipv6-next-hops
- ipv4 boolean
- aggregator-id-zero boolean
- apply-groups reference
- apply-groups-exclude reference
- as-override boolean
- asn-4-byte boolean
- authentication-key string
- authentication-keychain reference
- bfd-liveness boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
- cluster-id string
- connect-retry number
- damp-peer-oscillations
- error-interval number
- idle-hold-time
- initial-wait number
- max-wait number
- second-wait number
- damping boolean
- default-label-preference
- ebgp number
- ibgp number
- default-preference
- ebgp number
- ibgp number
- description string
- ebgp-default-reject-policy
- export boolean
- import boolean
- enforce-first-as boolean
- error-handling
- update-fault-tolerance boolean
- evpn-link-bandwidth
- add-to-received-bgp number
- export
- apply-groups reference
- apply-groups-exclude reference
- policy (policy-expr-string | string)
- extended-nh-encoding
- ipv4 boolean
- family
- flow-ipv4 boolean
- flow-ipv6 boolean
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- mcast-ipv4 boolean
- mcast-ipv6 boolean
- fast-external-failover boolean
- graceful-restart

```

configure service vpn bgp neighbor graceful-restart gr-notification

```

- gr-notification boolean
- long-lived
  - advertise-stale-to-all-neighbors boolean
  - advertised-stale-time number
  - family keyword
    - advertised-stale-time number
    - apply-groups reference
    - apply-groups-exclude reference
    - helper-override-stale-time number
  - forwarding-bits-set keyword
  - helper-override-restart-time number
  - helper-override-stale-time number
  - without-no-export boolean
- restart-time number
- stale-routes-time number
- group reference
- hold-time
  - minimum-hold-time number
  - seconds number
- import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
  - accept-from-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - add-to-received-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - aggregate-used-paths
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - send-to-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
  - admin-state keyword
  - all-stations boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - route-monitoring
    - post-policy boolean
    - pre-policy boolean
  - station reference
- multihop number
- multipath-eligible boolean

```

configure service vprn bgp neighbor next-hop-self

- **next-hop-self** *boolean*
- **origin-validation**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
- **passive** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-as** *number*
- **peer-creation-type** *keyword*
- **peer-ip-tracking** *boolean*
- **preference** *number*
- **prefix-limit** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **idle-timeout** *number*
 - **log-only** *boolean*
 - **maximum** *number*
 - **post-import** *boolean*
 - **threshold** *number*
- **remove-private**
 - **limited** *boolean*
 - **replace** *boolean*
 - **skip-peer-as** *boolean*
- **send-communities**
 - **extended** *boolean*
 - **large** *boolean*
 - **standard** *boolean*
- **send-default**
 - **export-policy** *reference*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** (*number* | *keyword*)
- **third-party-nexthop** *boolean*
- **ttl-security** *number*
- **type** *keyword*
- **next-hop-resolution**
 - **policy** *reference*
 - **use-bgp-routes** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-ip-tracking** *boolean*
- **peer-tracking-policy** *reference*
- **preference** *number*
- **rapid-withdrawal** *boolean*
- **remove-private**
 - **limited** *boolean*
 - **replace** *boolean*
 - **skip-peer-as** *boolean*
- **rib-management**
 - **ipv4**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
 - **ipv6**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**

configure service vprn bgp rib-management ipv6 route-table-import apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **policy-name** *reference*
- **label-ipv4**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
- **label-ipv6**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **router-id** *string*
- **send-communities**
 - **extended** *boolean*
 - **large** *boolean*
 - **standard** *boolean*
- **send-default**
 - **export-policy** *reference*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** *number*
- **third-party-next-hop** *boolean*
- **bgp-evpn**
 - **mpls** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-bind-tunnel**
 - **allow-flex-algo-fallback** *boolean*
 - **ecmp** *number*
 - **enforce-strict-tunnel-tagging** *boolean*
 - **resolution** *keyword*
 - **resolution-filter**
 - **bgp** *boolean*
 - **ldp** *boolean*
 - **mpls-fwd-policy** *boolean*
 - **rib-api** *boolean*
 - **rsvp** *boolean*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*
 - **sr-ospf3** *boolean*
 - **sr-policy** *boolean*
 - **sr-te** *boolean*
 - **udp** *boolean*
 - **default-route-tag** *string*
 - **domain-id** *string*
 - **dynamic-egress-label-limit** *boolean*
 - **evi** *number*
 - **evpn-link-bandwidth**
 - **advertise**
 - **max-dynamic-weight** *number*
 - **weight** (*number* | *keyword*)
 - **weighted-ecmp** *boolean*
 - **route-distinguisher** (*string* | *keyword*)
 - **send-tunnel-encap**
 - **mpls** *boolean*
 - **mpls-over-udp** *boolean*

configure service vprn bgp-evpn mpls vrf-export

- **vrf-export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-target**
 - **community** *string*
 - **export-community** *string*
 - **import-community** *string*
- **segment-routing-v6** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-route-tag** *string*
 - **domain-id** *string*
 - **evi** *number*
 - **resolution** *keyword*
 - **route-distinguisher** (*string* | *keyword*)
 - **source-address** *string*
- **srv6**
 - **default-locator** *string*
 - **instance** *reference*
- **vrf-export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-target**
 - **community** *string*
 - **export-community** *string*
 - **import-community** *string*
- **bgp-ipvpn**
 - **mpls**
 - **admin-state** *keyword*
 - **auto-bind-tunnel**
 - **allow-flex-algo-fallback** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ecmp** *number*
 - **enforce-strict-tunnel-tagging** *boolean*
 - **resolution** *keyword*
 - **resolution-filter**
 - **bgp** *boolean*
 - **gre** *boolean*
 - **ldp** *boolean*
 - **mpls-fwd-policy** *boolean*
 - **rib-api** *boolean*
 - **rsvp** *boolean*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*
 - **sr-ospf3** *boolean*
 - **sr-policy** *boolean*
 - **sr-te** *boolean*
 - **udp** *boolean*
 - **weighted-ecmp** *boolean*
 - **domain-id** *string*
 - **dynamic-egress-label-limit** *boolean*
 - **route-distinguisher** (*string* | *keyword*)

configure service vpn bgp-ipvpn mpls vrf-export

- **vrf-export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-target**
 - **community** *string*
 - **export-community** *string*
 - **import-community** *string*
- **segment-routing-v6** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-route-tag** *string*
 - **domain-id** *string*
 - **resolution** *keyword*
 - **route-distinguisher** (*string* | *keyword*)
 - **source-address** *string*
- **srv6**
 - **default-locator** *string*
 - **instance** *reference*
- **vrf-export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-target**
 - **community** *string*
 - **export-community** *string*
 - **import-community** *string*
- **bgp-shared-queue**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **bgp-vpn-backup**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **carrier-carrier-vpn** *boolean*
- **class-forwarding** *boolean*
- **confederation**
 - **confed-as-num** *number*
 - **members** *number*
- **customer** *reference*
- **d-path-length-ignore** *boolean*
- **description** *string*
- **dhcp-server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **dhcpv4** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
- **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*

configure service vprn dhcp-server dhcpv4 failover partner-down-delay

```

- partner-down-delay number
- peer reference
  - apply-groups reference
  - apply-groups-exclude reference
  - sync-tag string
- startup-wait-time number
- force-renews boolean
- lease-hold
  - additional-scenarios
    - internal-lease-ipsec boolean
    - solicited-release boolean
  - time number
- pool string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - failover
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ignore-mclt-on-takeover boolean
    - maximum-client-lead-time number
    - partner-down-delay number
    - peer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - startup-wait-time number
  - max-lease-time number
  - min-lease-time number
  - minimum-free
    - absolute number
    - event-when-depleted boolean
    - percent number
  - nak-non-matching-subnet boolean
  - offer-time number
  - options
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - duration number
      - empty
      - hex-string string
      - ipv4-address string
      - netbios-node-type keyword
  - subnet string
    - address-range string end string
    - apply-groups reference
    - apply-groups-exclude reference
    - failover-control-type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - drain boolean
  - exclude-addresses string end string
  - maximum-declined number
  - minimum-free
    - absolute number
    - event-when-depleted boolean
    - percent number
  - options
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference

```

configure service vprn dhcp-server dhcpv4 pool subnet options option ascii-string

- **ascii-string** *string*
- **duration** *number*
- **empty**
- **hex-string** *string*
- **ipv4-address** *string*
- **netbios-node-type** *keyword*
- **pool-selection**
 - **use-gi-address**
 - **scope** *keyword*
 - **use-pool-from-client**
 - **delimiter** *string*
- **user-db** *reference*
- **user-identification** *keyword*
- **dhcpv6** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-provisioned** *boolean*
 - **defaults**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **options**
 - **option** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string*
 - **domain-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *string*
 - **ipv6-address** *string*
 - **preferred-lifetime** *number*
 - **rebind-time** *number*
 - **renew-time** *number*
 - **valid-lifetime** *number*
 - **description** *string*
 - **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*
 - **ignore-rapid-commit** *boolean*
 - **interface-id-mapping** *boolean*
 - **lease-hold**
 - **additional-scenarios**
 - **internal-lease-ipsec** *boolean*
 - **solicited-release** *boolean*
 - **time** *number*
 - **lease-query** *boolean*
 - **pool** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **delegated-prefix**
 - **length** *number*
 - **maximum** *number*
 - **minimum** *number*
 - **description** *string*

configure service vprn dhcp-server dhcpv6 pool exclude-prefix

```

- exclude-prefix string
- failover
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ignore-mclt-on-takeover boolean
  - maximum-client-lead-time number
  - partner-down-delay number
  - peer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
  - startup-wait-time number
- options
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - domain-string string
    - duration number
    - empty
    - hex-string string
    - ipv6-address string
- prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - drain boolean
  - failover-control-type keyword
  - options
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - domain-string string
      - duration number
      - empty
      - hex-string string
      - ipv6-address string
  - preferred-lifetime number
  - prefix-length-threshold number
    - absolute number
    - apply-groups reference
    - apply-groups-exclude reference
    - event-when-depleted boolean
    - percent number
  - prefix-type
    - pd boolean
    - wan-host boolean
  - rebind-time number
  - renew-time number
  - valid-lifetime number
- prefix-length-threshold number
  - apply-groups reference
  - apply-groups-exclude reference
  - event-when-depleted boolean
  - minimum-free-percent number
- pool-selection
  - use-link-address
    - scope keyword
  - use-pool-from-client
    - delimiter string
- server-id
  - apply-groups reference
  - apply-groups-exclude reference

```

configure service vprn dhcp-server dhcpv6 server-id duid-enterprise

```

    - duid-enterprise
      - ascii-string string
      - hex-string string
    - duid-link-local
    - user-identification keyword
- dns
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - default-domain string
  - ipv4-source-address (keyword | ipv4-unicast-address)
  - ipv6-source-address (keyword | ipv6-unicast-address)
  - server (ipv4-address-no-zone | ipv6-address-no-zone)
- ecmp number
- ecmp-unequal-cost boolean
- entropy-label boolean
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
- export-inactive-bgp boolean
- fib-priority keyword
- firewall
  - apply-groups reference
  - apply-groups-exclude reference
  - domain string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - dhcpv6-server
      - name string
      - router-instance string
    - nat-group reference
    - prefix string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - wlan-gw-group reference
- flowspec
  - apply-groups reference
  - apply-groups-exclude reference
  - filter-cam-type keyword
  - ip-filter-max-size number
  - ipv6-filter-max-size number
- grt-leaking
  - allow-local-management boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - export-grt
    - policy-name (policy-expr-string | string)
  - export-limit number
  - export-v6-limit number
  - grt-lookup boolean
  - import-grt
    - policy-name (policy-expr-string | string)
- gsmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - group string
    - admin-state keyword
    - ancp
      - dynamic-topology-discovery boolean
      - oam boolean
    - apply-groups reference

```

configure service vprn gsmf group apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- hold-multiplier number
- idle-filter boolean
- keepalive number
- neighbor string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - local-address string
  - priority-marking
    - dscp keyword
    - prec number
- persistency boolean
- gtp
- s11
  - interface reference
  - apn-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - peer-profile-map
    - prefix (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - peer-profile reference
- upf-data-endpoint
  - apply-groups reference
  - apply-groups-exclude reference
  - fpe reference
  - interface reference
- uplink
  - apn string
  - apply-groups reference
  - apply-groups-exclude reference
  - pdn-type keyword
  - peer-profile-map
    - prefix (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - peer-profile reference
- hash-label boolean
- igmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - forwarding-group-interface forwarding-service string group-interface-
name reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number

```

configure service vpm igmp forwarding-group-interface query-source-address

```

- query-source-address string
- router-alert-check boolean
- sub-hosts-only boolean
- subnet-check boolean
- version keyword
- group-if-query-source-address string
- group-interface reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - query-source-address string
  - router-alert-check boolean
  - sub-hosts-only boolean
  - subnet-check boolean
  - version keyword
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - mc-constraints
      - level number
        - apply-groups reference
        - apply-groups-exclude reference
        - bandwidth number
      - number-down number
        - apply-groups reference
        - apply-groups-exclude reference
        - level number
      - use-lag-port-weight boolean
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - redundant-mcast boolean
  - router-alert-check boolean
  - ssm-translate
    - group-range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
  - static
    - group string

```

configure service vpn igmp interface static group apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **source** *string*
- **starg**
- **group-range start** *string end string step string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **source** *string*
- **starg**
- **subnet-check** *boolean*
- **version** *keyword*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **ssm-translate**
 - **group-range start** *string end string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
- **igmp-host-tracking**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **expiry-time** *number*
- **ignore-nh-metric** *boolean*
- **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cflowd-parameters**
 - **sampling** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **direction** *keyword*
 - **sample-profile** (*keyword | number*)
 - **type** *keyword*
- **cpu-protection** *reference*
- **description** *string*
- **dynamic-tunnel-redundant-nexthop** *string*
- **hold-time**
 - **ipv4**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
 - **ipv6**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
- **if-attribute**
 - **admin-group** *reference*
 - **srlg-group** *reference*
- **ingress**
 - **destination-class-lookup** *boolean*
 - **policy-accounting** *reference*
- **ingress-stats** *boolean*
- **ip-mtu** *number*
- **ipsec**
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure service vpn interface ipsec apply-groups-exclude

```

- apply-groups-exclude reference
- ip-exception reference
- ipsec-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip string
      - interface string
      - service-name string
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description string
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - interval number
      - message-count number
  - ip-mtu number
  - key-exchange
    - dynamic
      - auto-establish boolean
      - cert
        - cert-profile reference
        - status-verify
          - default-result keyword
          - primary keyword
          - secondary keyword
        - trust-anchor-profile reference
      - id
        - fqdn string
        - ipv4 string
        - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
      - ike-policy reference
      - ipsec-transform reference
      - pre-shared-key string
    - manual
      - keys number direction keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - authentication-key string
        - encryption-key string
        - ipsec-transform reference
        - spi number
  - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
zone)
  - max-history-key-records
    - esp number
    - ike number
  - pmtu-discovery-aging number
  - private-sap number
  - private-service string
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)

```

configure service vpn interface ipsec ipsec-tunnel remote-gateway-address

```

- remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
- replay-window number
- security-policy
  - id number
  - strict-match boolean
- ipv6-exception reference
- public-sap number
- tunnel-group reference
- ipv4
  - addresses
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix-length number
  - allow-directed-broadcasts boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - gi-address string
    - lease-populate
      - max-leases number
    - option-82
      - action keyword
      - circuit-id
        - ascii-tuple
        - ifindex
        - none
        - sap-id
        - vlan-ascii-tuple
      - remote-id
        - ascii-string string
        - mac
        - none
      - vendor-specific-option
        - client-mac-address boolean
        - pool-name boolean
        - sap-id boolean
        - service-id boolean
        - string string
        - system-id boolean
    - proxy-server
      - admin-state keyword
      - emulated-server string
      - lease-time
        - radius-override boolean
        - value number
  - python-policy reference
  - relay-plain-bootp boolean
  - relay-proxy
    - release-update-src-ip boolean
    - siaddr-override string
  - release-include-gi-address boolean
  - server string
  - src-ip-addr keyword
  - trusted boolean

```

configure service vprn interface ipv4 dhcp use-arp

- **use-arp** *boolean*
- **icmp**
 - **mask-reply** *boolean*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **ttl-expired**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **ip-helper-address** *string*
- **local-dhcp-server** *reference*
- **neighbor-discovery**
 - **host-route**
 - **populate** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **learn-unsolicited** *boolean*
 - **limit**
 - **log-only** *boolean*
 - **max-entries** *number*
 - **threshold** *number*
 - **local-proxy-arp** *boolean*
 - **populate** *boolean*
 - **proactive-refresh** *boolean*
 - **proxy-arp-policy** *reference*
 - **remote-proxy-arp** *boolean*
 - **retry-timer** *number*
 - **static-neighbor** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *string*
 - **static-neighbor-unnumbered**
 - **mac-address** *string*
 - **timeout** *number*
- **primary**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast** *keyword*
 - **prefix-length** *number*
 - **track-srrp** *number*
- **qos-route-lookup** *keyword*
- **secondary** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast** *keyword*
 - **igp-inhibit** *boolean*
 - **prefix-length** *number*
 - **track-srrp** *number*
- **tcp-mss** *number*
- **unnumbered**
 - **ip-address** *string*
 - **ip-int-name** *string*

configure service vprn interface ipv4 urpf-check

- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **backup** *string*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** *string*
 - **interface-name** *string*
 - **service-name** *string*
 - **init-delay** *number*
 - **mac** *string*
 - **master-int-inherit** *boolean*
 - **message-interval** *number*
 - **monitor-oper-group** *reference*
 - **ntp-reply** *boolean*
 - **oper-group** *reference*
 - **owner** *boolean*
 - **passive** *boolean*
 - **ping-reply** *boolean*
 - **policy** *reference*
 - **preempt** *boolean*
 - **priority** *number*
 - **ssh-reply** *boolean*
 - **standby-forwarding** *boolean*
 - **telnet-reply** *boolean*
 - **traceroute-reply** *boolean*
- **ipv6**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duplicate-address-detection** *boolean*
 - **eui-64** *boolean*
 - **prefix-length** *number*
 - **primary-preference** *number*
 - **track-srrp** *number*
 - **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*
 - **multiplier** *number*
 - **receive** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
 - **dhcp6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **relay**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **lease-populate**
 - **max-nbr-of-leases** *number*
 - **route-populate**
 - **na** *boolean*
 - **pd**
 - **exclude** *boolean*
 - **ta** *boolean*
 - **link-address** *string*

configure service vprn interface ipv6 dhcp6 relay neighbor-resolution

- **neighbor-resolution** *boolean*
- **option**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-id**
 - **ascii-tuple**
 - **if-index**
 - **sap-id**
 - **string** *string*
 - **remote-id** *boolean*
- **python-policy** *reference*
- **server** *string*
- **source-address** *string*
- **user-db** *reference*
- **server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **max-nbr-of-leases** *number*
 - **prefix-delegation**
 - **admin-state** *keyword*
 - **prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **client-id**
 - **duid** *string*
 - **iaid** *number*
 - **preferred-lifetime** (*number* | *keyword*)
 - **valid-lifetime** (*number* | *keyword*)
- **duplicate-address-detection** *boolean*
- **forward-ipv4-packets** *boolean*
- **icmp6**
 - **packet-too-big**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **time-exceeded**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **link-local-address**
 - **address** *string*
 - **duplicate-address-detection** *boolean*
- **local-dhcp-server** *reference*
- **neighbor-discovery**
 - **host-route**
 - **populate** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **learn-unsolicited** *keyword*
 - **limit**
 - **log-only** *boolean*

configure service vprn interface ipv6 neighbor-discovery limit max-entries

- **max-entries** *number*
- **threshold** *number*
- **local-proxy-nd** *boolean*
- **proactive-refresh** *keyword*
- **proxy-nd-policy** *reference*
- **reachable-time** *number*
- **secure-nd**
 - **admin-state** *keyword*
 - **allow-unsecured-msgs** *boolean*
 - **public-key-min-bits** *number*
 - **security-parameter** *number*
- **stale-time** *number*
- **static-neighbor** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *string*
- **qos-route-lookup** *keyword*
- **tcp-mss** *number*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup** *string*
- **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **interface-name** *string*
 - **service-name** *string*
- **init-delay** *number*
- **mac** *string*
- **master-int-inherit** *boolean*
- **message-interval** *number*
- **monitor-oper-group** *reference*
- **ntp-reply** *boolean*
- **oper-group** *reference*
- **owner** *boolean*
- **passive** *boolean*
- **ping-reply** *boolean*
- **policy** *reference*
- **preempt** *boolean*
- **priority** *number*
- **standby-forwarding** *boolean*
- **telnet-reply** *boolean*
- **traceroute-reply** *boolean*
- **load-balancing**
 - **flow-label-load-balancing** *boolean*
 - **ip-load-balancing** *keyword*
 - **spi-load-balancing** *boolean*
 - **teid-load-balancing** *boolean*
- **loopback** *boolean*
- **mac** *string*
- **mac-accounting** *boolean*
- **monitor-oper-group** *reference*
- **multi-chassis-shunting-profile** *reference*
- **ping-template**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **destination-address** *string*
 - **name** *reference*

configure service vprn interface ptp-hw-assist

- **ptp-hw-assist**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **radius-auth-policy** *reference*
- **sap** *string*
 - **aarp**
 - **id** *reference*
 - **type** *keyword*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **anti-spoof** *keyword*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **calling-station-id** *string*
 - **collect-stats** *boolean*
 - **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **description** *string*
 - **dist-cpu-protection** *reference*
 - **egress**
 - **agg-rate**
 - **adaptation-rule** *keyword*
 - **burst-limit** (*number* | *keyword*)
 - **limit-unused-bandwidth** *boolean*
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **policer-control-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **root**
 - **max-rate** (*number* | *keyword*)
 - **priority-mbs-thresholds**
 - **min-thresh-separation** (*number* | *keyword*)
 - **priority** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mbs-contribution** (*number* | *keyword*)
 - **policy-name** *reference*
 - **qinq-mark-top-only** *boolean*
 - **sap-egress**
 - **overrides**
 - **hs-secondary-shaper** *string*
 - **hs-wrr-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hs-class-weight** *number*
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
 - **policer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure service vprn interface sap egress qos sap-egress overrides policer cbs

```

- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
  - cir keyword
  - pir keyword
- apply-groups reference
- apply-groups-exclude reference
- avg-frame-overhead decimal-number
- burst-limit (number | keyword)
- cbs (number | keyword)
- drop-tail
  - low
    - percent-reduction-from-mbs (number | keyword)
- hs-class-weight number
- hs-wred-queue
  - policy reference
- hs-wrr-weight number
- mbs (number | keyword)
- monitor-queue-depth
  - fast-polling boolean
  - violation-threshold decimal-number
- parent
  - cir-weight number
  - weight number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- policy-name reference
- port-redirect-group
  - group-name reference
  - instance number
- scheduler-policy
  - overrides
    - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
      - parent
        - cir-weight number
        - weight number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
  - queue-group-redirect-list reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number

```

configure service vprn interface sap eth-cfm mep admin-state

- **admin-state** *keyword*
- **ais** *boolean*
- **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ccm** *boolean*
- **ccm-ltm-priority** *number*
- **ccm-padding-size** *number*
- **csf**
 - **multiplier** *decimal-number*
- **description** *string*
- **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
- **fault-propagation** *keyword*
- **grace**
 - **eth-ed**
 - **max-rx-defect-window** *number*
 - **priority** *number*
 - **rx-eth-ed** *boolean*
 - **tx-eth-ed** *boolean*
 - **eth-vsm-grace**
 - **rx-eth-vsm-grace** *boolean*
 - **tx-eth-vsm-grace** *boolean*
- **low-priority-defect** *keyword*
- **one-way-delay-threshold** *number*
- **snelch-ingress-levels** *number*
- **fwd-wholesale**
 - **pppoe-service** *reference*
- **host-admin-state** *keyword*
- **host-lockout-policy** *reference*
- **ingress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **qos**
 - **match-qinq-dot1p** *keyword*
 - **policer-control-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **root**
 - **max-rate** (*number* | *keyword*)
 - **priority-mbs-thresholds**
 - **min-thresh-separation** (*number* | *keyword*)
 - **priority** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mbs-contribution** (*number* | *keyword*)
 - **policy-name** *reference*
 - **sap-ingress**
 - **fp-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **overrides**
 - **ip-criteria**
 - **activate-entry-tag** *number*
 - **ipv6-criteria**
 - **activate-entry-tag** *number*
 - **policer** *reference*

configure service vprn interface sap ingress qos sap-ingress overrides policer apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
  - cir keyword
  - pir keyword
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- drop-tail
  - low
    - percent-reduction-from-mbs (number | keyword)
- mbs (number | keyword)
- monitor-queue-depth
  - fast-polling boolean
- parent
  - cir-weight number
  - weight number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- policy-name reference
- queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- queue-group-redirect-list reference
- ip-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - clear-df-bit boolean
  - delivery-service string
  - description string
  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - dscp keyword
  - encapsulated-ip-mtu number
  - gre-header
    - admin-state keyword
    - key
      - admin-state keyword

```

configure service vpn interface sap ip-tunnel gre-header key receive

```

    - receive number
    - send number
- icmp-generation
  - frag-required
    - admin-state keyword
    - interval number
    - message-count number
- icmp6-generation
  - packet-too-big
    - admin-state keyword
    - number number
    - seconds number
- ip-mtu number
- ipsec-transport-mode-profile reference
- local-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- pmtu-discovery-aging number
- private-tcp-mss-adjust number
- propagate-pmtu-v4 boolean
- propagate-pmtu-v6 boolean
- public-tcp-mss-adjust (number | keyword)
- reassembly (number | keyword)
- remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- ipsec-gateway string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cert
    - cert-profile reference
    - status-verify
      - default-result keyword
      - primary keyword
      - secondary keyword
    - trust-anchor-profile reference
- client-db
  - fallback boolean
  - name reference
- default-secure-service
  - interface string
  - service-name string
- default-tunnel-template reference
- dhcp-address-assignment
  - dhcpv4
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - gi-address string
    - send-release boolean
    - server
      - address string
      - router-instance string
  - dhcpv6
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - link-address string
    - send-release boolean
    - server
      - address string
      - router-instance string
- ike-policy reference
- local
  - address-assignment
    - admin-state keyword
    - apply-groups reference

```


configure service vpn interface sap ipsec-gateway local address-assignment apply-groups-exclude

```

- apply-groups-exclude reference
- ipv4
  - dhcp-server string
  - pool string
  - router-instance string
  - secondary-pool string
- ipv6
  - dhcp-server string
  - pool string
  - router-instance string
- gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
- id
  - auto
  - fqdn string
  - ipv4 string
  - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
- max-history-key-records
  - esp number
  - ike number
- pre-shared-key string
- radius
  - accounting-policy reference
  - authentication-policy reference
- ts-list reference
- ipsec-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip string
      - interface string
      - service-name string
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description string
  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - interval number
      - message-count number
  - ip-mtu number
  - key-exchange
    - dynamic
      - auto-establish boolean
      - cert
        - cert-profile reference
        - status-verify
          - default-result keyword
          - primary keyword
          - secondary keyword
        - trust-anchor-profile reference
    - id
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)

```

configure service vpn interface sap ipsec-tunnel key-exchange dynamic ike-policy

```

    - ike-policy reference
    - ipsec-transform reference
    - pre-shared-key string
  - manual
    - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - encryption-key string
      - ipsec-transform reference
      - spi number
  - max-history-key-records
    - esp number
    - ike number
  - pmtu-discovery-aging number
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - replay-window number
  - security-policy
    - id reference
    - strict-match boolean
  - tunnel-endpoint
    - delivery-service string
    - local-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - lag
    - link-map-profile number
    - per-link-hash
      - class number
      - weight number
  - multi-service-site reference
  - static-host
    - ipv4 string mac string
      - admin-state keyword
      - ancp-string string
      - app-profile
        - profile reference
        - apply-groups reference
        - apply-groups-exclude reference
        - int-dest-id string
        - sla-profile reference
        - sub-profile reference
        - subscriber-id
          - string string
          - use-sap-id
  - transit-policy
    - ip reference
    - prefix reference
  - shcv-policy-ipv4 reference
  - spoke-sdp string
    - aarp
      - id reference
      - type keyword
  - accounting-policy reference
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-liveness
      - encap keyword
    - bfd-template reference

```

configure service vprn interface spoke-sdp bfd failure-action

- **failure-action** *keyword*
- **wait-for-up-timer** *number*
- **collect-stats** *boolean*
- **control-word** *boolean*
- **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
- **description** *string*
- **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **vc-label** *number*
- **entropy-label**
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-lmm-fc-stats**
 - **fc** *keyword*
 - **fc-in-profile** *keyword*
 - **collect-lmm-stats** *boolean*
 - **mep** *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number*
 - **admin-state** *keyword*
 - **ais** *boolean*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **ccm-padding-size** *number*
 - **csf**
 - **multiplier** *decimal-number*
 - **description** *string*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
 - **fault-propagation** *keyword*
 - **grace**
 - **eth-ed**
 - **max-rx-defect-window** *number*
 - **priority** *number*
 - **rx-eth-ed** *boolean*
 - **tx-eth-ed** *boolean*
 - **eth-vsm-grace**
 - **rx-eth-vsm-grace** *boolean*
 - **tx-eth-vsm-grace** *boolean*
 - **low-priority-defect** *keyword*
 - **one-way-delay-threshold** *number*
 - **snelch-ingress-levels** *number*
 - **hash-label**

configure service vprn interface spoke-sdp hash-label signal-capability

- **signal-capability**
- **ingress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **network**
 - **fp-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **policy-name** *reference*
 - **vc-label** *number*
 - **transit-policy**
 - **ip** *reference*
 - **prefix** *reference*
 - **vc-type** *keyword*
- **static-tunnel-redundant-nextthop** *string*
- **tos-marking-state** *keyword*
- **tunnel** *boolean*
- **vas-if-type** *keyword*
- **vpls** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **egress**
 - **reclassify-using-qos** *reference*
 - **routed-override-filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **evpn**
 - **arp**
 - **advertise** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **flood-garp-and-unknown-req** *boolean*
 - **learn-dynamic** *boolean*
 - **nd**
 - **advertise** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **learn-dynamic** *boolean*
 - **evpn-tunnel**
 - **allow-bfd** *boolean*
 - **ipv6-gateway-address** *keyword*
 - **supplementary-broadcast-domain** *boolean*
- **ingress**
 - **routed-override-filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **ip-mirror-interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **spoke-sdp** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **ingress**
 - **filter**
 - **ip** *reference*
 - **vc-label** *number*

configure service vprn ipsec

- **ipsec**
 - **allow-reverse-route-override-type** *keyword*
 - **multi-chassis-shunt-interface** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **next-hop**
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **multi-chassis-shunting-profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **multi-chassis-shunt-interface** *reference*
 - **security-policy** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-ip**
 - **address** *string*
 - **any** *boolean*
 - **local-ipv6**
 - **address** *string*
 - **any** *boolean*
 - **remote-ip**
 - **address** *string*
 - **any** *boolean*
 - **remote-ipv6**
 - **address** *string*
 - **any** *boolean*
- **ipv6**
 - **neighbor-discovery**
 - **reachable-time** *number*
 - **stale-time** *number*
 - **router-advertisement**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dns-options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rdnss-lifetime** (*keyword* | *number*)
 - **server** *string*
 - **interface** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **current-hop-limit** *number*
 - **dns-options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **include-rdnss** *boolean*
 - **rdnss-lifetime** (*number* | *keyword*)
 - **server** *string*
 - **managed-configuration** *boolean*
 - **max-advertisement-interval** *number*
 - **min-advertisement-interval** *number*
 - **mtu** *number*
 - **other-stateful-configuration** *boolean*
 - **prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **autonomous** *boolean*

configure service vprn ipv6 router-advertisement interface prefix on-link

- **on-link** *boolean*
- **preferred-lifetime** (*keyword | number*)
- **valid-lifetime** (*keyword | number*)
- **reachable-time** *number*
- **retransmit-time** *number*
- **router-lifetime** *number*
- **use-virtual-mac** *boolean*
- **isis** *number*
 - **admin-state** *keyword*
 - **advertise-passive-only** *boolean*
 - **advertise-router-capability** *keyword*
 - **all-l1isis** *string*
 - **all-l2isis** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area-address** *string*
 - **authentication-check** *boolean*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **csnp-authentication** *boolean*
 - **default-route-tag** *number*
 - **export-limit**
 - **log-percent** *number*
 - **number** *number*
 - **export-policy** *reference*
 - **graceful-restart**
 - **helper-mode** *boolean*
 - **hello-authentication** *boolean*
 - **hello-padding** *keyword*
 - **ignore-attached-bit** *boolean*
 - **ignore-lsp-errors** *boolean*
 - **ignore-narrow-metric** *boolean*
 - **iid-tlv** *boolean*
 - **import-policy** *reference*
 - **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness**
 - **ipv4**
 - **include-bfd-tlv** *boolean*
 - **ipv6**
 - **include-bfd-tlv** *boolean*
 - **csnp-interval** *number*
 - **default-instance** *boolean*
 - **hello-authentication** *boolean*
 - **hello-authentication-key** *string*
 - **hello-authentication-keychain** *reference*
 - **hello-authentication-type** *keyword*
 - **hello-padding** *keyword*
 - **interface-type** *keyword*
 - **ipv4-multicast** *boolean*
 - **ipv6-unicast** *boolean*
 - **level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hello-authentication-key** *string*
 - **hello-authentication-keychain** *reference*
 - **hello-authentication-type** *keyword*
 - **hello-interval** *number*
 - **hello-multiplier** *number*
 - **hello-padding** *keyword*
 - **ipv4-multicast-metric** *number*

configure service vprn isis interface level ipv6-unicast-metric

```

- ipv6-unicast-metric number
- metric number
- passive boolean
- priority number
- sd-offset number
- sf-offset number
- level-capability keyword
- load-balancing-weight number
- loopfree-alternate
- exclude boolean
- policy-map
- route-nh-template reference
- lsp-pacing-interval number
- mesh-group
- blocked
- value number
- passive boolean
- retransmit-interval number
- tag number
- ipv4-multicast-routing keyword
- ipv4-routing boolean
- ipv6-routing keyword
- level keyword
- advertise-router-capability boolean
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- authentication-keychain reference
- authentication-type keyword
- csnp-authentication boolean
- default-ipv4-multicast-metric number
- default-ipv6-unicast-metric number
- default-metric number
- external-preference number
- hello-authentication boolean
- hello-padding keyword
- loopfree-alternate-exclude boolean
- lsp-mtu-size number
- preference number
- psnp-authentication boolean
- wide-metrics-only boolean
- level-capability keyword
- link-group string
- apply-groups reference
- apply-groups-exclude reference
- description string
- level keyword
- apply-groups reference
- apply-groups-exclude reference
- ipv4-multicast-metric-offset number
- ipv4-unicast-metric-offset number
- ipv6-unicast-metric-offset number
- member reference
- oper-members number
- revert-members number
- loopfree-alternate
- exclude
- prefix-policy reference
- lsp-lifetime number
- lsp-minimum-remaining-lifetime number
- lsp-mtu-size number
- lsp-refresh
- half-lifetime boolean
- interval number

```

configure service vprn isis mru-mismatch-detection

- **mru-mismatch-detection** *boolean*
- **multi-topology**
 - **ipv4-multicast** *boolean*
 - **ipv6-unicast** *boolean*
- **multicast-import**
 - **ipv4** *boolean*
- **overload**
 - **max-metric** *boolean*
- **overload-export-external** *boolean*
- **overload-export-interlevel** *boolean*
- **overload-on-boot**
 - **max-metric** *boolean*
 - **timeout** *number*
- **poi-tlv** *boolean*
- **prefix-attributes-tlv** *boolean*
- **prefix-limit**
 - **limit** *number*
 - **log-only** *boolean*
 - **overload-timeout** (*number* | *keyword*)
 - **warning-threshold** *number*
- **psnp-authentication** *boolean*
- **reference-bandwidth** *number*
- **rib-priority**
 - **high**
 - **prefix-list** *reference*
 - **tag** *number*
- **router-id** *string*
- **standard-multi-instance** *boolean*
- **strict-adjacency-check** *boolean*
- **summary-address** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level-capability** *keyword*
 - **route-tag** *number*
- **suppress-attached-bit** *boolean*
- **system-id** *string*
- **timers**
 - **lsp-wait**
 - **lsp-initial-wait** *number*
 - **lsp-max-wait** *number*
 - **lsp-second-wait** *number*
 - **spf-wait**
 - **spf-initial-wait** *number*
 - **spf-max-wait** *number*
 - **spf-second-wait** *number*
- **unicast-import**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **l2tp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **avp-hiding** *keyword*
 - **challenge** *boolean*
 - **destruct-timeout** *number*
 - **ethernet-tunnel**
 - **reconnect-timeout** (*number* | *keyword*)
 - **exclude-avps**
 - **calling-number** *boolean*
 - **initial-rx-lcp-conf-req** *boolean*
 - **failover**
 - **recovery-max-session-lifetime** *number*
 - **recovery-method** *keyword*
 - **recovery-time** *number*

configure service vprn l2tp failover track-srrp

- **track-srrp** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **peer** *reference*
- **sync-tag** *string*
- **group** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **avp-hiding** *keyword*
- **challenge** *keyword*
- **description** *string*
- **destruct-timeout** *number*
- **ethernet-tunnel**
 - **reconnect-timeout** (*number* | *keyword*)
- **failover**
 - **recovery-method** *keyword*
 - **recovery-time** *number*
- **hello-interval** (*number* | *keyword*)
- **idle-timeout** (*number* | *keyword*)
- **l2tpv3**
 - **cookie-length** (*number* | *keyword*)
 - **digest-type** *keyword*
 - **nonce-length** *number*
 - **password** *string*
 - **private-tcp-mss-adjust** (*number* | *keyword*)
 - **public-tcp-mss-adjust** (*number* | *keyword*)
 - **pw-cap-list**
 - **ethernet** *boolean*
 - **ethernet-vlan** *boolean*
 - **rem-router-id** *string*
 - **track-password-change** *boolean*
- **lac**
 - **df-bit** *keyword*
- **lns**
 - **lns-group** *reference*
 - **load-balance-method** *keyword*
- **mlppp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **endpoint**
 - **ip** (*ipv4-address* | *keyword*)
 - **mac** (*mac-address* | *keyword*)
 - **interleave** *boolean*
 - **max-fragment-delay** (*number* | *keyword*)
 - **max-links** *number*
 - **reassembly-timeout** *number*
 - **short-sequence-numbers** *boolean*
- **ppp**
 - **authentication** *keyword*
 - **authentication-policy** *string*
 - **chap-challenge-length**
 - **end** *number*
 - **start** *number*
 - **default-group-interface**
 - **interface** *string*
 - **service-name** *string*
 - **ipcp-subnet-negotiation** *boolean*
 - **keepalive**
 - **interval** *number*
 - **multiplier** *number*
 - **lcp-force-ack-accm** *boolean*
 - **lcp-ignore-magic-numbers** *boolean*

configure service vprn l2tp group lns ppp mtu

```

- mtu number
- proxy-authentication boolean
- proxy-lcp boolean
- reject-disabled-ncp boolean
- user-db string
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- password string
- protocol keyword
- radius-accounting-policy reference
- receive-window-size number
- session-assign-method keyword
- session-limit (number | keyword)
- tunnel string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- auto-establish boolean
- avp-hiding keyword
- challenge keyword
- description string
- destruct-timeout number
- failover
- recovery-method keyword
- recovery-time number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)
- l2tpv3
- private-tcp-mss-adjust (number | keyword)
- public-tcp-mss-adjust (number | keyword)
- lac
- df-bit keyword
- lns
- lns-group reference
- load-balance-method keyword
- mlppp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- endpoint
- ip (ipv4-address | keyword)
- mac (mac-address | keyword)
- interleave keyword
- max-fragment-delay number
- max-links number
- reassembly-timeout number
- short-sequence-numbers keyword
- ppp
- authentication keyword
- authentication-policy string
- chap-challenge-length
- end number
- start number
- default-group-interface
- interface string
- service-name string
- ipcp-subnet-negotiation keyword
- keepalive
- interval number
- multiplier number
- lcp-force-ack-accm keyword
- lcp-ignore-magic-numbers keyword

```

configure service vprn l2tp group tunnel lns ppp mtu

```

    - mtu number
    - proxy-authentication keyword
    - proxy-lcp keyword
    - reject-disabled-ncp keyword
    - user-db string
  - local-address string
  - local-name string
  - max-retries-estab number
  - max-retries-not-estab number
  - password string
  - peer string
  - preference number
  - radius-accounting-policy reference
  - receive-window-size number
  - remote-name string
  - session-limit (number | keyword)
- group-session-limit number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)
- ignore-avps
  - sequencing-required boolean
- l2tpv3
  - cookie-length number
  - digest-type keyword
  - nonce-length number
  - password string
  - private-tcp-mss-adjust number
  - public-tcp-mss-adjust number
  - transport-type
    - ip boolean
- lac
  - calling-number-format string
  - cisco-nas-port
    - ethernet string
  - df-bit boolean
  - local-address string
  - local-name string
  - max-retries-estab number
  - max-retries-not-estab number
  - next-attempt keyword
  - password string
  - peer-address-change-policy keyword
  - radius-accounting-policy reference
  - receive-window-size number
  - replace-result-code
    - cdn-invalid-dst boolean
    - cdn-permanent-no-facilities boolean
    - cdn-temporary-no-facilities boolean
- rtm-debounce-time (number | keyword)
- session-assign-method keyword
- session-limit number
- tunnel-selection-blacklist
  - add-tunnel-on
    - address-change-timeout boolean
    - cdn-err-code boolean
    - cdn-invalid-dst boolean
    - cdn-permanent-no-facilities boolean
    - cdn-temporary-no-facilities boolean
    - stop-ccn-err-code boolean
    - stop-ccn-other boolean
    - tx-cdn-not-established-in-time boolean
  - max-list-length (number | keyword)
  - max-time number
  - timeout-action keyword

```

configure service vpn l2tp tunnel-session-limit

- **tunnel-session-limit** *number*
- **label-mode** *keyword*
- **local-routes-domain-id** *string*
- **log**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **filter** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **description** *string*
 - **named-entry** *string*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match**
 - **application**
 - **eq** *keyword*
 - **neq** *keyword*
 - **event**
 - **eq** *number*
 - **gt** *number*
 - **gte** *number*
 - **lt** *number*
 - **lte** *number*
 - **neq** *number*
 - **message**
 - **eq** *string*
 - **neq** *string*
 - **regexp** *boolean*
 - **severity**
 - **eq** *keyword*
 - **gt** *keyword*
 - **gte** *keyword*
 - **lt** *keyword*
 - **lte** *keyword*
 - **neq** *keyword*
 - **subject**
 - **eq** *string*
 - **neq** *string*
 - **regexp** *boolean*
- **log-id** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **destination**
 - **netconf**
 - **max-entries** *number*
 - **snmp**
 - **max-entries** *number*
 - **syslog** *reference*
 - **filter** *reference*
 - **netconf-stream** *string*
 - **python-policy** *reference*
 - **source**
 - **change** *boolean*
 - **debug** *boolean*
 - **main** *boolean*
 - **security** *boolean*
 - **time-format** *keyword*
- **snmp-trap-group** *string*
 - **apply-groups** *reference*

configure service vprn log snmp-trap-group apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- trap-target string
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - notify-community string
  - port number
  - replay boolean
  - security-level keyword
  - version keyword
- syslog string
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - facility keyword
  - log-prefix (keyword | string)
  - port number
  - severity keyword
  - tls-client-profile reference
- management
  - allow-ftp boolean
  - allow-grpc boolean
  - allow-netconf boolean
  - allow-ssh boolean
  - allow-telnet boolean
  - allow-telnet6 boolean
  - apply-groups reference
  - apply-groups-exclude reference
- maximum-ipv4-routes
  - log-only boolean
  - threshold number
  - value number
- maximum-ipv6-routes
  - log-only boolean
  - threshold number
  - value number
- mc-maximum-routes
  - log-only boolean
  - threshold number
  - value number
- mld
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - forwarding-group-interface forwarding-service string group-interface-
name reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number

```

configure service vprn mld forwarding-group-interface query-response-interval

```

- query-response-interval number
- query-source-address string
- router-alert-check boolean
- sub-hosts-only boolean
- subnet-check boolean
- version keyword
- group-if-query-source-address string
- group-interface reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - query-source-address string
  - router-alert-check boolean
  - sub-hosts-only boolean
  - subnet-check boolean
  - version keyword
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - mc-constraints
      - level number
        - apply-groups reference
        - apply-groups-exclude reference
        - bandwidth number
      - number-down number
        - apply-groups reference
        - apply-groups-exclude reference
        - level number
      - use-lag-port-weight boolean
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - router-alert-check boolean
  - ssm-translate
    - group-range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
  - static
    - group string

```

configure service vpn mld interface static group apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **source** *string*
- **starg**
- **group-range start** *string end string step string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **source** *string*
- **starg**
- **version** *keyword*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **ssm-translate**
 - **group-range start** *string end string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
- **msdp**
 - **active-source-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **data-encapsulation** *boolean*
 - **export-policy** *reference*
 - **group** *string*
 - **active-source-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **local-address** *string*
 - **mode** *keyword*
 - **peer** *string*
 - **active-source-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **default-peer** *boolean*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **local-address** *string*
 - **receive-message-rate**
 - **rate** *number*
 - **threshold** *number*
 - **time** *number*
 - **receive-message-rate**
 - **rate** *number*
 - **threshold** *number*
 - **time** *number*
 - **import-policy** *reference*
 - **local-address** *string*
 - **peer** *string*
 - **active-source-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **default-peer** *boolean*
 - **export-policy** *reference*
 - **import-policy** *reference*

configure service vprn msdp peer local-address

```

- local-address string
- receive-message-rate
  - rate number
  - threshold number
  - time number
- receive-message-rate
  - rate number
  - threshold number
  - time number
- rpf-table keyword
- source string
  - active-source-limit number
  - apply-groups reference
  - apply-groups-exclude reference
  - source-active-cache-lifetime number
- mss-adjust
  - apply-groups reference
  - apply-groups-exclude reference
  - nat-group number
  - segment-size number
- mtrace2
  - admin-state keyword
  - udp-port number
- multicast-info-policy reference
- mvpn
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-discovery
    - source-address string
    - type keyword
  - c-mcast-signaling keyword
  - intersite-shared
    - admin-state keyword
    - kat-type5-advertisement-withdraw boolean
    - persistent-type5-advertisement boolean
  - mdt-type keyword
  - provider-tunnel
    - inclusive
      - bier
        - admin-state keyword
        - sub-domain number
      - bsr keyword
      - mldp
        - admin-state keyword
      - p2mp-sr
        - admin-state keyword
        - bfd-leaf boolean
        - bfd-root
          - multiplier number
          - transmit-interval number
        - p2mp-policy boolean
        - static-policy reference
      - pim
        - admin-state keyword
        - group-address string
        - hello-interval number
        - hello-multiplier number
        - improved-assert boolean
        - mode keyword
        - three-way-hello boolean
        - tracking-support boolean
    - rsvp
      - admin-state keyword
      - bfd-leaf boolean

```


configure service vprn mvpn provider-tunnel inclusive rsvp bfd-root

```

- bfd-root
  - multiplier number
  - transmit-interval number
- lsp-template reference
- umh-rate-monitoring
  - revertive-timer number
  - traffic-rate-delta number
- wildcard-spmsi boolean
- selective
  - asm-mdt boolean
  - auto-discovery boolean
  - bier
    - admin-state keyword
    - sub-domain number
  - data-delay-interval number
  - data-threshold
    - group-prefix (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - pe-threshold-add number
      - pe-threshold-delete number
      - threshold number
  - join-tlv-packing boolean
  - mldp
    - admin-state keyword
    - maximum-p2mp-spmsi number
  - multistream-spmsi number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - group-prefix (ipv4-prefix | ipv6-prefix) source-prefix (ipv4-prefix |
ipv6-prefix)
  - lsp-template reference
  - p2mp-sr
    - p2mp-policy boolean
    - static-policy reference
  - pim
    - group-address string
    - mode keyword
  - p2mp-sr
    - admin-state keyword
    - p2mp-policy boolean
    - static-policy reference
  - pim
    - group-prefix string
    - mode keyword
  - rsvp
    - admin-state keyword
    - lsp-template reference
    - maximum-p2mp-spmsi number
  - umh-rate-monitoring
    - group (ipv4-prefix | ipv6-prefix) source (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - revertive-timer number
      - traffic-rate-delta number
- redundant-source-list
- source-prefix (ipv4-prefix | ipv6-prefix)
- rpf-select
  - core-mvpn reference
  - apply-groups reference
  - apply-groups-exclude reference
  - group-prefix string
  - apply-groups reference

```

configure service vprn mvpn rpf-select core-mvpn group-prefix apply-groups-exclude

```

    - apply-groups-exclude reference
    - starg boolean
- umh-pe-backup
  - umh-pe string
    - apply-groups reference
    - apply-groups-exclude reference
    - standby string
- umh-selection keyword
- vrf-export
  - policy (policy-expr-string | string)
  - unicast boolean
- vrf-import
  - policy (policy-expr-string | string)
  - unicast boolean
- vrf-target
  - community string
  - export
    - community string
    - unicast boolean
  - import
    - community string
    - unicast boolean
    - unicast boolean
- nat
  - apply-groups reference
  - apply-groups-exclude reference
  - inside
    - l2-aware
      - subscribers string
    - large-scale
      - dnat-only
        - source-prefix-list reference
      - dual-stack-lite
        - admin-state keyword
        - deterministic
          - policy-map string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - map string to string
              - apply-groups reference
              - apply-groups-exclude reference
              - first-outside-address string
            - nat-policy reference
          - prefix-map string nat-policy reference
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - map string to string
              - apply-groups reference
              - apply-groups-exclude reference
              - first-outside-address string
        - endpoint string
          - apply-groups reference
          - apply-groups-exclude reference
          - ip-fragmentation keyword
          - min-first-fragment-size-rx number
          - reassemble boolean
          - tunnel-mtu number
        - max-subscriber-limit number
        - subscriber-prefix-length number
      - filters
        - downstream
          - ipv4 reference

```

configure service vprn nat inside large-scale nat-policy

```

- nat-policy reference
- nat44
  - destination-prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - nat-policy reference
- deterministic
  - policy-map string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - map string to string
  - apply-groups reference
  - apply-groups-exclude reference
  - first-outside-address string
  - nat-policy reference
  - prefix-map string nat-policy reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - map string to string
  - apply-groups reference
  - apply-groups-exclude reference
  - first-outside-address string
- max-subscriber-limit number
- nat-import reference
- nat64
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - drop-zero-ipv4-checksum boolean
  - insert-ipv6-fragment-header boolean
  - ip-fragmentation keyword
  - ipv6-mtu number
  - prefix string
  - subscriber-prefix-length number
  - tos
    - downstream
      - use-ipv4 boolean
    - upstream
      - set-tos (keyword | number)
- redundancy
  - peer string
  - peer6 string
  - steering-route string
- subscriber-identification
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - attribute
    - type keyword
    - vendor keyword
  - description string
  - drop-unidentified-traffic boolean
  - radius-proxy-server
    - router-instance string
    - server string
- map
  - map-domain reference
- outside
  - dnat-only
  - route-limit number
- filters
  - downstream

```

configure service vprn nat outside filters downstream ipv4

```

- ipv4 reference
- ipv6 reference
- upstream
  - ipv4 reference
  - ipv6 reference
- mtu number
- pool string
  - address-range string end string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - drain boolean
  - admin-state keyword
  - applications
    - agnostic boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - icmp-echo-reply boolean
  - l2-aware
    - default-host
      - inside-router-instance string
      - ip-address string
      - rate-limit number
    - external-assignment boolean
  - port-block-extension
    - ports number
    - subscriber
      - watermarks
        - high number
        - low number
    - subscriber-limit number
    - watermarks
      - high number
      - low number
  - large-scale
    - default-host
      - inside-router-instance string
      - ip-address string
      - rate-limit number
    - deterministic
      - port-reservation number
      - watermarks
        - high number
        - low number
    - redundancy
      - admin-state keyword
      - export-route string
      - follow
        - name string
        - router-instance string
      - monitor-route string
      - subscriber-limit number
- mode keyword
- nat-group reference
- port-forwarding
  - dynamic-block-reservation boolean
  - range-end number
  - range-start number
- port-reservation
  - port-blocks number
  - ports number
- type keyword
- watermarks

```

configure service vprn nat outside pool watermarks high

```

    - high number
    - low number
    - wlan-gw-group reference
- network
  - apply-groups reference
  - apply-groups-exclude reference
  - ingress
    - filter
      - ip reference
      - ipv6 reference
    - qos
      - fp-redirect-group reference
      - instance number
      - network-policy reference
      - urpf-check boolean
  - network-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cflowd-parameters
    - sampling keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - direction keyword
      - sample-profile (keyword | number)
      - type keyword
  - cpu-protection reference
  - description string
  - dist-cpu-protection reference
  - egress
    - filter
      - ip reference
  - hold-time
    - ipv4
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
  - ingress
    - filter
      - ip reference
  - ingress-stats boolean
  - ip-mtu number
  - ipv4
    - allow-directed-broadcasts boolean
    - bfd
      - admin-state keyword
      - echo-receive number
      - multiplier number
      - receive number
      - transmit-interval number
      - type keyword
    - icmp
      - mask-reply boolean
      - param-problem
        - admin-state keyword
        - number number
        - seconds number
      - redirects
        - admin-state keyword
        - number number
        - seconds number
    - ttl-expired

```

configure service vprn network-interface ipv4 icmp ttl-expired admin-state

- **admin-state** *keyword*
- **number** *number*
- **seconds** *number*
- **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **neighbor-discovery**
 - **retry-timer** *number*
 - **static-neighbor** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *string*
 - **timeout** *number*
- **primary**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast** *keyword*
 - **prefix-length** *number*
- **secondary** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast** *keyword*
 - **igp-inhibit** *boolean*
 - **prefix-length** *number*
- **tcp-mss** *number*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **lag**
 - **link-map-profile** *number*
 - **per-link-hash**
 - **class** *number*
 - **weight** *number*
- **load-balancing**
 - **flow-label-load-balancing** *boolean*
 - **ip-load-balancing** *keyword*
 - **lsr-load-balancing** *keyword*
 - **spi-load-balancing** *boolean*
 - **teid-load-balancing** *boolean*
- **loopback**
- **mac** *string*
- **port** *string*
- **qos**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress-instance** *number*
 - **egress-port-redirect-group** *reference*
 - **ingress-fp-redirect-group** *reference*
 - **ingress-instance** *number*
 - **network-policy** *reference*
 - **tos-marking-state** *keyword*
- **ntp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authenticate** *boolean*
 - **authentication-check** *boolean*
 - **authentication-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **key** *string*
 - **type** *keyword*

configure service vprn ntp broadcast

- **broadcast** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **key-id** *reference*
 - **ttl** *number*
 - **version** *number*
- **ospf** *number*
 - **admin-state** *keyword*
 - **advertise-router-capability** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area** *string*
 - **advertise-ne-profile** *reference*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area-range** *string*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **blackhole-aggregate** *boolean*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **interface** *string*
 - **admin-state** *keyword*
 - **advertise-router-capability** *boolean*
 - **advertise-subnet** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **bfd-liveness**
 - **remain-down-on-failure** *boolean*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **interface-type** *keyword*
 - **load-balancing-weight** *number*
 - **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
 - **lsa-filter-out** *keyword*
 - **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *string*
 - **metric** *number*
 - **mtu** *number*
 - **neighbor** *string*
 - **passive** *boolean*
 - **poll-interval** *number*
 - **priority** *number*
 - **retransmit-interval** *number*
 - **rib-priority** *keyword*
 - **transit-delay** *number*
 - **loopfree-alternate-exclude** *boolean*
 - **nssa**
 - **area-range** *string*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **originate-default-route**
 - **adjacency-check** *boolean*

configure service vprn ospf area nssa originate-default-route type-nssa

```

    - type-nssa boolean
    - redistribute-external boolean
    - summaries boolean
- sham-link string ip-address string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - authentication-keychain reference
    - authentication-type keyword
    - dead-interval number
    - hello-interval number
    - message-digest-key number
      - apply-groups reference
      - apply-groups-exclude reference
      - md5 string
    - metric number
    - retransmit-interval number
    - transit-delay number
- stub
    - default-metric number
    - summaries boolean
- virtual-link string transit-area reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - authentication-keychain reference
    - authentication-type keyword
    - dead-interval number
    - hello-interval number
    - message-digest-key number
      - apply-groups reference
      - apply-groups-exclude reference
      - md5 string
    - retransmit-interval number
    - transit-delay number
- compatible-rfc1583 boolean
- export-limit
    - log-percent number
    - number number
- export-policy reference
- external-db-overflow
    - interval number
    - limit number
- external-preference number
- graceful-restart
    - helper-mode boolean
    - strict-lsa-checking boolean
- ignore-dn-bit boolean
- import-policy reference
- loopfree-alternate
    - exclude
      - prefix-policy reference
- multicast-import boolean
- overload boolean
- overload-include-ext-1 boolean
- overload-include-ext-2 boolean
- overload-include-stub boolean
- overload-on-boot
    - timeout number
- preference number
- reference-bandwidth number
- rib-priority

```


configure service vpn ospf rib-priority high

- **high**
 - **prefix-list** *reference*
- **router-id** *string*
- **rtr-adv-lsa-limit**
 - **log-only** *boolean*
 - **max-lsa-count** *number*
 - **overload-timeout** (*number* | *keyword*)
 - **warning-threshold** *number*
- **super-backbone** *boolean*
- **suppress-dn-bit** *boolean*
- **timers**
 - **incremental-spf-wait** *number*
 - **lsa-accumulate** *number*
 - **lsa-arrival** *number*
 - **lsa-generate**
 - **lsa-initial-wait** *number*
 - **lsa-second-wait** *number*
 - **max-lsa-wait** *number*
 - **redistribute-delay** *number*
 - **spf-wait**
 - **spf-initial-wait** *number*
 - **spf-max-wait** *number*
 - **spf-second-wait** *number*
- **unicast-import** *boolean*
- **vpn-domain**
 - **id** *string*
 - **type** *keyword*
- **vpn-tag** *number*
- **ospf3** *number*
 - **admin-state** *keyword*
 - **advertise-router-capability** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area** *string*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area-range** (*ipv4-prefix* | *ipv6-prefix*)
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **blackhole-aggregate** *boolean*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **interface** *string*
 - **admin-state** *keyword*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication**
 - **inbound** *reference*
 - **outbound** *reference*
 - **bfd-liveness**
 - **remain-down-on-failure** *boolean*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **interface-type** *keyword*
 - **load-balancing-weight** *number*
 - **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
 - **lsa-filter-out** *keyword*
 - **metric** *number*

configure service vprn ospf3 area interface mtu

```

- mtu number
- neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
- passive boolean
- poll-interval number
- priority number
- retransmit-interval number
- rib-priority keyword
- transit-delay number
- key-rollover-interval number
- loopfree-alternate-exclude boolean
- nssa
  - area-range (ipv4-prefix | ipv6-prefix)
    - advertise boolean
    - apply-groups reference
    - apply-groups-exclude reference
  - originate-default-route
    - adjacency-check boolean
    - type-nssa boolean
  - redistribute-external boolean
  - summaries boolean
- stub
  - default-metric number
  - summaries boolean
- virtual-link string transit-area reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - inbound reference
    - outbound reference
  - dead-interval number
  - hello-interval number
  - retransmit-interval number
  - transit-delay number
- export-limit
  - log-percent number
  - number number
- export-policy reference
- external-db-overflow
  - interval number
  - limit number
- external-preference number
- graceful-restart
  - helper-mode boolean
  - strict-lsa-checking boolean
- ignore-dn-bit boolean
- import-policy reference
- loopfree-alternate
  - exclude
    - prefix-policy reference
- multicast-import boolean
- overload boolean
- overload-include-ext-1 boolean
- overload-include-ext-2 boolean
- overload-include-stub boolean
- overload-on-boot
  - timeout number
- preference number
- reference-bandwidth number
- rib-priority
  - high
    - prefix-list reference
- router-id string
- rtr-adv-lsa-limit

```

configure service vprn ospf3 rtr-adv-lsa-limit log-only

- **log-only** *boolean*
- **max-lsa-count** *number*
- **overload-timeout** (*number* | *keyword*)
- **warning-threshold** *number*
- **suppress-dn-bit** *boolean*
- **timers**
 - **incremental-spf-wait** *number*
 - **lsa-accumulate** *number*
 - **lsa-arrival** *number*
 - **lsa-generate**
 - **lsa-initial-wait** *number*
 - **lsa-second-wait** *number*
 - **max-lsa-wait** *number*
 - **redistribute-delay** *number*
 - **spf-wait**
 - **spf-initial-wait** *number*
 - **spf-max-wait** *number*
 - **spf-second-wait** *number*
- **unicast-import** *boolean*
- **pcp**
 - **server** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **dual-stack-lite-address** *string*
 - **fwd-inside-router** *string*
 - **interface** *reference*
 - **policy** *reference*
- **pim**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **apply-to** *keyword*
 - **bgp-nh-override** *boolean*
 - **import**
 - **join-policy** *reference*
 - **register-policy** *reference*
 - **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **assert-period** *number*
 - **bfd-liveness**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **bsm-check-rtr-alert** *boolean*
 - **hello-interval** *number*
 - **hello-multiplier** *number*
 - **improved-assert** *boolean*
 - **instant-prune-echo** *boolean*
 - **ipv4**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **monitor-oper-group**
 - **name** *reference*
 - **operation** *keyword*
 - **priority-delta** *number*
 - **multicast** *boolean*
 - **ipv6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **monitor-oper-group**
 - **name** *reference*

configure service vprn pim interface ipv6 monitor-oper-group operation

- **operation** *keyword*
- **priority-delta** *number*
- **multicast** *boolean*
- **max-groups** *number*
- **mcac**
 - **bandwidth**
 - **mandatory** (*number | keyword*)
 - **total** (*number | keyword*)
 - **interface-policy** *reference*
 - **mc-constraints**
 - **admin-state** *keyword*
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **number-down** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **use-lag-port-weight** *boolean*
 - **policy** *reference*
- **multicast-senders** *keyword*
- **p2mp-ldp-tree-join**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **priority** *number*
- **sticky-dr**
 - **priority** *number*
- **three-way-hello** *boolean*
- **tracking-support** *boolean*
- **ipv4**
 - **admin-state** *keyword*
 - **grt-extranet**
 - **any**
 - **group-prefix** (*ipv4-prefix | ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **starg** *boolean*
 - **rpf-table** *keyword*
 - **ssm-assert-compatible-mode** *boolean*
 - **ssm-default-range** *boolean*
- **ipv6**
 - **admin-state** *keyword*
 - **rpf-table** *keyword*
 - **ssm-default-range** *boolean*
- **mc-ecmp-balance** *boolean*
- **mc-ecmp-balance-hold** *number*
- **mc-ecmp-hashing**
 - **rebalance** *boolean*
- **mtu-over-head** *number*
- **non-dr-attract-traffic** *boolean*
- **rp**
 - **bootstrap**
 - **export** *reference*
 - **import** *reference*
 - **ipv4**
 - **anycast** *string* **rp-set-peer** *string*
 - **auto-rp-discovery** *boolean*
 - **bsr-candidate**
 - **address** *string*
 - **admin-state** *keyword*
 - **hash-mask-len** *number*
 - **priority** *number*
 - **candidate** *boolean*

configure service vprn pim rp ipv4 mapping-agent

```

- mapping-agent boolean
- rp-candidate
  - address string
  - admin-state keyword
  - group-range string
  - holdtime number
  - priority number
- static
  - address string
  - apply-groups reference
  - apply-groups-exclude reference
  - group-prefix string
  - override boolean
- ipv6
  - anycast string rp-set-peer string
  - bsr-candidate
    - address string
    - admin-state keyword
    - hash-mask-len number
    - priority number
  - embedded-rp
    - admin-state keyword
    - group-range string
  - rp-candidate
    - address string
    - admin-state keyword
    - group-range string
    - holdtime number
    - priority number
  - static
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - group-prefix string
    - override boolean
- spt-switchover (ipv4-prefix | ipv6-prefix)
  - apply-groups reference
  - apply-groups-exclude reference
  - threshold (number | keyword)
- ssm-groups
  - group-range (ipv4-prefix | ipv6-prefix)
- radius
  - apply-groups reference
  - apply-groups-exclude reference
  - proxy string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - attribute-matching
    - entry number
    - accounting-server-policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-server-policy string
    - prefix-string string
    - suffix-string string
  - type number
  - vendor (number | keyword)
- cache
  - admin-state keyword
  - key
    - attribute-type number
    - packet-type keyword
    - vendor (number | keyword)

```

configure service vprn radius proxy cache timeout

- **timeout** *number*
- **track-accounting**
 - **accounting-off** *boolean*
 - **accounting-on** *boolean*
 - **interim-update** *boolean*
 - **start** *boolean*
 - **stop** *boolean*
- **track-authentication**
 - **accept** *boolean*
- **track-delete-hold-time** *number*
- **defaults**
 - **accounting-server-policy** *string*
 - **authentication-server-policy** *string*
- **description** *string*
- **interface** *reference*
- **load-balance-key**
 - **attribute-1**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-2**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-3**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-4**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-5**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
- **source-ip-udp**
- **purpose** *keyword*
- **python-policy** *reference*
- **secret** *string*
- **send-accounting-response** *boolean*
- **wlan-gw**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv6-address** *string*
- **wlan-gw-group** *reference*
- **server** *string*
 - **accept-coa** *boolean*
 - **acct-port** *number*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auth-port** *number*
 - **description** *string*
 - **pending-requests-limit** *number*
 - **python-policy** *reference*
 - **secret** *string*
- **reassembly**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **nat-group** *number*
 - **to-base-network** *boolean*
- **redundant-interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **hold-time**

configure service vprn redundant-interface hold-time ipv4

```

- ipv4
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ip-mtu number
- ipv4
  - primary
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix-length number
    - remote-ip string
  - spoke-sdp string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - control-word boolean
    - description string
    - egress
      - filter
        - ip reference
        - vc-label number
    - ingress
      - filter
        - ip reference
        - vc-label number
- rip
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - authentication-type keyword
  - bfd-liveness boolean
  - check-zero boolean
  - description string
  - export-limit
    - log-percent number
    - number number
  - export-policy reference
  - group string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - authentication-type keyword
    - bfd-liveness boolean
    - check-zero boolean
    - description string
    - export-policy reference
    - import-policy reference
    - message-size number
    - metric-in number
    - metric-out number
    - neighbor string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - authentication-type keyword
      - bfd-liveness boolean
      - check-zero boolean
      - description string

```

configure service vprn rip group neighbor export-policy

```

- export-policy reference
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- unicast-address string
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- propagate-metric boolean
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- ripng
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bfd-liveness boolean
- check-zero boolean
- description string
- export-limit
  - log-percent number
  - number number
- export-policy reference
- group string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - check-zero boolean
  - description string
  - export-policy reference
  - import-policy reference
  - message-size number
  - metric-in number
  - metric-out number
  - neighbor reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness boolean
    - check-zero boolean

```


configure service vprn ripng group neighbor description

```

- description string
- export-policy reference
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- unicast-address string
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- router-id string
- segment-routing-v6 number
- apply-groups reference
- apply-groups-exclude reference
- locator reference
  - apply-groups reference
  - apply-groups-exclude reference
  - function
    - end-dt4
      - value number
    - end-dt46
      - value number
    - end-dt6
      - value number
- micro-segment-locator reference
  - apply-groups reference
  - apply-groups-exclude reference
  - function
    - udt4
      - value number
    - udt46
      - value number
    - udt6
      - value number
- selective-fib boolean
- service-id number
- sfm-overload
  - holdoff-time number
- sgt-qos

```

configure service vprn sgt-qos dot1p

- **dot1p**
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dot1p** (*keyword | number*)
- **dscp**
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dscp** (*keyword | number*)
 - **dscp-map** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
- **snmp**
 - **access** *boolean*
 - **community** *string*
 - **access-permissions** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source-access-list** *reference*
 - **version** *keyword*
- **source-address**
 - **ipv4** *keyword*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-name** *string*
 - **ipv6** *keyword*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **spoke-sdp** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
- **static-routes**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hold-down**
 - **initial** *number*
 - **max-value** *number*
 - **multiplier** *number*
 - **route** (*ipv4-prefix | ipv6-prefix*) **route-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-tag** *number*
 - **blackhole**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *string*
 - **description** *string*
 - **generate-icmp** *boolean*
 - **metric** *number*
 - **preference** *number*
 - **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
 - **tag** *number*
 - **community** *string*
 - **grt**
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure service vpn static-routes route grt apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **metric** *number*
- **preference** *number*
- **indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **community** *string*
- **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-count** *number*
 - **interval** *number*
 - **log** *boolean*
 - **padding-size** *number*
- **description** *string*
- **destination-class** *number*
- **metric** *number*
- **preference** *number*
- **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
- **qos**
 - **forwarding-class** *keyword*
 - **priority** *keyword*
- **source-class** *number*
- **tag** *number*
- **interface** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **community** *string*
- **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-count** *number*
 - **interval** *number*
 - **log** *boolean*
 - **padding-size** *number*
- **description** *string*
- **destination-class** *number*
- **load-balancing-weight** *number*
- **metric** *number*
- **preference** *number*
- **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
- **qos**
 - **forwarding-class** *keyword*
 - **priority** *keyword*
- **source-class** *number*
- **tag** *number*
- **ipsec-tunnel** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **community** *string*
- **description** *string*
- **destination-class** *number*
- **metric** *number*
- **preference** *number*
- **qos**
 - **forwarding-class** *keyword*

configure service vprn static-routes route ipsec-tunnel qos priority

- **priority** *keyword*
- **source-class** *number*
- **tag** *number*
- **next-hop** (*ipv4-address-with-zone | ipv6-address-with-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-next-hop**
 - **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **bfd-liveness** *boolean*
 - **community** *string*
 - **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-count** *number*
 - **interval** *number*
 - **log** *boolean*
 - **padding-size** *number*
 - **description** *string*
 - **destination-class** *number*
 - **load-balancing-weight** *number*
 - **metric** *number*
 - **preference** *number*
 - **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
 - **qos**
 - **forwarding-class** *keyword*
 - **priority** *keyword*
 - **source-class** *number*
 - **tag** *number*
 - **validate-next-hop** *boolean*
 - **tag** *number*
- **subscriber-interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **fwd-service** *reference*
 - **fwd-subscriber-interface** *reference*
 - **group-interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bonding-parameters**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **connection** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **service** *string*
 - **fpe** *reference*
 - **multicast**
 - **connection** (*number | keyword*)
- **brg**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authenticated-brg-only** *boolean*
 - **default-brg-profile** *reference*
- **cflowd-parameters**
 - **sampling** *keyword*
 - **apply-groups** *reference*

configure service vprn subscriber-interface group-interface cflowd-parameters sampling apply-groups-exclude

- **apply-groups-exclude** *reference*
- **direction** *keyword*
- **sample-profile** (*keyword | number*)
- **type** *keyword*
- **data-trigger**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **description** *string*
- **dynamic-routes-track-srrp**
 - **hold-time** *number*
- **gtp-parameters**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fpe** *reference*
- **gx-policy** *reference*
- **ingress**
 - **policy-accounting** *reference*
- **ingress-stats** *boolean*
- **ip-mtu** *number*
- **ipoe-linking**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **gratuitous-router-advertisement** *boolean*
 - **shared-circuit-id** *boolean*
- **ipoe-session**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **force-auth**
 - **cid-change** *boolean*
 - **rid-change** *boolean*
 - **ipoe-session-policy** *reference*
 - **min-auth-interval** (*keyword | number*)
 - **radius-session-timeout** *keyword*
 - **sap-session-limit** *number*
 - **session-limit** *number*
 - **stateless-redundancy** *boolean*
 - **user-db** *reference*
- **ipv4**
 - **arp-host**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **host-limit** *number*
 - **min-auth-interval** *number*
 - **sap-host-limit** *number*
 - **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*
 - **multiplier** *number*
 - **receive** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
 - **dhcp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **client-applications**
 - **dhcp** *boolean*
 - **ppp** *boolean*

configure service vprn subscriber-interface group-interface ipv4 dhcp description

```

- description string
- filter reference
- gi-address string
- lease-populate
  - l2-header
    - mac string
    - max-leases number
- match-circuit-id boolean
- offer-selection
  - client-mac
    - discover-delay number
    - mac-address keyword
  - discover-delay number
  - server string
    - apply-groups reference
    - apply-groups-exclude reference
    - discover-delay number
- option-82
  - action keyword
  - circuit-id
    - ascii-tuple
    - ifindex
    - none
    - sap-id
    - vlan-ascii-tuple
  - remote-id
    - ascii-string string
    - mac
    - none
  - vendor-specific-option
    - client-mac-address boolean
    - pool-name boolean
    - sap-id boolean
    - service-id boolean
    - string string
    - system-id boolean
- proxy-server
  - admin-state keyword
  - emulated-server string
  - lease-time
    - radius-override boolean
    - value number
- python-policy reference
- relay-proxy
  - release-update-src-ip boolean
  - siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- user-db reference
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number

```

configure service vprn subscriber-interface group-interface ipv4 icmp ttl-expired seconds

```

    - seconds number
    - use-matching-address boolean
  - unreachable
    - admin-state keyword
    - number number
    - seconds number
  - ignore-df-bit boolean
  - neighbor-discovery
    - local-proxy-arp boolean
    - populate boolean
    - proxy-arp-policy reference
    - remote-proxy-arp boolean
    - timeout number
  - qos-route-lookup keyword
  - urpf-check
    - mode keyword
- ipv6
  - allow-multiple-wan-addresses boolean
  - auto-reply
    - neighbor-solicitation boolean
    - router-solicitation boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp6
    - apply-groups reference
    - apply-groups-exclude reference
    - filter reference
    - option
      - apply-groups reference
      - apply-groups-exclude reference
      - interface-id
        - ascii-tuple
        - if-index
        - sap-id
        - string string
      - remote-id boolean
    - override-slaac boolean
  - pd-managed-route
    - next-hop keyword
  - proxy-server
    - admin-state keyword
    - client-applications
      - dhcp boolean
      - ppp boolean
    - preferred-lifetime (number | keyword)
    - rebind-timer number
    - renew-timer number
    - server-id
      - apply-groups reference
      - apply-groups-exclude reference
      - duid-en-ascii string
      - duid-en-hex string
      - duid-ll
    - valid-lifetime (number | keyword)
  - python-policy reference
  - relay
    - admin-state keyword
    - advertise-selection
      - client-mac

```

configure service vprn subscriber-interface group-interface ipv6 dhcp6 relay advertise-selection client-mac mac-address

```

    - mac-address keyword
    - preference-option
      - value number
    - solicit-delay number
  - preference-option
    - value number
  - server string
    - apply-groups reference
    - apply-groups-exclude reference
    - preference-option
      - value number
    - solicit-delay number
    - solicit-delay number
  - client-applications
    - dhcp boolean
    - ppp boolean
  - description string
  - lease-split
    - admin-state keyword
    - valid-lifetime number
  - link-address string
  - server string
  - source-address string
  - snooping
    - admin-state keyword
  - user-db reference
  - user-ident keyword
  - ipoe-bridged-mode boolean
  - neighbor-discovery
    - apply-groups reference
    - apply-groups-exclude reference
    - dad-snooping boolean
    - neighbor-limit number
  - qos-route-lookup keyword
  - router-advertisements
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - force-mcast keyword
    - max-advertisement-interval number
    - min-advertisement-interval number
    - options
      - current-hop-limit number
      - dns
        - include-rdnss boolean
        - rdns-lifetime (number | keyword)
    - managed-configuration boolean
    - mtu (number | keyword)
    - other-stateful-configuration boolean
    - reachable-time number
    - retransmit-timer number
    - router-lifetime (number | keyword)
  - prefix-options
    - autonomous boolean
    - on-link boolean
    - preferred-lifetime (number | keyword)
    - valid-lifetime (number | keyword)
  - router-solicit
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - inactivity-timer (number | keyword)
    - min-auth-interval number
    - user-db reference

```


configure service vprn subscriber-interface group-interface ipv6 urpf-check

- **urpf-check**
 - **mode** *keyword*
- **local-address-assignment**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **ipv4**
 - **client-applications**
 - **ipoe** *boolean*
 - **ppp** *boolean*
 - **default-pool** *string*
 - **server** *reference*
- **ipv6**
 - **client-applications**
 - **ipoe-slaac** *boolean*
 - **ipoe-wan** *boolean*
 - **ppp-slaac** *boolean*
 - **server** *reference*
- **mac** *string*
- **nasreq-auth-policy** *reference*
- **oper-up-while-empty** *boolean*
- **pppoe**
 - **admin-state** *keyword*
 - **anti-spoof** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **dhcp-client**
 - **client-id** *keyword*
 - **policy** *reference*
 - **python-policy** *reference*
 - **sap-session-limit** *number*
 - **session-limit** *number*
 - **user-db** *reference*
- **radius-auth-policy** *reference*
- **redundant-interface** *reference*
- **sap** *string*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **anti-spoof** *keyword*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **calling-station-id** *string*
 - **collect-stats** *boolean*
 - **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **default-host**
 - **ipv4** *reference* **prefix-length** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **next-hop** *string*
 - **ipv6** *string* **prefix-length** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **next-hop** *string*
- **description** *string*
- **dist-cpu-protection** *reference*
- **egress**

configure service vprn subscriber-interface group-interface sap egress agg-rate

- **agg-rate**
 - **adaptation-rule** *keyword*
 - **burst-limit** (*number* | *keyword*)
 - **limit-unused-bandwidth** *boolean*
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
- **filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **qos**
 - **policer-control-policy**
 - **policy-name** *reference*
 - **qinq-mark-top-only** *boolean*
 - **sap-egress**
 - **policy-name** *reference*
 - **scheduler-policy**
 - **policy-name** *reference*
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-lmm-fc-stats**
 - **fc** *keyword*
 - **fc-in-profile** *keyword*
 - **collect-lmm-stats** *boolean*
 - **mep** *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number*
 - **admin-state** *keyword*
 - **ais** *boolean*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **ccm-padding-size** *number*
 - **csf**
 - **multiplier** *decimal-number*
 - **description** *string*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
 - **fault-propagation** *keyword*
 - **grace**
 - **eth-ed**
 - **max-rx-defect-window** *number*
 - **priority** *number*
 - **rx-eth-ed** *boolean*
 - **tx-eth-ed** *boolean*
 - **eth-vsm-grace**
 - **rx-eth-vsm-grace** *boolean*
 - **tx-eth-vsm-grace** *boolean*
 - **low-priority-defect** *keyword*
 - **one-way-delay-threshold** *number*
 - **sqlch-ingress-levels** *number*
 - **fwd-wholesale**
 - **pppoe-service** *reference*
 - **host-admin-state** *keyword*
 - **host-lockout-policy** *reference*
 - **igmp-host-tracking**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **expiry-time** *number*

configure service vprn subscriber-interface group-interface sap igmp-host-tracking import-policy

```

- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- router-alert-check boolean
- ingress
- filter
  - ip reference
  - ipv6 reference
- qos
  - match-qinq-dot1p keyword
  - policer-control-policy
    - policy-name reference
  - sap-ingress
    - policy-name reference
    - queuing-type keyword
  - scheduler-policy
    - policy-name reference
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- monitor-oper-group reference
- multi-service-site reference
- oper-group reference
- static-host
  - ipv4 string mac string
    - admin-state keyword
    - ancp-string string
    - app-profile
      - profile reference
      - scope keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - managed-route string
      - apply-groups reference
      - apply-groups-exclude reference
    - cpe-check
      - apply-groups reference
      - apply-groups-exclude reference
      - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
      - drop-count number
      - failed-action
        - metric number
        - preference number
        - tag number
        - withdraw boolean
      - interval number
      - log boolean
      - padding-size number
      - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
      - timeout number
    - metric number
    - preference number
    - tag number
  - rip-policy reference
  - shcv
  - sla-profile reference
  - sub-profile reference
  - subscriber-id

```

configure service vprn subscriber-interface group-interface sap static-host ipv4 subscriber-id string

```

    - string string
    - use-sap-id
- ipv6 string mac string
  - admin-state keyword
  - ancp-string string
  - app-profile
    - profile reference
    - scope keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - int-dest-id string
  - mac-linking string
  - managed-route string
    - apply-groups reference
    - apply-groups-exclude reference
  - cpe-check
    - apply-groups reference
    - apply-groups-exclude reference
    - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
    - drop-count number
    - failed-action
      - metric number
      - preference number
      - tag number
      - withdraw boolean
    - interval number
    - log boolean
    - padding-size number
    - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
      - timeout number
      - metric number
      - preference number
      - tag number
    - retail-svc-id number
    - shcv
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - string string
      - use-sap-id
- mac-learning
  - data-triggered boolean
  - single-mac boolean
- sub-sla-mgmt
- admin-state keyword
- defaults
  - app-profile reference
  - int-dest-id
    - string string
    - top-q-tag
  - sla-profile reference
  - sub-profile reference
  - subscriber-id
    - auto-id
    - sap-id
    - string string
- single-sub-parameters
  - non-sub-traffic
    - app-profile reference
    - sla-profile reference
    - sub-profile reference
    - subscriber-id string

```

configure service vprn subscriber-interface group-interface sap sub-sla-mgmt single-sub-parameters profiled-traffic-only

- **profiled-traffic-only** *boolean*
- **sub-ident-policy** *reference*
- **subscriber-limit** (*keyword* | *number*)
- **sap-parameters**
 - **anti-spoof** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **sub-sla-mgmt**
 - **defaults**
 - **app-profile** *reference*
 - **sla-profile** *reference*
 - **sub-profile** *reference*
 - **subscriber-id**
 - **auto-id**
 - **string** *string*
 - **sub-ident-policy** *reference*
 - **shcv-policy** *reference*
 - **shcv-policy-ipv4** *reference*
 - **shcv-policy-ipv6** *reference*
 - **srrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** *string*
 - **interface-name** *string*
 - **service-name** *string*
 - **description** *string*
 - **gw-mac** *string*
 - **keep-alive-interval** *number*
 - **message-path** *reference*
 - **monitor-oper-group**
 - **group-name** *reference*
 - **priority-step** *number*
 - **one-garp-per-sap** *boolean*
 - **policy** *reference*
 - **preempt** *boolean*
 - **priority** *number*
 - **send-fib-population-packets** *keyword*
 - **suppress-aa-sub** *boolean*
 - **tos-marking-state** *keyword*
 - **type** *keyword*
 - **wlan-gw**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **gateway-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **purpose**
 - **xconnect** *boolean*
 - **gateway-router** *string*
 - **group-encryption**
 - **encryption-keygroup-inbound** *reference*
 - **encryption-keygroup-outbound** *reference*
 - **l2-ap**
 - **access-point** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **encap-type** *keyword*

configure service vprn subscriber-interface group-interface wlan-gw l2-ap access-point epipe-sap-template

```

    - epipe-sap-template reference
    - auto-sub-id-fmt keyword
    - default-encap-type keyword
- lanext
  - max-bd number
- learn-ap-mac
  - delay-auth boolean
- mobility
  - hold-time number
  - inter-tunnel-type boolean
  - inter-vlan boolean
  - trigger
    - control boolean
    - data boolean
    - iapp boolean
- oper-down-on-group-degrade boolean
- tcp-mss-adjust number
- tunnel-egress-qos
  - admin-state keyword
  - agg-rate-limit (number | keyword)
  - granularity keyword
  - hold-time (number | keyword)
  - multi-client-only boolean
  - qos reference
  - scheduler-policy reference
- tunnel-encaps
  - learn-l2tp-cookie (keyword | hex-string)
- vlan-range string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - hold-time number
    - local
      - coa-policy reference
      - default-ue-state keyword
    - on-control-plane boolean
    - policy reference
    - vlan-mismatch-timeout number
- data-triggered-ue-creation
  - admin-state keyword
  - arp boolean
  - create-proxy-cache-entry
    - mac-format string
    - proxy-server
      - name string
      - router-instance string
- dhcp4
  - admin-state keyword
  - dns string
  - l2-aware-ip-address (ipv4-unicast-address | keyword)
  - lease-time
    - active number
    - initial number
  - nbns string
- dhcp6
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preferred-lifetime
    - active number
    - initial number
  - valid-lifetime
    - active number
    - initial number

```

configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm

```

- dsm
- accounting-policy reference
- accounting-update
  - interval number
- admin-state keyword
- application-assurance
  - accounting-statistics boolean
  - profile reference
  - url-parameter string
- apply-groups reference
- apply-groups-exclude reference
- egress
  - policer reference
- ingress
  - ip-filter reference
  - policer reference
  - soft-quota-exhausted-filter reference
- one-time-redirect
  - port number
  - url string
- volume-quota-direction keyword
- extension string
- http-redirect-policy reference
- idle-timeout-action keyword
- l2-service
  - admin-state keyword
  - description string
  - service reference
- nat-policy reference
- retail-service string
- slaac
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preferred-lifetime
    - active number
    - initial number
  - valid-lifetime
    - active number
    - initial number
- vrgw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - brg
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - lanext
    - access
      - max-mac number
      - multi-access boolean
      - policer reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - assistive-address-resolution boolean
    - bd-mac-prefix string
    - mac-translation boolean
    - network
      - admin-state keyword
      - max-mac number
      - policer reference
- xconnect
  - accounting

```

configure service vprn subscriber-interface group-interface wlan-gw vlan-range xconnect accounting mobility-updates

```

    - mobility-updates boolean
    - policy reference
    - update-interval number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- wlan-gw-group reference
- wpp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - initial
    - app-profile reference
    - sla-profile reference
    - sub-profile reference
  - lease-time number
  - portal
    - name string
    - portal-group reference
    - router-instance string
  - restore-to-initial-on-disconnect boolean
  - triggered-hosts boolean
  - user-db reference
- hold-time
- ipv4
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ipv6
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ipoe-linking
  - apply-groups reference
  - apply-groups-exclude reference
  - gratuitous-router-advertisement boolean
- ipoe-session
  - apply-groups reference
  - apply-groups-exclude reference
  - session-limit number
- ipv4
  - address string
  - apply-groups reference
  - apply-groups-exclude reference
  - gateway string
  - holdup-time number
  - populate-host-routes boolean
  - prefix-length number
  - track-srrp number
- allow-unmatching-subnets boolean
- arp-host
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - host-limit number
- bfd
  - admin-state keyword
  - echo-receive number
  - multiplier number
  - receive number

```


configure service vprn subscriber-interface ipv4 bfd transmit-interval

- **transmit-interval** *number*
- **type** *keyword*
- **default-dns** *string*
- **dhcp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **client-applications**
 - **dhcp** *boolean*
 - **ppp** *boolean*
 - **description** *string*
 - **gi-address** *string*
 - **lease-populate**
 - **max-leases** *number*
 - **offer-selection**
 - **client-mac**
 - **discover-delay** *number*
 - **mac-address** *keyword*
 - **discover-delay** *number*
 - **server** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **discover-delay** *number*
 - **option-82**
 - **vendor-specific-option**
 - **client-mac-address** *boolean*
 - **sap-id** *boolean*
 - **service-id** *boolean*
 - **string** *string*
 - **system-id** *boolean*
 - **proxy-server**
 - **admin-state** *keyword*
 - **emulated-server** *string*
 - **lease-time**
 - **radius-override** *boolean*
 - **value** *number*
 - **python-policy** *reference*
 - **relay-proxy**
 - **release-update-src-ip** *boolean*
 - **siaddr-override** *string*
 - **release-include-gi-address** *boolean*
 - **server** *string*
 - **src-ip-addr** *keyword*
 - **virtual-subnet** *boolean*
- **export-host-routes** *boolean*
- **unnumbered**
 - **ip-address** *string*
 - **ip-int-name** *string*
- **ipv6**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **host-type** *keyword*
 - **prefix-length** *number*
 - **allow-multiple-wan-addresses** *boolean*
 - **allow-unmatching-prefixes** *boolean*
 - **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*
 - **multiplier** *number*
 - **receive** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
 - **default-dns** *string*

configure service vprn subscriber-interface ipv6 delegated-prefix-length

- **delegated-prefix-length** (number | keyword)
- **dhcp6**
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **override-slaac** boolean
 - **pd-managed-route**
 - **next-hop** keyword
 - **proxy-server**
 - **admin-state** keyword
 - **client-applications**
 - **dhcp** boolean
 - **ppp** boolean
 - **preferred-lifetime** (number | keyword)
 - **rebind-timer** number
 - **renew-timer** number
 - **server-id**
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **duid-en-ascii** string
 - **duid-en-hex** string
 - **duid-ll**
 - **valid-lifetime** (number | keyword)
 - **python-policy** reference
 - **relay**
 - **admin-state** keyword
 - **advertise-selection**
 - **client-mac**
 - **mac-address** keyword
 - **preference-option**
 - **value** number
 - **solicit-delay** number
 - **preference-option**
 - **value** number
 - **server** string
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **preference-option**
 - **value** number
 - **solicit-delay** number
 - **solicit-delay** number
 - **client-applications**
 - **dhcp** boolean
 - **ppp** boolean
 - **description** string
 - **lease-split**
 - **admin-state** keyword
 - **valid-lifetime** number
 - **link-address** string
 - **server** string
 - **source-address** string
 - **ipoe-bridged-mode** boolean
 - **link-local-address**
 - **address** string
 - **prefix** string
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **holdup-time** number
 - **host-type** keyword
 - **track-srrp** number
 - **router-advertisements**
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **force-mcast** keyword

configure service vprn subscriber-interface ipv6 router-advertisements max-advertisement-interval

- **max-advertisement-interval** *number*
- **min-advertisement-interval** *number*
- **options**
 - **current-hop-limit** *number*
 - **dns**
 - **include-rdnss** *boolean*
 - **rdnss-lifetime** (*number* | *keyword*)
 - **managed-configuration** *boolean*
 - **mtu** (*number* | *keyword*)
 - **other-stateful-configuration** *boolean*
 - **reachable-time** *number*
 - **retransmit-timer** *number*
 - **router-lifetime** (*number* | *keyword*)
- **prefix-options**
 - **autonomous** *boolean*
 - **on-link** *boolean*
 - **preferred-lifetime** (*number* | *keyword*)
 - **valid-lifetime** (*number* | *keyword*)
- **router-solicit**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inactivity-timer** (*number* | *keyword*)
- **local-address-assignment**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **ipv4**
 - **client-applications**
 - **ppp** *boolean*
 - **default-pool** *string*
 - **server** *reference*
- **ipv6**
 - **client-applications**
 - **ipoe-slaac** *boolean*
 - **ipoe-wan** *boolean*
 - **ppp-slaac** *boolean*
 - **server** *reference*
- **pppoe**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **session-limit** *number*
- **private-retail-subnets** *boolean*
- **wan-mode** *keyword*
- **wlan-gw**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **pool-manager**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcp6-client**
 - **dhcpv4-nat**
 - **admin-state** *keyword*
 - **link-address** *string*
 - **pool-name** *string*
 - **ia-na**
 - **admin-state** *keyword*
 - **link-address** *string*
 - **pool-name** *string*
 - **lease-query**
 - **max-retries** *number*
 - **servers** *string*
 - **slaac**
 - **admin-state** *keyword*

configure service vprn subscriber-interface wlan-gw pool-manager dhcp6-client slaac link-address

```

    - link-address string
    - pool-name string
    - source-ip (keyword | ipv6-address)
  - watermarks
    - high number
    - low number
  - wlan-gw-group reference
  - redundancy
    - admin-state keyword
    - export string
    - monitor string
  - subscriber-mgmt
    - apply-groups reference
    - apply-groups-exclude reference
    - multi-chassis-shunt-id number
    - up-resiliency
      - monitor-oper-group reference
      - apply-groups reference
      - apply-groups-exclude reference
      - health-drop number
  - ttl-propagate
    - local keyword
    - transit keyword
  - twamp-light
    - apply-groups reference
    - apply-groups-exclude reference
    - reflector
      - admin-state keyword
      - allow-ipv6-udp-checksum-zero boolean
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - prefix (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
      - type keyword
      - udp-port number
  - video-interface string
    - accounting-policy reference
    - address string
    - adi
      - scte30
        - ad-server string
        - local-address
          - apply-groups reference
          - apply-groups-exclude reference
          - control string
          - data string
        - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
    - channel string source string
      - apply-groups reference
      - apply-groups-exclude reference
      - channel-name string
      - description string
      - scte35-action keyword
      - zone-channel string zone-source string
        - adi-channel-name string
        - apply-groups reference
        - apply-groups-exclude reference
    - cpu-protection reference
    - description string

```

configure service vprn video-interface multicast-service

```

- multicast-service number
- output-format keyword
- rt-client
  - apply-groups reference
  - apply-groups-exclude reference
  - src-address string
- video-sap
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - apply-groups reference
    - apply-groups-exclude reference
    - filter
      - ip reference
    - qos
      - policy-name reference
  - ingress
    - apply-groups reference
    - apply-groups-exclude reference
    - filter
      - ip reference
    - qos
      - policy-name reference
  - video-group-id reference
- vprn-type keyword
- vxlan
  - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - fpe-id reference
- weighted-ecmp keyword
- wlan-gw
  - apply-groups reference
  - apply-groups-exclude reference
  - distributed-subscriber-mgmt
    - apply-groups reference
    - apply-groups-exclude reference
    - ipv6-tcp-mss-adjust number
  - mobility-triggered-accounting
    - admin-state keyword
    - hold-down number
    - include-counters boolean
  - xconnect
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - tunnel-source-ip string
    - wlan-gw-group reference
- wpp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - portal string
    - ack-auth-retry-count number
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ntf-logout-retry-count number
    - port-format keyword
    - retry-interval number
    - secret string
    - version number

```

3.43.1 service command descriptions

service

Synopsis	Enter the service context
Context	configure service
Tree	service
Introduced	16.0.R1
Platforms	All

cpipe [[service-name](#)] *string*

Synopsis	Enter the cpipe list instance
Context	configure service cpipe string
Tree	cpipe
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[service-name] *string*

Synopsis	Administrative service name
Context	configure service cpipe string
Tree	cpipe
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the service
Context	configure service cpipe string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

customer *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Service customer ID
Context **configure** *service cpipe string customer reference*
Tree *customer*
Reference **configure** *service customer string*
Notes This element is mandatory.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** *service cpipe string description string*
Tree *description*
String Length 1 to 80
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

endpoint [*name*] *string*

Synopsis Enter the **endpoint** list instance
Context **configure** *service cpipe string endpoint string*
Tree *endpoint*
Max. Instances 2
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[name] *string*

Synopsis	Service endpoint name
Context	configure <i>service cpipe string endpoint string</i>
Tree	<i>endpoint</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure <i>service cpipe string endpoint string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hold-time-active *number*

Synopsis	Time to hold the active state before entering standby when a local MC-LAG SAP goes down
Context	configure <i>service cpipe string endpoint string hold-time-active number</i>
Tree	<i>hold-time-active</i>
Range	1 to 60
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

revert-time (*number* | *keyword*)

Synopsis	Time to wait before reverting back to the primary spoke-sdp defined on this service endpoint
Context	configure <i>service cpipe string endpoint string revert-time (number keyword)</i>
Tree	<i>revert-time</i>

Range	1 to 600
Default	immediate
Units	seconds
Options	never, immediate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sap [[sap-id](#)] *string*

Synopsis	Enter the sap list instance
Context	configure service cpipe <i>string</i> sap <i>string</i>
Tree	sap
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[sap-id] *string*

Synopsis	SAP ID
Context	configure service cpipe <i>string</i> sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure service cpipe <i>string</i> sap <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service cpipe string sap string admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cem

Synopsis	Enter the cem context
Context	configure service cpipe string sap string cem
Tree	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

packet

Synopsis	Enter the packet context
Context	configure service cpipe string sap string cem packet
Tree	packet
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

jitter-buffer *number*

Synopsis	Jitter buffer size
Context	configure service cpipe string sap string cem packet jitter-buffer <i>number</i>
Tree	jitter-buffer
Range	1 to 250
Units	milliseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

payload-size *number*

Synopsis	Size of payload packets transmitted to PSN by CEM SAP
Context	configure service cpipe <i>string</i> sap <i>string</i> cem packet payload-size <i>number</i>
Tree	payload-size
Range	16 to 2048
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

report-alarm

Synopsis	Enter the report-alarm context
Context	configure service cpipe <i>string</i> sap <i>string</i> cem report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

buffer-overflow *boolean*

Synopsis	Report alarm for buffer overflow
Context	configure service cpipe <i>string</i> sap <i>string</i> cem report-alarm buffer-overflow <i>boolean</i>
Tree	buffer-overflow
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

buffer-underrun *boolean*

Synopsis	Report alarm for buffer underrun
Context	configure service cpipe <i>string</i> sap <i>string</i> cem report-alarm buffer-underrun <i>boolean</i>
Tree	buffer-underrun
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

malformed-packets *boolean*

Synopsis	Report alarm for malformed packets
Context	configure service cpipe string sap string cem report-alarm malformed-packets <i>boolean</i>
Tree	malformed-packets
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

packet-loss *boolean*

Synopsis	Report remote peer is currently in packet loss status
Context	configure service cpipe string sap string cem report-alarm packet-loss <i>boolean</i>
Tree	packet-loss
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-fault *boolean*

Synopsis	Report remote TDM interface is currently not in service
Context	configure service cpipe string sap string cem report-alarm remote-fault <i>boolean</i>
Tree	remote-fault
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-packet-loss *boolean*

Synopsis	Report remote peer is currently in packet loss status
Context	configure service cpipe string sap string cem report-alarm remote-packet-loss <i>boolean</i>
Tree	remote-packet-loss
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-rdi *boolean*

Synopsis	Report remote TDM interface is currently in RDI status
Context	configure service cpipe string sap string cem report-alarm remote-rdi <i>boolean</i>
Tree	remote-rdi
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

stray-packets *boolean*

Synopsis	Report alarm for stray packets
Context	configure service cpipe string sap string cem report-alarm stray-packets <i>boolean</i>
Tree	stray-packets
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rtp-header *boolean*

Synopsis	Use RTP header for transmitted packets to the PSN
Context	configure service cpipe string sap string cem rtp-header <i>boolean</i>
Tree	rtp-header
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	configure service cpipe string sap string collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service cpipe <i>string</i> sap <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 160
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	configure service cpipe <i>string</i> sap <i>string</i> dist-cpu-protection <i>reference</i>
Tree	dist-cpu-protection
Reference	configure system security dist-cpu-protection <i>policy</i> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

egress

Synopsis	Enter the egress context
Context	configure service cpipe <i>string</i> sap <i>string</i> egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

agg-rate

Synopsis	Enter the agg-rate context
Context	configure service cpipe <i>string</i> sap <i>string</i> egress agg-rate
Tree	agg-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	configure service cpipe <i>string</i> sap <i>string</i> egress agg-rate adaptation-rule <i>keyword</i>
Tree	adaptation-rule
Default	closest
Options	max, min, closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	configure service cpipe <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	configure service cpipe <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	configure service cpipe <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i>

Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis	Enter the qos context
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos
Tree	qos
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos policer-control-policy
Tree	policer-control-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enable the overrides context
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

root

Synopsis	Enter the root context
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root
Tree	root

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit
Context **configure** [service cpipe](#) *string* [sap](#) *string* [egress qos policer-control-policy overrides root](#)
[max-rate](#) (*number* | *keyword*)
Tree [max-rate](#)
Range 1 to 6400000000
Options max
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context
Context **configure** [service cpipe](#) *string* [sap](#) *string* [egress qos policer-control-policy overrides root](#)
[priority-mbs-thresholds](#)
Tree [priority-mbs-thresholds](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

min-thresh-separation (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space
Context **configure** [service cpipe](#) *string* [sap](#) *string* [egress qos policer-control-policy overrides root](#)
[priority-mbs-thresholds min-thresh-separation](#) (*number* | *keyword*)
Tree [min-thresh-separation](#)
Range 0 to 16777216
Units bytes
Options auto
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

priority [*priority-level*] *number*

Synopsis	Enter the priority list instance
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

[priority-level] *number*

Synopsis	Priority level
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i>

Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

sap-egress

Synopsis	Enter the sap-egress context
Context	configure service cpipe <i>string sap string egress qos sap-egress</i>
Tree	sap-egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enter the overrides context
Context	configure service cpipe <i>string sap string egress qos sap-egress overrides</i>
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure service cpipe <i>string sap string egress qos sap-egress overrides policer reference</i>
Tree	policer
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

[policer-id] *reference*

Synopsis	Policer unique ID
Context	configure service cpipe <i>string sap string egress qos sap-egress overrides policer reference</i>
Tree	policer

Reference	configure qos sap-egress <i>string</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate

Synopsis Enter the **percent-rate** context
Context **configure** [service cpipe string sap string egress qos sap-egress overrides policer reference percent-rate](#)
Tree [percent-rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cir decimal-number

Synopsis CIR percent rate
Context **configure** [service cpipe string sap string egress qos sap-egress overrides policer reference percent-rate cir decimal-number](#)
Tree [cir](#)
Range 0.00 to 100.00
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

pir decimal-number

Synopsis PIR percent rate
Context **configure** [service cpipe string sap string egress qos sap-egress overrides policer reference percent-rate pir decimal-number](#)
Tree [pir](#)
Range 0.01 to 100.00
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis Enter the **rate** context

Context	configure service cpipe string sap string egress qos sap-egress overrides policer reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service cpipe string sap string egress qos sap-egress overrides policer reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service cpipe string sap string egress qos sap-egress overrides policer reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service cpipe string sap string egress qos sap-egress overrides policer reference stat-mode <i>keyword</i>

Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i>
Tree	queue
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[queue-id] *reference*

Synopsis	Policer unique ID
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i>
Tree	queue
Reference	configure qos sap-egress <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

avg-frame-overhead decimal-number

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference avg-frame-overhead decimal-number
Tree	avg-frame-overhead
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

burst-limit (number | keyword)

Synopsis	Explicit shaping burst size for the queue
Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference burst-limit (number keyword)
Tree	burst-limit
Range	1 to 14000000

Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service cpipe string sap string egress qos sap-egress overrides queue <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service cpipe string sap string egress qos sap-egress overrides queue <i>reference</i> drop-tail
Tree	drop-tail
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low

Synopsis	Enter the low context
Context	configure service cpipe string sap string egress qos sap-egress overrides queue <i>reference</i> drop-tail low
Tree	low
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hs-class-weight *number*

Synopsis	Class weight override for the queue
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the hs-wred-queue context
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue
Tree	hs-wred-queue
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy applied to the HSQ queue group queue
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue policy <i>reference</i>
Tree	policy
Reference	configure qos slope-policy <i>string</i>

Introduced 20.10.R1
Platforms 7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [hs-wrr-weight](#) *number*
Tree [hs-wrr-weight](#)
Range 1 to 127
Default 1
Introduced 20.10.R1
Platforms 7750 SR-7/12/12e

mbs (*number* | *keyword*)

Synopsis MBS
Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [mbs](#) (*number* | *keyword*)
Tree [mbs](#)
Range 0 to 1073741824
Units bytes
Options auto
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

monitor-queue-depth

Synopsis Enable the **monitor-queue-depth** context
Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [monitor-queue-depth](#)
Tree [monitor-queue-depth](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to false , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

parent

Synopsis	Enter the parent context
Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference parent
Tree	parent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
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Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference parent cir-weight number
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight number

Synopsis	PIR parameter that overrides parent for queue group
Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference parent weight number
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir decimal-number

Synopsis	CIR percent rate
Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the rate context
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis	PIR rate
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Context	configure service cpipe string sap string egress qos sap-egress overrides queue reference rate pir (<i>number keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure service cpipe string sap string egress qos sap-egress policy-name reference
Tree	policy-name
Reference	configure qos sap-egress string
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service cpipe string sap string egress qos scheduler-policy
Tree	scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enter the overrides context
Context	configure service cpipe string sap string egress qos scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

scheduler [[scheduler-name](#)] *string*

Synopsis	Enter the scheduler list instance
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

parent

Synopsis	Enter the parent context
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> parent
Tree	parent
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** *service cpipe string sap string egress qos scheduler-policy overrides scheduler string parent cir-weight number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** *service cpipe string sap string egress qos scheduler-policy overrides scheduler string parent weight number*

Tree [weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis Enter the **rate** context

Context **configure** *service cpipe string sap string egress qos scheduler-policy overrides scheduler string rate*

Tree [rate](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** *service cpipe string sap string egress qos scheduler-policy overrides scheduler string rate cir (number | keyword)*

Tree [cir](#)

Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service cpipe <i>string</i> sap <i>string</i> egress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

endpoint *reference*

Synopsis	Endpoint name
Context	configure service cpipe <i>string</i> sap <i>string</i> endpoint <i>reference</i>
Tree	endpoint
Reference	configure service cpipe <i>string</i> endpoint <i>string</i>
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress

Synopsis Enter the **ingress** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#)

Tree [ingress](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis Enter the **qos** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#)

Tree [qos](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer-control-policy

Synopsis Enter the **policer-control-policy** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#)

Tree [policer-control-policy](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis Enable the **overrides** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#) [overrides](#)

Tree [overrides](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

root

Synopsis	Enter the root context
Context	configure service cpipe string sap string ingress qos policer-control-policy overrides root
Tree	root
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service cpipe string sap string ingress qos policer-control-policy overrides root max-rate (number keyword)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service cpipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service cpipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (number keyword)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes

Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

priority [[priority-level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

[priority-level] *number*

Synopsis	Priority level
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

sap-ingress

Synopsis	Enter the sap-ingress context
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress
Tree	sap-ingress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enter the overrides context
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ip-criteria
Tree	ip-criteria
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ip-criteria activate-entry-tag <i>number</i>
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ipv6-criteria
Tree	ipv6-criteria
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv6 criteria
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag <i>number</i>
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i>
Tree	policer
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i>
Tree	policer
Reference	configure qos sap-ingress <i>string</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service cpipe string sap string ingress qos sap-ingress overrides policer reference packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service cpipe string sap string ingress qos sap-ingress overrides policer reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service cpipe string sap string ingress qos sap-ingress overrides policer reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service cpipe string sap string ingress qos sap-ingress overrides policer reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis Enter the **rate** context
Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)
[reference](#) **rate**
Tree [rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cir (*number* | *keyword*)

Synopsis CIR rate
Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)
[reference](#) **rate** **cir** (*number* | *keyword*)
Tree [cir](#)
Range 0 to 6400000000
Units kilobps
Options max
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis PIR rate
Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)
[reference](#) **rate** **pir** (*number* | *keyword*)
Tree [pir](#)
Range 1 to 6400000000
Units kilobps
Options max
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i>
Tree	queue
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[[queue-id](#)] *reference*

Synopsis	Policer unique ID
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i>
Tree	queue
Reference	configure qos sap-ingress <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule

Tree	adaptation-rule
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail
Tree	drop-tail
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low

Synopsis	Enter the low context
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low
Tree	low
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824

Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

parent

Synopsis	Enter the parent context
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue reference parent
Tree	parent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
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Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue reference parent cir-weight number
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight number

Synopsis	PIR parameter that overrides parent for queue group
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue reference parent weight number
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir decimal-number

Synopsis	CIR percent rate
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue reference percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the rate context
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service cpipe string sap string ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis	PIR rate
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Context	configure service cpipe <i>string sap string ingress qos sap-ingress overrides queue reference rate pir</i> (<i>number keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Policy ID
Context	configure service cpipe <i>string sap string ingress qos sap-ingress policy-name reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queuing-type *keyword*

Synopsis	Queuing type
Context	configure service cpipe <i>string sap string ingress qos sap-ingress queuing-type keyword</i>
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service cpipe <i>string sap string ingress qos scheduler-policy</i>
Tree	scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enter the overrides context
Context	configure service cpipe string sap string ingress qos scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

scheduler [**scheduler-name**] *string*

Synopsis	Enter the scheduler list instance
Context	configure service cpipe string sap string ingress qos scheduler-policy overrides scheduler string
Tree	scheduler
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	configure service cpipe string sap string ingress qos scheduler-policy overrides scheduler string
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

parent

Synopsis Enter the **parent** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) **parent**

Tree [parent](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) **parent** [cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) **parent** [weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis Enter the **rate** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) **rate**

Tree [rate](#)

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate
Context **configure** [service cpipe](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* **rate** **cir** (*number* | *keyword*)
Tree [cir](#)
Range 0 to 6400000000
Units kilobps
Options sum, max
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis PIR at which the queue is to operate
Context **configure** [service cpipe](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* **rate** **pir** (*number* | *keyword*)
Tree [pir](#)
Range 1 to 6400000000
Units kilobps
Options max
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis Scheduler policy name
Context **configure** [service cpipe](#) *string* [sap](#) *string* [ingress qos scheduler-policy](#) *policy-name* *reference*
Tree [policy-name](#)
Reference **configure** [qos scheduler-policy](#) *string*
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lag

Synopsis	Enter the lag context
Context	configure service cpipe string sap string lag
Tree	lag
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multi-service-site *reference*

Synopsis	Multi service site name
Context	configure service cpipe string sap string multi-service-site reference
Tree	multi-service-site
Reference	configure service customer string multi-service-site string
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure service cpipe string service-id number
Tree	service-id
Range	1 to 2147483647
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

service-mtu *number*

Synopsis	MTU size
Context	configure service cpipe string service-mtu number
Tree	service-mtu
Range	1 to 9194

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

spoke-sdp [**sdp-bind-id**] *string*

Synopsis Enter the **spoke-sdp** list instance
Context **configure** *service cpipe string spoke-sdp string*
Tree *spoke-sdp*
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[sdp-bind-id] *string*

Synopsis SDP binding ID
Context **configure** *service cpipe string spoke-sdp string*
Tree *spoke-sdp*
String Length 3 to 16
Notes This element is part of a list key.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the SDP binding to the service
Context **configure** *service cpipe string spoke-sdp string admin-state keyword*
Tree *admin-state*
Default enable
Options enable, disable
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bandwidth (*number* | *keyword*)

Synopsis Bandwidth that is reserved for this SDP binding
Context **configure** *service cpipe string spoke-sdp string bandwidth (number | keyword)*

Tree	bandwidth
Range	0 to 100000000
Default	0
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bfd

Synopsis	Enter the bfd context
Context	configure service cpipe <i>string</i> spoke-sdp <i>string</i> bfd
Tree	bfd
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service cpipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-liveness
Tree	bfd-liveness
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	configure service cpipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-liveness encap <i>keyword</i>
Tree	encap
Default	ipv4
Options	ipv4
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	configure service cpipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-template <i>reference</i>
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context.
Reference	configure bfd bfd-template <i>string</i>
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

control-word *boolean*

Synopsis	Use control word as part of packet encapsulation
Context	configure service cpipe <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i>
Tree	control-word
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service cpipe <i>string</i> spoke-sdp <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

egress

Synopsis	Enter the egress context
Context	configure service cpipe <i>string</i> spoke-sdp <i>string</i> egress
Tree	egress
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis Enter the **qos** context
Context **configure** [service cpipe](#) *string* [spoke-sdp](#) *string* [egress qos](#)
Tree [qos](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

network

Synopsis Enter the **network** context
Context **configure** [service cpipe](#) *string* [spoke-sdp](#) *string* [egress qos network](#)
Tree [network](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis Network policy ID
Context **configure** [service cpipe](#) *string* [spoke-sdp](#) *string* [egress qos network policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos network](#) *string*
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-redirect-group

Synopsis Enter the **port-redirect-group** context
Context **configure** [service cpipe](#) *string* [spoke-sdp](#) *string* [egress qos network port-redirect-group](#)
Tree [port-redirect-group](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

group-name *reference*

Synopsis	Name of the egress port queue group
Context	configure service cpipe <i>string</i> spoke-sdp <i>string</i> egress qos network port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

instance *number*

Synopsis	Queue-group instance ID
Context	configure service cpipe <i>string</i> spoke-sdp <i>string</i> egress qos network port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service cpipe <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

endpoint

Synopsis	Enter the endpoint context
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Context	configure service cpipe string spoke-sdp string endpoint
Tree	endpoint
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

icb boolean



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	configure service cpipe string spoke-sdp string endpoint icb boolean
Tree	icb
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Endpoint name to which SDP bind is attached
Context	configure service cpipe string spoke-sdp string endpoint name reference
Tree	name
Reference	configure service cpipe string endpoint string
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

precedence (number | keyword)

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	configure service cpipe string spoke-sdp string endpoint precedence (number keyword)
Tree	precedence

Range	1 to 4
Default	4
Options	primary
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress

Synopsis	Enter the ingress context
Context	configure service cpipe string spoke-sdp string ingress
Tree	ingress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis	Enter the qos context
Context	configure service cpipe string spoke-sdp string ingress qos
Tree	qos
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

network

Synopsis	Enter the network context
Context	configure service cpipe string spoke-sdp string ingress qos network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service cpipe string spoke-sdp string ingress qos network fp-redirect-group
Tree	fp-redirect-group

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

group-name *reference*

Synopsis Name of the forwarding plane queue group template
Context **configure** [service](#) [cpipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [fp-redirect-group](#) [group-name](#) *reference*
Tree [group-name](#)
Reference **configure** [qos](#) [queue-group-templates](#) [ingress](#) [queue-group](#) *string*
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

instance *number*

Synopsis Instance of the forwarding-plane ingress Queue Group for this SDP binding
Context **configure** [service](#) [cpipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [fp-redirect-group](#) [instance](#) *number*
Tree [instance](#)
Range 1 to 65535
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis Network policy ID
Context **configure** [service](#) [cpipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos](#) [network](#) *string*
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure <i>service cpipe string spoke-sdp string ingress vc-label number</i>
Tree	<i>vc-label</i>
Range	1 to 1048575
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate as a test service
Context	configure <i>service cpipe string test boolean</i>
Tree	<i>test</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vc-switching *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use PW switching signaling for spoke SDPs in service
Context	configure <i>service cpipe string vc-switching boolean</i>
Tree	<i>vc-switching</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vc-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Circuit emulation service type
Context	configure <i>service cpipe string vc-type keyword</i>
Tree	<i>vc-type</i>
Options	satop-e1, satop-t1, cesopsn, cesopsn-cas
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vpn-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	configure <i>service cpipe string vpn-id number</i>
Tree	<i>vpn-id</i>
Range	1 to 2147483647
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

customer [*customer-name*] *string*

Synopsis	Enter the customer list instance
Context	configure <i>service customer string</i>
Tree	<i>customer</i>
Introduced	16.0.R1
Platforms	All

[*customer-name*] *string*

Synopsis	Customer name for a service
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Context	configure service customer string
Tree	customer
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

contact string

Synopsis	Service customer contact information
Context	configure service customer string contact string
Tree	contact
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

customer-id number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Customer ID
Context	configure service customer string customer-id number
Tree	customer-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure service customer string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

multi-service-site [[multi-service-site-name](#)] *string*

Synopsis Enter the **multi-service-site** list instance
Context **configure service customer** *string* [multi-service-site](#) *string*
Tree [multi-service-site](#)
Introduced 16.0.R1
Platforms All

[multi-service-site-name] *string*

Synopsis Customer site name
Context **configure service customer** *string* [multi-service-site](#) *string*
Tree [multi-service-site](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

assignment

Synopsis Enter the **assignment** context
Context **configure service customer** *string* [multi-service-site](#) *string* **assignment**
Tree [assignment](#)
Introduced 16.0.R1
Platforms All

card *number*

Synopsis Multi-service-site assignment to the card slot
Context **configure service customer** *string* [multi-service-site](#) *string* **assignment** [card](#) *number*
Tree [card](#)
Range 1 to 20
Notes The following elements are part of a choice: **card**, **fpe**, or **port**.

Introduced 16.0.R1
Platforms All

fpe reference

Synopsis Multi-service-site assignment to the FPE object

Context **configure service customer string multi-service-site string assignment fpe reference**

Tree **fpe**

Description When configured to **true**, this command identifies the MSS assignment to an FPE object to allow the creation of a scheduling hierarchy used to control bandwidth over a set of PW SAPs belonging to multiple PW ports. These PW ports must be associated with the same FPE to which MSS is assigned.

When configured to **false**, this command has no effect and returns no warnings or messages.

Reference **configure fwd-path-ext fpe number**

Notes The following elements are part of a choice: **card**, **fpe**, or **port**.

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port string

Synopsis Multi-service-site assignment to the port

Context **configure service customer string multi-service-site string assignment port string**

Tree **port**

Notes The following elements are part of a choice: **card**, **fpe**, or **port**.

Introduced 16.0.R1

Platforms All

description string

Synopsis Text description

Context **configure service customer string multi-service-site string description string**

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms All

egress

Synopsis	Enter the egress context
Context	configure service customer string multi-service-site string egress
Tree	egress
Introduced	16.0.R1
Platforms	All

agg-rate

Synopsis	Enter the agg-rate context
Context	configure service customer string multi-service-site string egress agg-rate
Tree	agg-rate
Introduced	16.0.R1
Platforms	All

limit-unused-bandwidth boolean

Synopsis	Enable aggregate rate overrun protection
Context	configure service customer string multi-service-site string egress agg-rate limit-unused-bandwidth boolean
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting boolean

Synopsis	Enable frame-based accounting on all policers and queues associated with context
Context	configure service customer string multi-service-site string egress agg-rate queue-frame-based-accounting boolean
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate number

Synopsis	Rate limit
Context	configure service customer <i>string</i> multi-service-site <i>string</i> egress agg-rate <i>rate</i> <i>number</i>
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

policer-control-policy reference

Synopsis	Policer control policy
Context	configure service customer <i>string</i> multi-service-site <i>string</i> egress policer-control-policy <i>reference</i>
Tree	policer-control-policy
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1

Platforms All

scheduler [[scheduler-name](#)] *string*

Synopsis Enter the **scheduler** list instance

Context **configure service customer** *string* **multi-service-site** *string* **egress scheduler-policy overrides scheduler** *string*

Tree [scheduler](#)

Introduced 16.0.R1

Platforms All

[scheduler-name] *string*

Synopsis Scheduler name

Context **configure service customer** *string* **multi-service-site** *string* **egress scheduler-policy overrides scheduler** *string*

Tree [scheduler](#)

Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (**#**, **\$**, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context does not change.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

parent

Synopsis Enter the **parent** context

Context	configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR for the scheduler
Context	configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
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Context **configure service customer** *string* **multi-service-site** *string* **ingress**
Tree [ingress](#)
Introduced 16.0.R1
Platforms All

policer-control-policy *reference*

Synopsis Policer control policy
Context **configure service customer** *string* **multi-service-site** *string* **ingress** **policer-control-policy** *reference*
Tree [policer-control-policy](#)
Reference **configure qos** **policer-control-policy** *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-policy

Synopsis Enter the **scheduler-policy** context
Context **configure service customer** *string* **multi-service-site** *string* **ingress** **scheduler-policy**
Tree [scheduler-policy](#)
Introduced 16.0.R1
Platforms All

overrides

Synopsis Enter the **overrides** context
Context **configure service customer** *string* **multi-service-site** *string* **ingress** **scheduler-policy** **overrides**
Tree [overrides](#)
Introduced 16.0.R1
Platforms All

scheduler [[scheduler-name](#)] *string*

Synopsis Enter the **scheduler** list instance

Context	configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR for the scheduler
Context	configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir

Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

phone *string*

Synopsis	Service customer telephone number information
Context	configure service customer <i>string</i> phone <i>string</i>
Tree	phone
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

epipe [[service-name](#)] *string*

Synopsis	Enter the epipe list instance
Context	configure service epipe <i>string</i>
Tree	epipe
Introduced	16.0.R1
Platforms	All

[service-name] *string*

Synopsis	Administrative service name
Context	configure service epipe <i>string</i>
Tree	epipe
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service
Context	configure service epipe <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bgp [[bgp-instance](#)] *number*

Synopsis	Enter the bgp list instance
Context	configure service epipe <i>string</i> bgp <i>number</i>
Tree	bgp
Introduced	16.0.R1
Platforms	All

[bgp-instance] *number*

Synopsis	BGP instance
Context	configure service epipe <i>string</i> bgp <i>number</i>
Tree	bgp
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

adv-service-mtu *number*

Synopsis Advertised service MTU value

Context **configure service epipe** *string* **bgp** *number* **adv-service-mtu** *number*

Tree [adv-service-mtu](#)

Description This command configures the MTU signaled value used in the BGP for the service. When configured, the router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.

Range 0 to 9782

Introduced 22.2.R1

Platforms All

pw-template-binding [[pw-template-name](#)] *reference*

Synopsis Enter the **pw-template-binding** list instance

Context **configure service epipe** *string* **bgp** *number* **pw-template-binding** *reference*

Tree [pw-template-binding](#)

Max. Instances 100

Introduced 16.0.R1

Platforms All

[pw-template-name] *reference*

Synopsis Policy name

Context **configure service epipe** *string* **bgp** *number* **pw-template-binding** *reference*

Tree [pw-template-binding](#)

Reference **configure service pw-template** *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure service epipe <i>string</i> bgp <i>number</i> pw-template-binding <i>reference</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template name for PW-Template binding
Context	configure service epipe <i>string</i> bgp <i>number</i> pw-template-binding <i>reference</i> bfd-template <i>reference</i>
Tree	bfd-template
Reference	configure bfd bfd-template <i>string</i>
Introduced	16.0.R1
Platforms	All

endpoint *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint name associated with the BGP PW template
Context	configure service epipe <i>string</i> bgp <i>number</i> pw-template-binding <i>reference</i> endpoint <i>reference</i>
Tree	endpoint
Description	This command specifies the endpoint name associated with the BGP PW template. When an endpoint is associated to the PW template binding of a BGP VPWS service, EVPN MPLS can also be configured and associated to the same endpoint in the same Epipe service.
Reference	configure service epipe <i>string</i> endpoint <i>string</i>
Introduced	20.5.R1
Platforms	All

import-rt *string*

Synopsis	Import route-target communities
Context	configure service epipe <i>string</i> bgp <i>number</i> pw-template-binding <i>reference</i> import-rt <i>string</i>
Tree	import-rt
String Length	10 to 28
Max. Instances	5
Introduced	16.0.R1
Platforms	All

route-distinguisher (*keyword* | *vpn-route-distinguisher*)

Synopsis	High-order 6 bytes that are used as string to compose VSI-ID for use in NLRI
Context	configure service epipe <i>string</i> bgp <i>number</i> route-distinguisher (<i>keyword</i> <i>vpn-route-distinguisher</i>)
Tree	route-distinguisher
Options	auto-rd
Introduced	16.0.R1
Platforms	All

route-target

Synopsis	Enter the route-target context
Context	configure service epipe <i>string</i> bgp <i>number</i> route-target
Tree	route-target
Introduced	16.0.R1
Platforms	All

export *string*

Synopsis	Extended community name for default import policy
Context	configure service epipe <i>string</i> bgp <i>number</i> route-target export <i>string</i>
Tree	export
String Length	10 to 28

Introduced 16.0.R1
Platforms All

import *string*

Synopsis Extended community name for default import policy
Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* [route-target](#) **import** *string*
Tree [import](#)
String Length 10 to 28
Introduced 16.0.R1
Platforms All

vsi-export *reference*

Synopsis VSI export policies
Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* **vsi-export** *reference*
Tree [vsi-export](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 19.10.R1
Platforms All

vsi-import *reference*

Synopsis VSI import policies
Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* **vsi-import** *reference*
Tree [vsi-import](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 19.10.R1
Platforms All

bgp-evpn

Synopsis	Enable the bgp-evpn context
Context	configure service epipe string bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

evi number

Synopsis	EVPN ID
Context	configure service epipe string bgp-evpn evi number
Tree	evi
Description	<p>This command configures an EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers.</p> <p>The following options are supported:</p> <p>If this EVPN identifier is not specified, the value is zero and no route distinguisher or route target is automatically derived from it. If the specified EVPN identifier is lower than 65535 and no other route distinguisher or route target is configured in the service, the following applies:</p> <ul style="list-style-type: none"> the route distinguisher is derived from <system_ip>:evi the route target is derived from <autonomous-system>:evi <p>If the specified EVPN identifier is higher than 65535 and no other route distinguisher or route target is configured in the service, the following applies.</p> <ul style="list-style-type: none"> The route distinguisher cannot be automatically derived. An error is generated if enabling EVPN is attempted without a route distinguisher. A manual or an auto-rd route distinguisher must be configured. The route target can only be automatically derived if the evi-three-byte-auto-rt command is configured. If configured, the route target is automatically derived in accordance with the rules described in RFC8365.
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

local-attachment-circuit [*name*] *string*

Synopsis	Enter the local-attachment-circuit list instance
----------	---

Context	configure service epipe string bgp-evpn local-attachment-circuit string
Tree	local-attachment-circuit
Max. Instances	2
Introduced	20.10.R1
Platforms	All

[name] *string*

Synopsis	Attachment circuit name
Context	configure service epipe string bgp-evpn local-attachment-circuit string
Tree	local-attachment-circuit
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

endpoint *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint name
Context	configure service epipe string bgp-evpn local-attachment-circuit string endpoint reference
Tree	endpoint
Reference	configure service epipe string endpoint string
Introduced	20.10.R1
Platforms	All

eth-tag *number*

Synopsis	Ethernet tag of the attachment circuit
Context	configure service epipe string bgp-evpn local-attachment-circuit string eth-tag number
Tree	eth-tag

Description	<p>This command configures the Ethernet tag value of the attachment circuit.</p> <p>When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit.</p> <p>When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe.</p>
Range	1 to 16777215
Introduced	20.10.R1
Platforms	All

mpls [*bgp-instance*] *number*

Synopsis	Enter the mpls list instance
Context	configure <i>service epipe string bgp-evpn mpls number</i>
Tree	<i>mpls</i>
Introduced	16.0.R1
Platforms	All

[bgp-instance] *number*

Synopsis	BGP instance
Context	configure <i>service epipe string bgp-evpn mpls number</i>
Tree	<i>mpls</i>
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP EVPN MPLS
Context	configure <i>service epipe string bgp-evpn mpls number admin-state keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms All

auto-bind-tunnel

Synopsis Enter the **auto-bind-tunnel** context

Context **configure service epipe string bgp-evpn mpls number auto-bind-tunnel**

Tree [auto-bind-tunnel](#)

Introduced 16.0.R1

Platforms All

allow-flex-algo-fallback *boolean*

Synopsis Enable flexible algorithm fallback

Context **configure service epipe string bgp-evpn mpls number auto-bind-tunnel allow-flex-algo-fallback boolean**

Tree [allow-flex-algo-fallback](#)

Description When configured to **true**, a BGP router with a Flex-Algorithm action configured (via the **configure policy-options policy-statement entry action flex-algo** command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.

When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.

Default false

Introduced 20.10.R1

Platforms All

ecmp *number*

Synopsis Maximum ECMP routes information

Context **configure service epipe string bgp-evpn mpls number auto-bind-tunnel ecmp number**

Tree [ecmp](#)

Range 1 to 32

Default 1

Introduced 19.10.R1

Platforms All

enforce-strict-tunnel-tagging *boolean*

Synopsis	Enable/disable enforcement of strict tunnel tagging
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel enforce-strict-tunnel-tagging <i>boolean</i>
Tree	enforce-strict-tunnel-tagging
Default	false
Introduced	16.0.R4
Platforms	All

resolution *keyword*

Synopsis	Resolution method for tunnel selection
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution <i>keyword</i>
Tree	resolution
Default	none
Options	none, filter, any
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter bgp <i>boolean</i>
Tree	bgp
Description	When configured to true , BGP searches the BGP LSP for the address of the BGP next hop.

When configured to **false**, BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.

Default	false
Introduced	16.0.R1
Platforms	All

ldp boolean

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter ldp boolean
Tree	ldp
Description	When configured to true , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop. When configured to false , LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

mpls-fwd-policy boolean

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter mpls-fwd-policy boolean
Tree	mpls-fwd-policy
Description	When configured to true , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop. When configured to false , the MPLS forwarding policy is not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

rib-api boolean

Synopsis	Use RIB API gRPC service for next-hop resolution
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Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter rib-api <i>boolean</i>
Tree	rib-api
Description	When configured to true , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service. When configured to false , the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter rsvp <i>boolean</i>
Tree	rsvp
Description	When configured to true , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID. When configured to false , the RSVP LSP is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-isis <i>boolean</i>
Tree	sr-isis
Description	When configured to true , BGP uses an IS-IS tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance. When configured to false , IS-IS tunneling is not used for next-hop resolution.

Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf boolean

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-ospf boolean
Tree	sr-ospf
Description	<p>When configured to true, BGP uses an OSPF tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF instance.</p> <p>When configured to false, OSPF tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf3 boolean

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-ospf3 boolean
Tree	sr-ospf3
Description	<p>When configured to true, BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance.</p> <p>When configured to false, OSPF3 tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	19.10.R1
Platforms	All

sr-policy boolean

Synopsis	Use SR policies for next-hop resolution
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Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	When configured to true , this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route. When configured to false , SR policies are not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Description	When configured to true , BGP uses an SR-TE tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID. When configured to false , SR-TE tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter udp <i>boolean</i>
Tree	udp
Description	When configured to true , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop. When configured to false , MPLS over UDP tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1

Platforms All

weighted-ecmp *boolean*

Synopsis Allow weighted load balancing

Context **configure** *service* *epipe string* *bgp-evpn mpls number* *auto-bind-tunnel* *weighted-ecmp boolean*

Tree [weighted-ecmp](#)

Description When configured to **true**, this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.

When configured to **false**, this command disables weighted ECMP for next-hop tunnel selection.

Default false

Introduced 22.7.R1

Platforms All

control-word *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the CW bit in the label message

Context **configure** *service* *epipe string* *bgp-evpn mpls number* *control-word boolean*

Tree [control-word](#)

Default false

Introduced 16.0.R1

Platforms All

default-route-tag *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Default route tag

Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> default-route-tag <i>string</i>
Tree	default-route-tag
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none">• If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	16.0.R4
Platforms	All

dynamic-egress-label-limit *boolean*

Synopsis	Enables dynamic egress label limit
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> dynamic-egress-label-limit <i>boolean</i>
Tree	dynamic-egress-label-limit
Description	<p>When configured to true, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> <p>When configured to false this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.</p>
Default	false
Introduced	22.2.R1
Platforms	All

ecmp number

Synopsis	Maximum ECMP routes information
Context	configure service epipe string bgp-evpn mpls number ecmp number
Tree	ecmp
Range	1 to 32
Default	1
Introduced	16.0.R1
Platforms	All

entropy-label boolean

Synopsis	Enable use of entropy-labels
Context	configure service epipe string bgp-evpn mpls number entropy-label boolean
Tree	entropy-label
Default	false
Introduced	16.0.R1
Platforms	All

evi-three-byte-auto-rt boolean



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	configure service epipe string bgp-evpn mpls number evi-three-byte-auto-rt boolean
Tree	evi-three-byte-auto-rt
Description	When configured to true , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). Where: <ul style="list-style-type: none">• Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken• A=0 (for auto-derivation)• Type=4 (EVI-based route-target)

- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

Default	false
Introduced	21.10.R1
Platforms	All

force-vc-forwarding *keyword*

Synopsis	VC forwarding action
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> force-vc-forwarding <i>keyword</i>
Tree	force-vc-forwarding
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group identifier
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>string</i>
Introduced	19.5.R1
Platforms	All

route-next-hop

Synopsis	Enter the route-next-hop context
Context	configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> route-next-hop
Tree	route-next-hop
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	19.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	configure <i>service epipe string bgp-evpn mpls number route-next-hop ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ip-address
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	19.10.R1
Platforms	All

system-ipv4



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	configure <i>service epipe string bgp-evpn mpls number route-next-hop system-ipv4</i>
Tree	system-ipv4
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	19.10.R1
Platforms	All

system-ipv6



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	configure <i>service epipe string bgp-evpn mpls number route-next-hop system-ipv6</i>
Tree	system-ipv6
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .

Introduced 19.10.R1
Platforms All

send-tunnel-encap

Synopsis Enter the **send-tunnel-encap** context
Context **configure** [service](#) [epipe](#) [string](#) [bgp-evpn](#) [mpls](#) [number](#) [send-tunnel-encap](#)
Tree [send-tunnel-encap](#)
Introduced 16.0.R1
Platforms All

mpls *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable MPLS encapsulation
Context **configure** [service](#) [epipe](#) [string](#) [bgp-evpn](#) [mpls](#) [number](#) [send-tunnel-encap](#) [mpls](#) *boolean*
Tree [mpls](#)
Default true
Introduced 16.0.R1
Platforms All

mpls-over-udp *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable MPLS over UDP encapsulation
Context **configure** [service](#) [epipe](#) [string](#) [bgp-evpn](#) [mpls](#) [number](#) [send-tunnel-encap](#) [mpls-over-udp](#) *boolean*
Tree [mpls-over-udp](#)
Default false
Introduced 16.0.R1
Platforms All

remote-attachment-circuit [*name*] *string*

Synopsis	Enter the remote-attachment-circuit list instance
Context	configure service epipe string <i>bgp-evpn remote-attachment-circuit string</i>
Tree	<i>remote-attachment-circuit</i>
Max. Instances	2
Introduced	20.10.R1
Platforms	All

[name] *string*

Synopsis	Attachment circuit name
Context	configure service epipe string <i>bgp-evpn remote-attachment-circuit string</i>
Tree	<i>remote-attachment-circuit</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

endpoint *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint name
Context	configure service epipe string <i>bgp-evpn remote-attachment-circuit string endpoint reference</i>
Tree	<i>endpoint</i>
Reference	configure service epipe string <i>endpoint string</i>
Introduced	20.10.R1
Platforms	All

eth-tag *number*

Synopsis	Ethernet tag of the attachment circuit
Context	configure service epipe <i>string</i> bgp-evpn remote-attachment-circuit <i>string</i> eth-tag <i>number</i>
Tree	eth-tag
Description	<p>This command configures the Ethernet tag value of the attachment circuit.</p> <p>When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit.</p> <p>When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe.</p>
Range	1 to 16777215
Introduced	20.10.R1
Platforms	All

segment-routing-v6 [[bgp-instance](#)] *number*

Synopsis	Enter the segment-routing-v6 list instance
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i>
Tree	segment-routing-v6
Description	Commands in this context configure the SRv6 instance that is used in the service.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[bgp-instance] *number*

Synopsis	BGP instance
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i>
Tree	segment-routing-v6
Range	1
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of segment routing over IPv6
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-route-tag *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> default-route-tag <i>string</i>
Tree	default-route-tag
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none">• If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ecmp number

Synopsis	Maximum ECMP value configured on the service
Context	configure service epipe string bgp-evpn segment-routing-v6 number <i>ecmp number</i>
Tree	ecmp
Range	1 to 32
Default	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

evi-three-byte-auto-rt boolean



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	configure service epipe string bgp-evpn segment-routing-v6 number <i>evi-three-byte-auto-rt boolean</i>
Tree	evi-three-byte-auto-rt
Description	<p>When configured to true, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). Where:</p> <ul style="list-style-type: none"> • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI <p>When configured to false, route target derivation is not allowed.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

force-vc-forwarding *keyword*

Synopsis	Datapath forwarding to force vlan-vc-type
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> force-vc-forwarding <i>keyword</i>
Tree	force-vc-forwarding
Description	<p>This command allows the system to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag added in the customer frame before sending it to the EVPN destinations.</p> <p>This command may be used in conjunction with the sap ingress vlan-translation command. If so used, the configured translated VLAN ID is the VLAN ID sent to the EVPN destinations as opposed to the service-delimiting tag VLAN ID. If the ingress SAP/SDP binding is 'null'-encapsulated, the output VLAN ID and pbits is zero.</p>
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

oper-group *reference*

Synopsis	Operational group
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> oper-group <i>reference</i>
Tree	oper-group
Description	<p>This command adds the BGP EVPN SRv6 instance or an Ethernet Segment (ES) as a member of the operational group.</p> <p>When configured on a BGP EVPN instance, the operational group is up when it is either empty (meaning that the operational group has no members) or at least an EVPN destination is created under the EVPN instance added as member. When configured, no other SAP, SDP binding, or BGP EVPN instance can be added to the same operational group within the same or different service.</p> <p>The operational group will be down when it is applied on a BGP EVPN instance as well as:</p> <ul style="list-style-type: none">• the service is admin-state disable• the BGP EVPN MPLS and VXLAN are admin-state disable• all the EVPN destinations in the instance are removed <p>When configured on an ES, the state of the operational group depends on the state of the SAPs contained in the ES. The operational group transitions to up if at least one SAP in the ES is up. The operational group goes down when all the associated SAPs are operationally down. The ES operational group should be monitored on the LAG associated to the ES, along with single-active multi-homing, so that the NDF state can be signaled to the CE by LAG standby signaling.</p>

Reference	configure service oper-group <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

resolution *keyword*

Synopsis	Resolution options for routes
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> resolution <i>keyword</i>
Tree	resolution
Default	route-table
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-next-hop

Synopsis	Enter the route-next-hop context
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> route-next-hop
Tree	route-next-hop
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> route-next-hop ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

system-ipv4



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> route-next-hop system-ipv4
Tree	system-ipv4
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

system-ipv6



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> route-next-hop system-ipv6
Tree	system-ipv6
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IPv6 address
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> source-address <i>string</i>
Tree	source-address

Description	<p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the router "base" segment-routing segment-routing-v6 source-address context.</p> <p>A source IPv6 address must be configured in this context or in the base router context.</p> <p>The system does not check if the address entered is a valid local address.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6

Synopsis	Enter the srv6 context
Context	configure service epipe string bgp-evpn segment-routing-v6 number srv6
Tree	srv6
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-locator *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	configure service epipe string bgp-evpn segment-routing-v6 number srv6 default-locator string
Tree	default-locator
Description	This command specifies the locator that exists in the SRv6 service instance and is used as the default locator for the service.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

instance *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Segment Routing SRv6 instance
Context	configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6 <i>instance reference</i>
Tree	instance
Reference	configure service epipe <i>string</i> segment-routing-v6 <i>number</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vxlan [[bgp-instance](#)] *number*

Synopsis	Enter the vxlan list instance
Context	configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i>
Tree	vxlan
Introduced	16.0.R1
Platforms	All

[[bgp-instance](#)] *number*

Synopsis	BGP instance
Context	configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i>
Tree	vxlan
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP EVPN VXLAN
Context	configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i> admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

default-route-tag *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i> default-route-tag <i>string</i>
Tree	default-route-tag
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	16.0.R4
Platforms	All

ecmp *number*

Synopsis	Maximum ECMP routes information
Context	configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i> ecmp <i>number</i>
Tree	ecmp
Range	1 to 32
Default	1

Introduced 16.0.R1
Platforms All

evi-three-byte-auto-rt *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Auto-derive the BGP EVPN route target

Context **configure service epipe string bgp-evpn vxlan number evi-three-byte-auto-rt boolean**

Tree **evi-three-byte-auto-rt**

Description When configured to **true**, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).
Where:

- Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken
- A=0 (for auto-derivation)
- Type=4 (EVI-based route-target)
- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

Default false

Introduced 21.10.R1

Platforms All

send-tunnel-encap *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Send VXLAN value in encapsulation extended community

Context **configure service epipe string bgp-evpn vxlan number send-tunnel-encap boolean**

Tree **send-tunnel-encap**

Description	When configured to true , this command sends the VXLAN value in the encapsulation that is advertised with the EVPN routes for the service. The encapsulation is encoded in RFC5512-based tunnel encapsulation extended communities. When configured to false , no encapsulation extended community is sent.
Default	true
Introduced	16.0.R1
Platforms	All

vxlan-instance *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VXLAN instance
Context	configure service epipe string bgp-evpn vxlan number vxlan-instance reference
Tree	vxlan-instance
Reference	configure service epipe string vxlan instance number
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

bgp-mh-site [[site-name](#)] *string*

Synopsis	Enter the bgp-mh-site list instance
Context	configure service epipe string bgp-mh-site string
Tree	bgp-mh-site
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[site-name] *string*

Synopsis	Name for the specific site
Context	configure service epipe string bgp-mh-site string
Tree	bgp-mh-site

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

activation-timer *number*

Synopsis	Time that the local sites are in standby status, waiting for BGP updates
Context	configure service epipe <i>string</i> bgp-mh-site <i>string</i> activation-timer <i>number</i>
Tree	activation-timer
Range	0 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the site
Context	configure service epipe <i>string</i> bgp-mh-site <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	configure service epipe <i>string</i> bgp-mh-site <i>string</i> boot-timer <i>number</i>
Tree	boot-timer
Range	0 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

id number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Site ID for the service
Context	configure service epipe string bgp-mh-site string id number
Tree	id
Description	This command configures the ID for the site. The ID must match between services but is local to the service.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

min-down-timer number

Synopsis	Minimum downtime for BGP multi-homing site after transition from up to down
Context	configure service epipe string bgp-mh-site string min-down-timer number
Tree	min-down-timer
Range	0 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

preference number

Synopsis	Preference value to advertise in the NLRI L2 extended community
Context	configure service epipe string bgp-mh-site string preference number
Tree	preference
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

sap string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to be associated with this site
Context	configure service epipe string bgp-mh-site string sap string
Tree	sap
String Length	1 to 45
Introduced	16.0.R1
Platforms	All

bgp-vpws

Synopsis	Enable the bgp-vpws context
Context	configure service epipe string bgp-vpws
Tree	bgp-vpws
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the VPWS edge instance
Context	configure service epipe string bgp-vpws admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

local-ve

Synopsis	Enter the local-ve context
Context	configure service epipe string bgp-vpws local-ve
Tree	local-ve
Introduced	16.0.R1

Platforms All

id number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Local VPWS edge ID
Context **configure service epipe string** *bgp-vpws local-ve id number*
Tree *id*
Range 1 to 65535
Introduced 16.0.R1
Platforms All

name string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Local VPWS instance name
Context **configure service epipe string** *bgp-vpws local-ve name string*
Tree *name*
String Length 1 to 32
Introduced 16.0.R1
Platforms All

remote-ve [name] string

Synopsis Enter the **remote-ve** list instance
Context **configure service epipe string** *bgp-vpws remote-ve string*
Tree *remote-ve*
Max. Instances 2
Introduced 16.0.R1
Platforms All

[name] *string*

Synopsis	Remote PE name to which a PW is to be signaled
Context	configure service epipe <i>string</i> bgp-vpws remote-ve <i>string</i>
Tree	remote-ve
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

id *number*

Synopsis	Remote VPWS edge ID
Context	configure service epipe <i>string</i> bgp-vpws remote-ve <i>string</i> id <i>number</i>
Tree	id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

customer *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	configure service epipe <i>string</i> customer <i>reference</i>
Tree	customer
Reference	configure service customer <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
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Context	configure service epipe string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

endpoint [name] string

Synopsis	Enter the endpoint list instance
Context	configure service epipe string endpoint string
Tree	endpoint
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[name] string

Synopsis	Service endpoint name
Context	configure service epipe string endpoint string
Tree	endpoint
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure service epipe string endpoint string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

hold-time-active *number*

Synopsis	Time to hold the active state before entering standby when a local MC-LAG SAP goes down
Context	configure service epipe <i>string</i> endpoint <i>string</i> hold-time-active <i>number</i>
Tree	hold-time-active
Range	1 to 60
Units	deciseconds
Introduced	16.0.R1
Platforms	All

revert-time (*number* | *keyword*)

Synopsis	Time to wait before reverting back to the primary spoke-sdp defined on this service endpoint
Context	configure service epipe <i>string</i> endpoint <i>string</i> revert-time (<i>number</i> <i>keyword</i>)
Tree	revert-time
Range	1 to 600
Default	immediate
Units	seconds
Options	never, immediate
Introduced	16.0.R1
Platforms	All

standby-signaling *keyword*

Synopsis	Endpoint behavior to handle the PW standby bit
Context	configure service epipe <i>string</i> endpoint <i>string</i> standby-signaling <i>keyword</i>
Tree	standby-signaling
Options	master, slave
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
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Context	configure service epipe <i>string eth-cfm</i>
Tree	eth-cfm
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ignore-l2vpn-mtu-mismatch *boolean*

Synopsis	Ignore the L2 VPN MTU mismatch with local service MTU
Context	configure service epipe <i>string ignore-l2vpn-mtu-mismatch</i> <i>boolean</i>
Tree	ignore-l2vpn-mtu-mismatch
Description	<p>When configured to true, the router does not check the value of the Layer 2 MTU in the Layer2 Info Extended Community received in a BGP update message against the local service MTU or locally signaled MTU. It may, therefore, bring up the BGP VPWS service regardless of any MTU mismatch.</p> <p>When configured to false, an MTU mismatch prevents the system from bringing up a BGP-VPWS service.</p>
Default	false
Introduced	22.2.R1
Platforms	All

load-balancing

Synopsis	Enter the load-balancing context
Context	configure service epipe <i>string load-balancing</i>
Tree	load-balancing
Introduced	16.0.R1
Platforms	All

lbl-eth-or-ip-l4-teid *boolean*

Synopsis	Enable hashing of MPLS ethernet and IP packets on SAPs
Context	configure service epipe <i>string load-balancing lbl-eth-or-ip-l4-teid</i> <i>boolean</i>
Tree	lbl-eth-or-ip-l4-teid
Description	<p>When configured to true, this command enables hashing of MPLS Ethernet and MPLS IP packets received on the Epipe and VPLS service SAP using the MPLS labels, the inner IP addresses, the port numbers, and the GTP TEID field, if read by the system. This capability is supported on line cards that are FP4-based and later.</p>

Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

per-service-hashing *boolean*

Synopsis	Enable per-service hashing for Ethernet services
Context	configure service epipe <i>string</i> load-balancing per-service-hashing <i>boolean</i>
Tree	per-service-hashing
Default	false
Introduced	16.0.R1
Platforms	All

nat-outside [[nat-group](#)] *number*

Synopsis	Enter the nat-outside list instance
Context	configure service epipe <i>string</i> nat-outside <i>number</i>
Tree	nat-outside
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[nat-group] *number*

Synopsis	NAT group
Context	configure service epipe <i>string</i> nat-outside <i>number</i>
Tree	nat-outside
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Epipe as a NAT outside service
Context	configure service epipe <i>string</i> nat-outside <i>number</i> admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

oper-group *reference*

Synopsis	Oper-group name
Context	configure service epipe <i>string</i> oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R1
Platforms	All

pbb

Synopsis	Enter the pbb context
Context	configure service epipe <i>string</i> pbb
Tree	pbb
Introduced	16.0.R1
Platforms	All

force-qtag-forwarding *boolean*

Synopsis	Add an IEEE 802.1q tag after CMAC addresses PBB header
Context	configure service epipe <i>string</i> pbb force-qtag-forwarding <i>boolean</i>
Tree	force-qtag-forwarding
Default	false
Introduced	16.0.R1
Platforms	All

local-switch-service-state *keyword*

Synopsis	Endpoint state used to determine PBB-Epipe state
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Context	configure service epipe <i>string</i> pbb local-switch-service-state <i>keyword</i>
Tree	local-switch-service-state
Description	In a PBB Epipe with two SAPs and a PBB tunnel, this command controls whether the operational state of the PBB-Epipe service depends on the state of the PBB tunnel only, or on the state of two of the three endpoints (PBB tunnel and two SAPs). The second case implies that at least one of the SAPs must be up for the PBB-Epipe service to be operationally up.
Default	sap
Options	sap, pbb-tunnel
Introduced	21.7.R1
Platforms	All

tunnel

Synopsis	Enable the tunnel context
Context	configure service epipe <i>string</i> pbb tunnel
Tree	tunnel
Introduced	16.0.R1
Platforms	All

backbone-dest-mac *string*

Synopsis	Backbone Destination MAC address
Context	configure service epipe <i>string</i> pbb tunnel backbone-dest-mac <i>string</i>
Tree	backbone-dest-mac
Notes	The following elements are part of a mandatory choice: backbone-dest-mac or backbone-dest-mac-name .
Introduced	16.0.R1
Platforms	All

backbone-dest-mac-name *reference*

Synopsis	Backbone destination MAC name for PBB packets
Context	configure service epipe <i>string</i> pbb tunnel backbone-dest-mac-name <i>reference</i>
Tree	backbone-dest-mac-name
Reference	configure service pbb mac <i>string</i>

Notes	The following elements are part of a mandatory choice: backbone-dest-mac or backbone-dest-mac-name .
Introduced	16.0.R1
Platforms	All

backbone-vpls-service-name *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Backbone VPLS service
Context	configure service epipe string pbb tunnel backbone-vpls-service-name <i>reference</i>
Tree	backbone-vpls-service-name
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

isid *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service instance ID
Context	configure service epipe string pbb tunnel isid <i>number</i>
Tree	isid
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sap [[sap-id](#)] *string*

Synopsis	Enter the sap list instance
Context	configure service epipe string sap <i>string</i>

Tree	sap
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
Context	configure service epipe <i>string</i> sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aarp

Synopsis	Enable the aarp context
Context	configure service epipe <i>string</i> sap <i>string</i> aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis	AARP instance ID
Context	configure service epipe <i>string</i> sap <i>string</i> aarp <i>id</i> <i>reference</i>
Tree	id
Reference	configure application-assurance aarp <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Role referenced by the AARP
Context	configure service epipe <i>string</i> sap <i>string</i> aarp <i>type</i> <i>keyword</i>
Tree	type
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure service epipe <i>string</i> sap <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service epipe <i>string</i> sap <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

app-profile *reference*

Synopsis	Application profile name
Context	configure service epipe <i>string</i> sap <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis SAP bandwidth
Context **configure** *service epipe string sap string bandwidth number*
Tree [bandwidth](#)
Range 1 to 6400000000
Units kilobps
Introduced 16.0.R1
Platforms All

cflowd *boolean*

Synopsis Enable Cflowd collection and analysis on this SAP
Context **configure** *service epipe string sap string cflowd boolean*
Tree [cflowd](#)
Default false
Introduced 16.0.R1
Platforms All

collect-stats *boolean*

Synopsis Collect accounting statistics
Context **configure** *service epipe string sap string collect-stats boolean*
Tree [collect-stats](#)
Default false
Introduced 16.0.R1
Platforms All

cpu-protection

Synopsis Enter the **cpu-protection** context
Context **configure** *service epipe string sap string cpu-protection*
Tree [cpu-protection](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context
Context **configure** [service](#) [epipe](#) [string](#) [sap](#) [string](#) [cpu-protection](#) [eth-cfm-monitoring](#)
Tree [eth-cfm-monitoring](#)
Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates
Context **configure** [service](#) [epipe](#) [string](#) [sap](#) [string](#) [cpu-protection](#) [eth-cfm-monitoring](#) [aggregate](#)
Tree [aggregate](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate
Context **configure** [service](#) [epipe](#) [string](#) [sap](#) [string](#) [cpu-protection](#) [eth-cfm-monitoring](#) [car](#)
Tree [car](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis Monitor MAC for CPU protection
Context **configure** [service](#) [epipe](#) [string](#) [sap](#) [string](#) [cpu-protection](#) [mac-monitoring](#)
Tree [mac-monitoring](#)
Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis CPM protection policy
Context **configure** [service epipe](#) *string* [sap](#) *string* [cpu-protection](#) [policy-id](#) *reference*
Tree [policy-id](#)
Reference **configure** [system security](#) [cpu-protection](#) [policy](#) *number*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** [service epipe](#) *string* [sap](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 160
Introduced 16.0.R1
Platforms All

dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP
Context **configure** [service epipe](#) *string* [sap](#) *string* [dist-cpu-protection](#) *reference*
Tree [dist-cpu-protection](#)
Reference **configure** [system security](#) [dist-cpu-protection](#) [policy](#) *string*
Introduced 16.0.R1
Platforms All

egress

Synopsis Enter the **egress** context
Context **configure** [service epipe](#) *string* [sap](#) *string* [egress](#)
Tree [egress](#)
Introduced 16.0.R1

Platforms All

agg-rate

Synopsis Enter the **agg-rate** context
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [agg-rate](#)
Tree [agg-rate](#)
Notes The following elements are part of a choice: **agg-rate** or **percent-agg-rate**.
Introduced 16.0.R1
Platforms All

adaptation-rule *keyword*

Synopsis Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [agg-rate](#) [adaptation-rule](#) *keyword*
Tree [adaptation-rule](#)
Default closest
Options max, min, closest
Introduced 22.10.R1
Platforms 7750 SR-1, 7750 SR-s

burst-limit (*number* | *keyword*)

Synopsis Shaping burst size when an aggregate shaper is used
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [agg-rate](#) [burst-limit](#) (*number* | *keyword*)
Tree [burst-limit](#)
Range 1 to 14000000
Default auto
Units bytes
Options auto
Introduced 22.10.R1
Platforms 7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	configure service epipe <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on all policers and queues associated with context
Context	configure service epipe <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	configure service epipe <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i>
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service epipe <i>string</i> sap <i>string</i> egress filter
Tree	filter
Introduced	16.0.R1

Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure** [service epipe](#) *string* [sap](#) *string* [egress filter ip](#) *reference*
Tree [ip](#)
Reference **configure** [filter ip-filter](#) *string*
Introduced 16.0.R1
Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [service epipe](#) *string* [sap](#) *string* [egress filter ipv6](#) *reference*
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter](#) *string*
Introduced 16.0.R1
Platforms All

mac reference

Synopsis MAC filter policy name
Context **configure** [service epipe](#) *string* [sap](#) *string* [egress filter mac](#) *reference*
Tree [mac](#)
Reference **configure** [filter mac-filter](#) *string*
Introduced 16.0.R1
Platforms All

qos

Synopsis Enter the **qos** context
Context **configure** [service epipe](#) *string* [sap](#) *string* [egress qos](#)
Tree [qos](#)
Introduced 16.0.R1

Platforms All

policer-control-policy

Synopsis Enter the **policer-control-policy** context
Context **configure service epipe string sap string egress qos policer-control-policy**
Tree [policer-control-policy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis Enable the **overrides** context
Context **configure service epipe string sap string egress qos policer-control-policy overrides**
Tree [overrides](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis Enter the **root** context
Context **configure service epipe string sap string egress qos policer-control-policy overrides root**
Tree [root](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit
Context **configure service epipe string sap string egress qos policer-control-policy overrides root max-rate** (*number* | *keyword*)
Tree [max-rate](#)
Range 1 to 6400000000
Options max
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context

Context **configure service epipe string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds**

Tree [priority-mbs-thresholds](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space

Context **configure service epipe string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (*number* | *keyword*)**

Tree [min-thresh-separation](#)

Range 0 to 16777216

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [*priority-level*] *number*

Synopsis Enter the **priority** list instance

Context **configure service epipe string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number***

Tree [priority](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[*priority-level*] *number*

Synopsis Priority level

Context **configure service epipe string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number***

Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i>
Tree	qinq-mark-top-only
Default	false
Introduced	16.0.R1

Platforms All

sap-egress

Synopsis Enter the **sap-egress** context
Context **configure service epipe string sap string egress qos sap-egress**
Tree [sap-egress](#)
Introduced 16.0.R1
Platforms All

overrides

Synopsis Enter the **overrides** context
Context **configure service epipe string sap string egress qos sap-egress overrides**
Tree [overrides](#)
Introduced 16.0.R1
Platforms All

hs-secondary-shaper *string*

Synopsis HS Secondary Shaper
Context **configure service epipe string sap string egress qos sap-egress overrides hs-secondary-shaper string**
Tree [hs-secondary-shaper](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

hs-wrr-group [*group-id*] *reference*

Synopsis Enter the **hs-wrr-group** list instance
Context **configure service epipe string sap string egress qos sap-egress overrides hs-wrr-group reference**
Tree [hs-wrr-group](#)
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

[group-id] *reference*

Synopsis	HS WRR group identifier
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i>
Tree	hs-wrr-group
Reference	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override of the WRR group
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis	Percent rate override applied to the HS WRR group
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Scheduling rate override applied to the HS WRR group
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Context	configure service epipe <i>string sap string egress qos sap-egress overrides hs-wrr-group reference rate (number keyword)</i>
Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure service epipe <i>string sap string egress qos sap-egress overrides policer reference</i>
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] *reference*

Synopsis	Policer unique ID
Context	configure service epipe <i>string sap string egress qos sap-egress overrides policer reference</i>
Tree	policer
Reference	configure qos sap-egress <i>string policer number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number | keyword*)

Synopsis	CBS
Context	configure service epipe <i>string sap string egress qos sap-egress overrides policer reference cbs (number keyword)</i>
Tree	cbs

Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis CIR percent rate
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#)
reference [percent-rate](#) [cir](#) *decimal-number*
Tree [cir](#)
Range 0.00 to 100.00
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis PIR percent rate
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#)
reference [percent-rate](#) [pir](#) *decimal-number*
Tree [pir](#)
Range 0.01 to 100.00
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis Enter the **rate** context
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#)
reference [rate](#)
Tree [rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis CIR rate

Context	configure service epipe string sap string egress qos sap-egress overrides policer reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service epipe string sap string egress qos sap-egress overrides policer reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service epipe string sap string egress qos sap-egress overrides policer reference stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
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Context	configure service epipe string sap string egress qos sap-egress overrides queue reference
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] reference

Synopsis	Policer unique ID
Context	configure service epipe string sap string egress qos sap-egress overrides queue reference
Tree	queue
Reference	configure qos sap-egress string queue number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service epipe string sap string egress qos sap-egress overrides queue reference adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service epipe string sap string egress qos sap-egress overrides queue reference adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> avg-frame-overhead <i>decimal-number</i>
Tree	avg-frame-overhead
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size for the queue
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	CBS
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Context	configure service epipe <i>string sap string egress qos sap-egress overrides queue reference cbs</i> (<i>number keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service epipe <i>string sap string egress qos sap-egress overrides queue reference drop-tail</i>
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure service epipe <i>string sap string egress qos sap-egress overrides queue reference drop-tail low</i>
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number | keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service epipe <i>string sap string egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs</i> (<i>number keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1

Platforms All

hs-class-weight *number*

Synopsis Class weight override for the queue
Context **configure service epipe string sap string egress qos sap-egress overrides queue**
reference hs-class-weight number
Tree [hs-class-weight](#)
Range 1 | 2 | 4 | 8
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

hs-wred-queue

Synopsis Enter the **hs-wred-queue** context
Context **configure service epipe string sap string egress qos sap-egress overrides queue**
reference hs-wred-queue
Tree [hs-wred-queue](#)
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

policy *reference*

Synopsis Slope policy applied to the HSQ queue group queue
Context **configure service epipe string sap string egress qos sap-egress overrides queue**
reference hs-wred-queue policy reference
Tree [policy](#)
Reference **configure qos slope-policy string**
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
Context **configure service epipe string sap string egress qos sap-egress overrides queue**
reference hs-wrr-weight number

Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to false , fast queue polling is not enabled.

Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00

Introduced 16.0.R1
Platforms All

rate

Synopsis Enter the **rate** context
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
[reference](#) **rate**
Tree [rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms All

cir (*number* | *keyword*)

Synopsis CIR rate
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
[reference](#) [rate](#) **cir** (*number* | *keyword*)
Tree [cir](#)
Range 0 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms All

pir (*number* | *keyword*)

Synopsis PIR rate
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
[reference](#) [rate](#) **pir** (*number* | *keyword*)
Tree [pir](#)
Range 1 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms All

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>string</i>
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of port queue group
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1

Platforms All

scheduler-policy

Synopsis Enter the **scheduler-policy** context
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#)
 Tree [scheduler-policy](#)
 Introduced 16.0.R1
 Platforms All

overrides

Synopsis Enter the **overrides** context
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#)
 Tree [overrides](#)
 Introduced 16.0.R1
 Platforms All

scheduler [[scheduler-name](#)] *string*

Synopsis Enter the **scheduler** list instance
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string*
 Tree [scheduler](#)
 Introduced 16.0.R1
 Platforms All

[[scheduler-name](#)] *string*

Synopsis Scheduler name
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string*
 Tree [scheduler](#)
 Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can

be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service epipe string sap string egress qos scheduler-policy overrides scheduler string parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service epipe string sap string egress qos scheduler-policy overrides scheduler string parent cir-weight number
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service epipe string sap string egress qos scheduler-policy overrides scheduler string parent weight number

Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service epipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1

Platforms All

policy-name *reference*

Synopsis Scheduler policy name

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [scheduler-policy](#) *string*

Introduced 16.0.R1

Platforms All

endpoint *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the endpoint

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [endpoint](#) *reference*

Tree [endpoint](#)

Reference **configure** [service](#) [epipe](#) *string* [endpoint](#) *string*

Introduced 16.0.R1

Platforms All

eth-cfm

Synopsis Enter the **eth-cfm** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#)

Tree [eth-cfm](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais *boolean*

Synopsis Enable the generation and the reception of AIS messages

Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm ais <i>boolean</i>
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc <i>keyword</i>
Tree	fc
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i>
Tree	fc-in-profile
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the mep list instance
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>string</i> association <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the ais context
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais client-meg-level <i>number</i>
Tree	client-meg-level
Range	1 to 7
Max.	7
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interface-support <i>boolean</i>

Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval number

Synopsis	Transmission interval for AIS messages
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interval <i>number</i>
Tree	interval
Range	1 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect keyword

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	all-def
Options	all-def, mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis	Priority of the AIS messages generated by the node
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais priority <i>number</i>
Tree	priority
Range	0 to 7
Default	7

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm boolean

Synopsis Generate CCM messages

Context **configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean**

Tree **ccm**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority number

Synopsis Priority of CCM and LTM messages transmitted by the MEP

Context **configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number**

Tree **ccm-ltm-priority**

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size number

Synopsis Number of octets of padding to insert in CCM packets

Context **configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number**

Tree **ccm-padding-size**

Description This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval**) is less than 1 second.

Range 3 to 1500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis VLAN tags to apply to CFM PDUs for egress processing
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **cfm-vlan-tag** *string*
Tree [cfm-vlan-tag](#)
String Length 1 to 9
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis Enable the **csf** context
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **csf**
Tree [csf](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis Multiplication factor used to clear the CSF condition
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **csf** **multiplier** *decimal-number*
Tree [multiplier](#)
Range 0.0 | 2.0 to 30.0
Default 3.5
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **description** *string*

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> direction <i>keyword</i>
Tree	direction
Default	down
Options	down, up
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i>

Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.

Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i>
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i>
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
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Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace

Description	<p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> lbm-svc-act-responder <i>boolean</i>
Tree	lbm-svc-act-responder
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
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Context	configure service epipe <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service epipe <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID
Context	configure service epipe <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number primary-vlan boolean</i>
Tree	primary-vlan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip primary-vlan (*number* | *keyword*)

Synopsis	Enter the mip list instance
Context	configure service epipe <i>string sap string eth-cfm mip primary-vlan</i> (<i>number</i> <i>keyword</i>)
Tree	mip
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan (*number* | *keyword*)

Synopsis	VLAN ID to which the MIP is attached
Context	configure service epipe <i>string sap string eth-cfm mip primary-vlan</i> (<i>number</i> <i>keyword</i>)
Tree	mip
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the none option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	configure service epipe <i>string sap string eth-cfm mip primary-vlan</i> (<i>number</i> <i>keyword</i>) cfm-vlan-tag <i>string</i>
Tree	cfm-vlan-tag
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM

PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.

String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MIP
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) mac-address <i>string</i>
Tree	mac-address
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-ctag-levels *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	configure service epipe <i>string</i> sap <i>string</i> eth-cfm squelch-ingress-ctag-levels <i>number</i>
Tree	squelch-ingress-ctag-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.
Range	0 to 7
Max.	8
Instances	
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
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Context	configure service epipe <i>string sap string eth-cfm squelch-ingress-levels number</i>
Tree	squelch-ingress-levels
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ethernet

Synopsis	Enter the ethernet context
Context	configure service epipe <i>string sap string ethernet</i>
Tree	ethernet
Introduced	20.5.R1
Platforms	All

llf

Synopsis	Enter the llf context
Context	configure service epipe <i>string sap string ethernet llf</i>
Tree	llf
Description	<p>Commands in this context enable Link Loss Forwarding (LLF) on an Ethernet port. This feature provides an end-to-end OAM fault notification for Ethernet VLL service. It brings down the Ethernet port (Ethernet LLF) or sends a SONET/SDH Path AIS (ATM LLF) toward the attached CE when there is a local fault on the pseudowire or service, or a remote fault on the SAP or pseudowire, signaled with label withdrawal or T-LDP status bits. It ceases when the fault disappears.</p> <p>The Ethernet port must be configured for null encapsulation.</p> <p>This feature is also supported in Epipes with BGP-EVPN enabled. In this case, upon removal of the EVPN destination, the port transitions to an operationally down state, however the AD per-EVI route for the SAP is still advertised (the SAP remains</p>

operationally up). The port transitions to the operationally up state when the EVPN destination is created.

Introduced 20.5.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of Link Loss Forwarding
Context **configure** **service** **epipe** *string* **sap** *string* **ethernet** **l1f** **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 20.5.R1
Platforms All

ignore-oper-down *boolean*

Synopsis Ignore operational down state of the SAP on SAP failure
Context **configure** **service** **epipe** *string* **sap** *string* **ignore-oper-down** *boolean*
Tree [ignore-oper-down](#)
Description When configured to **true**, the Epipe service does not transition to the operational down state when the SAP fails. This command can only be set to **true** for a single SAP in an Epipe. The command can be used in Epipes with or without EVPN enabled.
When configured to **false**, the Epipe service transitions to the operational down state when SAP fails.
Default false
Introduced 16.0.R1
Platforms All

ingress

Synopsis Enter the **ingress** context
Context **configure** **service** **epipe** *string* **sap** *string* **ingress**
Tree [ingress](#)
Introduced 16.0.R1
Platforms All

filter

Synopsis	Enter the filter context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service epipe <i>string</i> sap <i>string</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service epipe <i>string</i> sap <i>string</i> ingress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

mac reference

Synopsis	MAC filter policy name
Context	configure service epipe <i>string</i> sap <i>string</i> ingress filter mac <i>reference</i>
Tree	mac
Reference	configure filter mac-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos match-qinq-dot1p <i>keyword</i>
Tree	match-qinq-dot1p
Options	top, bottom
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the root context
Context	configure service epipe string sap string ingress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service epipe string sap string ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service epipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service epipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes

Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [*priority-level*] *number*

Synopsis	Enter the priority list instance
Context	configure <i>service</i> <i>epipe</i> <i>string</i> <i>sap</i> <i>string</i> <i>ingress</i> <i>qos</i> <i>policer-control-policy</i> <i>overrides</i> <i>root</i> <i>priority-mbs-thresholds</i> <i>priority</i> <i>number</i>
Tree	<i>priority</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] *number*

Synopsis	Priority level
Context	configure <i>service</i> <i>epipe</i> <i>string</i> <i>sap</i> <i>string</i> <i>ingress</i> <i>qos</i> <i>policer-control-policy</i> <i>overrides</i> <i>root</i> <i>priority-mbs-thresholds</i> <i>priority</i> <i>number</i>
Tree	<i>priority</i>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure <i>service</i> <i>epipe</i> <i>string</i> <i>sap</i> <i>string</i> <i>ingress</i> <i>qos</i> <i>policer-control-policy</i> <i>overrides</i> <i>root</i> <i>priority-mbs-thresholds</i> <i>priority</i> <i>number</i> <i>mbs-contribution</i> (<i>number</i> <i>keyword</i>)
Tree	<i>mbs-contribution</i>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

sap-ingress

Synopsis	Enter the sap-ingress context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress
Tree	sap-ingress
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue group instance
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ip-criteria
Tree	ip-criteria
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ip-criteria activate-entry-tag <i>number</i>
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure service epipe string sap string ingress qos sap-ingress overrides ipv6-criteria
Tree	ipv6-criteria
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv6 criteria
Context	configure service epipe string sap string ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag number
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [*policer-id*] *reference*

Synopsis	Enter the policer list instance
Context	configure service epipe string sap string ingress qos sap-ingress overrides policer reference
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[*policer-id*] *reference*

Synopsis	Policer unique ID
Context	configure service epipe string sap string ingress qos sap-ingress overrides policer reference
Tree	policer
Reference	configure qos sap-ingress string policer number
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis CBS

Context **configure service epipe** *string sap string ingress qos sap-ingress overrides policer*
reference cbs (*number* | *keyword*)

Tree [cbs](#)

Range 0 to 268435456

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis MBS

Context **configure service epipe** *string sap string ingress qos sap-ingress overrides policer*
reference mbs (*number* | *keyword*)

Tree [mbs](#)

Range 0 to 268435456

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis Packet size modification for policing information

Context **configure service epipe** *string sap string ingress qos sap-ingress overrides policer*
reference packet-byte-offset number

Tree [packet-byte-offset](#)

Range -32 to 31

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service epipe string sap string ingress qos sap-ingress overrides policer reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir decimal-number

Synopsis	CIR percent rate
Context	configure service epipe string sap string ingress qos sap-ingress overrides policer reference percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir decimal-number

Synopsis	PIR percent rate
Context	configure service epipe string sap string ingress qos sap-ingress overrides policer reference percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure service epipe string sap string ingress qos sap-ingress overrides policer reference rate
Tree	rate

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> stat-mode <i>keyword</i>
Tree	stat-mode

Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [\[queue-id\]](#) *reference*

Synopsis	Enter the queue list instance
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[\[queue-id\]](#) *reference*

Synopsis	Policer unique ID
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i>
Tree	queue
Reference	configure qos sap-ingress <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service epipe string sap string ingress qos sap-ingress overrides queue reference adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service epipe string sap string ingress qos sap-ingress overrides queue reference adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

cbs (number | keyword)

Synopsis	CBS
Context	configure service epipe string sap string ingress qos sap-ingress overrides queue reference cbs (number keyword)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service epipe string sap string ingress qos sap-ingress overrides queue reference drop-tail

Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
Context	configure service epipe string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure service epipe string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service epipe string sap string ingress qos sap-ingress overrides queue reference parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	configure service epipe string sap string ingress qos sap-ingress overrides queue reference parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1

Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)
reference [parent](#) [weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)
reference [percent-rate](#)

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

cir *decimal-number*

Synopsis CIR percent rate

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)
reference [percent-rate](#) [cir](#) *decimal-number*

Tree [cir](#)

Range 0.00 to 100.00

Introduced 16.0.R1

Platforms All

pir *decimal-number*

Synopsis PIR percent rate

Context	configure service epipe <i>string sap string ingress qos sap-ingress overrides queue reference percent-rate pir decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service epipe <i>string sap string ingress qos sap-ingress overrides queue reference rate</i>
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service epipe <i>string sap string ingress qos sap-ingress overrides queue reference rate cir (number keyword)</i>
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service epipe <i>string sap string ingress qos sap-ingress overrides queue reference rate pir (number keyword)</i>
Tree	pir
Range	1 to 6400000000

Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	16.0.R1
Platforms	All

queuing-type *keyword*

Synopsis	Queuing type
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress queuing-type <i>keyword</i>
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides

Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [[scheduler-name](#)] *string*

Synopsis	Enter the scheduler list instance
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service epipe string sap string ingress qos scheduler-policy overrides scheduler string parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service epipe string sap string ingress qos scheduler-policy overrides scheduler string parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service epipe string sap string ingress qos scheduler-policy overrides scheduler string parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service epipe string sap string ingress qos scheduler-policy overrides scheduler string rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

qtag-manipulation

Synopsis	Enter the qtag-manipulation context
Context	configure service epipe <i>string sap string ingress</i> qtag-manipulation
Tree	qtag-manipulation
Introduced	16.0.R1
Platforms	All

c-tag (*number | keyword*)

Synopsis	Inner ingress VLAN translation for two service delimiting VLAN values
Context	configure service epipe <i>string sap string ingress</i> qtag-manipulation c-tag (<i>number keyword</i>)
Tree	c-tag
Range	0 to 4094
Options	tag-*
Notes	The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag).
Introduced	16.0.R1
Platforms	All

push-dot1q-vlan (*number | keyword*)

Synopsis	VLAN translation information
Context	configure service epipe <i>string sap string ingress</i> qtag-manipulation push-dot1q-vlan (<i>number keyword</i>)
Tree	push-dot1q-vlan
Range	0 to 4094
Options	use-sap-svlan
Notes	The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag).
Introduced	16.0.R1
Platforms	All

s-tag *number*

Synopsis	Outer ingress VLN translation for two service delimiting VLAN values
Context	configure service epipe <i>string sap string ingress</i> qtag-manipulation s-tag <i>number</i>

Tree	s-tag
Range	0 to 4094
Notes	The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag).
Introduced	16.0.R1
Platforms	All

l2tpv3-session

Synopsis	Enable the l2tpv3-session context
Context	configure service epipe <i>string</i> sap <i>string</i> l2tpv3-session
Tree	l2tpv3-session
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the session for the service
Context	configure service epipe <i>string</i> sap <i>string</i> l2tpv3-session admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

pseudo-wire



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the pseudo-wire context
Context	configure service epipe <i>string</i> sap <i>string</i> l2tpv3-session pseudo-wire
Tree	pseudo-wire
Introduced	16.0.R4
Platforms	All

ethernet



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the Ethernet PW-type for the L2TPv3 session
Context	configure service epipe <i>string</i> sap <i>string</i> l2tpv3-session pseudo-wire ethernet
Tree	ethernet
Notes	The following elements are part of a choice: ethernet or ethernet-vlan-id .
Introduced	16.0.R4
Platforms	All

ethernet-vlan-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ethernet-VLAN PW-type ID for the L2TPv3 session
Context	configure service epipe <i>string</i> sap <i>string</i> l2tpv3-session pseudo-wire ethernet-vlan-id <i>number</i>
Tree	ethernet-vlan-id
Range	0 to 4095
Notes	The following elements are part of a choice: ethernet or ethernet-vlan-id .
Introduced	16.0.R4
Platforms	All

router



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the router context
Context	configure service epipe <i>string</i> sap <i>string</i> l2tpv3-session router
Tree	router

Introduced 16.0.R4
Platforms All

group *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Tunnel group name
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [l2tpv3-session](#) [router](#) [group](#) *string*
Tree [group](#)
String Length 1 to 32
Introduced 16.0.R4
Platforms All

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Router name used to identify the router instance
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [l2tpv3-session](#) [router](#) [router-instance](#) *string*
Tree [router-instance](#)
String Length 1 to 64
Introduced 16.0.R4
Platforms All

vc-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis VC ID for the L2TPv3 session
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [l2tpv3-session](#) [vc-id](#) *number*
Tree [vc-id](#)

Range	1 to 4294967295
Introduced	16.0.R4
Platforms	All

lag

Synopsis	Enter the lag context
Context	configure service epipe <i>string</i> sap <i>string</i> lag
Tree	lag
Introduced	16.0.R1
Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile
Context	configure service epipe <i>string</i> sap <i>string</i> lag link-map-profile <i>number</i>
Tree	link-map-profile
Range	1 to 64
Introduced	16.0.R1
Platforms	All

per-link-hash

Synopsis	Enter the per-link-hash context
Context	configure service epipe <i>string</i> sap <i>string</i> lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	configure service epipe <i>string</i> sap <i>string</i> lag per-link-hash class <i>number</i>
Tree	class
Range	1 to 3

Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	configure service epipe <i>string</i> sap <i>string</i> lag per-link-hash weight <i>number</i>
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

mc-ring

Synopsis	Enable the mc-ring context
Context	configure service epipe <i>string</i> sap <i>string</i> mc-ring
Tree	mc-ring
Introduced	16.0.R1
Platforms	All

ring-node *string*

Synopsis	Name for the ring node associated with this SAP
Context	configure service epipe <i>string</i> sap <i>string</i> mc-ring ring-node <i>string</i>
Tree	ring-node
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Monitor operational group
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Context	configure service epipe <i>string</i> sap <i>string</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>string</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	16.0.R1
Platforms	All

multi-service-site *reference*

Synopsis	Multi service site name
Context	configure service epipe <i>string</i> sap <i>string</i> multi-service-site <i>reference</i>
Tree	multi-service-site
Reference	configure service customer <i>string</i> multi-service-site <i>string</i>
Introduced	16.0.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group
Context	configure service epipe <i>string</i> sap <i>string</i> oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>string</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	16.0.R1
Platforms	All

transit-policy

Synopsis	Enable the transit-policy context
Context	configure service epipe <i>string</i> sap <i>string</i> transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	configure service epipe <i>string</i> sap <i>string</i> transit-policy ip <i>reference</i>
Tree	ip
Reference	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i>
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	configure service epipe <i>string</i> sap <i>string</i> transit-policy prefix <i>reference</i>
Tree	prefix
Reference	configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i>
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

segment-routing-v6 [[instance](#)] *number*

Synopsis	Enter the segment-routing-v6 list instance
Context	configure service epipe <i>string</i> segment-routing-v6 <i>number</i>
Tree	segment-routing-v6
Description	Commands in this context configure the SRv6 instance that is used in the service.
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[instance] *number*

Synopsis Segment routing v6 instance
Context **configure service epipe** *string segment-routing-v6 number*
Tree [segment-routing-v6](#)
Range 1
Notes This element is part of a list key.
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [[locator-name](#)] *reference*

Synopsis Enter the **locator** list instance
Context **configure service epipe** *string segment-routing-v6 number locator reference*
Tree [locator](#)
Max. Instances 1
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis SRv6 locator name
Context **configure service epipe** *string segment-routing-v6 number locator reference*
Tree [locator](#)
Reference **configure router** *string segment-routing segment-routing-v6 locator string*
Notes This element is part of a list key.
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis Enter the **function** context

Context	configure service epipe <i>string segment-routing-v6 number locator reference function</i>
Tree	function
Description	Commands in this context configure SRv6 SID function values and parameters for the locator.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dx2

Synopsis	Enable the end-dx2 context
Context	configure service epipe <i>string segment-routing-v6 number locator reference function end-dx2</i>
Tree	end-dx2
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	configure service epipe <i>string segment-routing-v6 number locator reference function end-dx2 value number</i>
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [[locator-name](#)] *reference*

Synopsis	Enter the micro-segment-locator list instance
Context	configure service epipe <i>string segment-routing-v6 number micro-segment-locator reference</i>
Tree	micro-segment-locator
Max. Instances	1

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis	Micro-segment SRv6 locator name
Context	configure service epipe <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i>
Tree	micro-segment-locator
Description	This command associates a pre-defined micro-segment SRv6 locator (defined in the configure router segment-routing segment-routing-v6 context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN.
Reference	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the function context
Context	configure service epipe <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function
Tree	function
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udx2

Synopsis	Enable the udx2 context
Context	configure service epipe <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function udx2
Tree	udx2
Description	Commands in this context configure the SRv6 micro-segment uDX2 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and cross-connect to the egress SAP occurs in the Epipe service.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	configure service epipe <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function udx2 <i>value</i> <i>number</i>
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure service epipe <i>string</i> service-id <i>number</i>
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

service-mtu *number*

Synopsis	MTU size
Context	configure service epipe <i>string</i> service-mtu <i>number</i>
Tree	service-mtu
Description	This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type.

The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

Range	1 to 9782
Introduced	16.0.R1
Platforms	All

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[sdp-bind-id] *string*

Synopsis	SDP binding ID
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Context	configure service epipe string spoke-sdp string
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aarp

Synopsis	Enable the aarp context
Context	configure service epipe string spoke-sdp string aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id reference

Synopsis	AARP instance ID
Context	configure service epipe string spoke-sdp string aarp id reference
Tree	id
Reference	configure application-assurance aarp number
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis	Role referenced by the AARP
Context	configure service epipe string spoke-sdp string aarp type keyword
Tree	type
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Policy to collect accounting statistics
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

adv-service-mtu *number*

Synopsis	Service MTU used in signaling
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> adv-service-mtu <i>number</i>
Tree	adv-service-mtu
Description	<p>This command configures the MTU value that is signaled in the targeted LDP for the spoke-SDP, instead of the service MTU. However, the configuration does not affect the locally enforced value, which is still based on the service MTU.</p> <p>This MTU value cannot be configured on a spoke-SDP that is bound to an SDP with the adv-mtu-override command (configure service sdp context).</p> <p>When unconfigured, an adjusted service MTU is used (service-mtu command).</p>
Range	0 to 9782
Introduced	21.5.R1
Platforms	All

app-profile *reference*

Synopsis	Application profile name for this SDP
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Context	configure service epipe <i>string spoke-sdp string app-profile reference</i>
Tree	app-profile
Reference	configure application-assurance <i>group number partition number policy app-profile string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth (*number | keyword*)

Synopsis	Bandwidth that is reserved for this SDP binding
Context	configure service epipe <i>string spoke-sdp string bandwidth</i> (<i>number keyword</i>)
Tree	bandwidth
Range	0 to 100000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure service epipe <i>string spoke-sdp string bfd</i>
Tree	bfd
Introduced	21.2.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service epipe <i>string spoke-sdp string bfd bfd-liveness</i>
Tree	bfd-liveness
Introduced	21.2.R1
Platforms	All

encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-liveness encap <i>keyword</i>
Tree	encap
Default	ipv4
Options	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-template <i>reference</i>
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context.
Reference	configure bfd bfd-template <i>string</i>
Introduced	21.2.R1
Platforms	All

failure-action *keyword*

Synopsis	VCCV BFD action taken on the SDP binding
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> bfd failure-action <i>keyword</i>
Tree	failure-action
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context.
Default	none
Options	none, down
Introduced	21.2.R1
Platforms	All

wait-for-up-timer *number*

Synopsis	Time waited for BFD up status
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	This command configures the time interval that is used to wait for a BFD session to come up. This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.
Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

control-word *boolean*

Synopsis	Use the control word as preferred
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i>
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	All

cpu-protection

Synopsis	Enter the cpu-protection context
Context	configure service epipe string spoke-sdp string cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the eth-cfm-monitoring context
Context	configure service epipe string spoke-sdp string cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	configure service epipe string spoke-sdp string cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	configure service epipe string spoke-sdp string cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> cpu-protection policy-id <i>reference</i>
Tree	policy-id
Reference	configure system security cpu-protection policy <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> egress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> egress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

mac reference

Synopsis	MAC filter policy name
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> egress filter mac reference
Tree	mac
Reference	configure filter mac-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

l2tpv3

Synopsis	Enter the l2tpv3 context
Context	configure service epipe string spoke-sdp string egress l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	All

cookie string

Synopsis	Cookie parameters
Context	configure service epipe string spoke-sdp string egress l2tpv3 cookie string
Tree	cookie
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service epipe string spoke-sdp string egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure service epipe string spoke-sdp string egress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

policy-name reference

Synopsis	Network policy ID
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Context	configure service epipe string spoke-sdp string egress qos network policy-name reference
Tree	policy-name
Reference	configure qos network string
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service epipe string spoke-sdp string egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name reference

Synopsis	Name of the egress port queue group
Context	configure service epipe string spoke-sdp string egress qos network port-redirect-group group-name reference
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group string
Introduced	16.0.R1
Platforms	All

instance number

Synopsis	Queue-group instance ID
Context	configure service epipe string spoke-sdp string egress qos network port-redirect-group instance number
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service epipe <i>string spoke-sdp string egress vc-label number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

endpoint

Synopsis	Enter the endpoint context
Context	configure service epipe <i>string spoke-sdp string endpoint</i>
Tree	endpoint
Introduced	16.0.R1
Platforms	All

icb *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind SDP as type Inter-Chassis Backup (ICB)
Context	configure service epipe <i>string spoke-sdp string endpoint icb boolean</i>
Tree	icb
Default	false
Introduced	16.0.R1
Platforms	All

name *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service endpoint name
Context	configure service epipe string spoke-sdp string endpoint name reference
Tree	name
Reference	configure service epipe string endpoint string
Introduced	16.0.R1
Platforms	All

precedence (*number* | *keyword*)

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	configure service epipe string spoke-sdp string endpoint precedence (<i>number</i> <i>keyword</i>)
Tree	precedence
Range	1 to 4
Default	4
Options	primary
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	configure service epipe string spoke-sdp string entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
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Context	configure service epipe string spoke-sdp string eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure service epipe string spoke-sdp string eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	configure service epipe string spoke-sdp string eth-cfm collect-lmm-fc-stats fc keyword
Tree	fc
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i>
Tree	fc-in-profile
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Description	<p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the mep list instance
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Context	configure service epipe string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name reference

Synopsis	Maintenance Domain (MD) name
Context	configure service epipe string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name reference

Synopsis	Maintenance Association (MA) name
Context	configure service epipe string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain string association string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id number

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service epipe string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the MEP
Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **admin-state** *keyword*
Tree **admin-state**
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis Enable the **ais** context
Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **ais**
Tree **ais**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis Client MEG level for AIS message generation
Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **ais** **client-meg-level** *number*
Tree **client-meg-level**
Range 1 to 7
Max. 7
Instances
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interface-support <i>boolean</i>
Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interval <i>number</i>
Tree	interval
Range	1 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	all-def
Options	all-def, mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node
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Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais priority number</i>
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification</i>
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
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Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean</i>
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</i>
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval**) is less than 1 second.

Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number cfm-vlan-tag string</i>
Tree	cfm-vlan-tag
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the csf context
Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf</i>
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number</i>
Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Direction the MEP faces

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [direction](#) *keyword*

Tree [direction](#)

Default down

Options down, up

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis Enable the **eth-test** context

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#)

Tree [eth-test](#)

Description Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#) **bit-error-threshold** *number*

Tree [bit-error-threshold](#)

Range 0 to 11840

Default 1

Units bit errors

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis Enter the **test-pattern** context

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#) **test-pattern**

Tree [test-pattern](#)

Description Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis Generate a CRC checksum

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#) [test-pattern](#) **crc-tlv** *boolean*

Tree [crc-tlv](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern keyword

Synopsis	Test pattern for Ethernet Test frames
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation keyword

Synopsis	Fault propagation for the MEP
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
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Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</i>
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number</i>
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</i>
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</i>
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-vsm-grace](#) [tx-eth-vsm-grace](#) *boolean*

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis Process service activation streams in ETH-CFM LBM

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [lbm-svc-act-responder](#) *boolean*

Tree [lbm-svc-act-responder](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [low-priority-defect](#) *keyword*

Tree [low-priority-defect](#)

Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> mac-address <i>string</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID
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Context	configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number primary-vlan boolean</i>
Tree	primary-vlan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip primary-vlan (*number | keyword*)

Synopsis	Enter the mip list instance
Context	configure service epipe <i>string spoke-sdp string eth-cfm mip primary-vlan (number keyword)</i>
Tree	mip
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan (*number | keyword*)

Synopsis	VLAN ID to which the MIP is attached
Context	configure service epipe <i>string spoke-sdp string eth-cfm mip primary-vlan (number keyword)</i>
Tree	mip
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the none option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	configure service epipe <i>string spoke-sdp string eth-cfm mip primary-vlan (number keyword) cfm-vlan-tag string</i>
Tree	cfm-vlan-tag

Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MIP
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) mac-address <i>string</i>
Tree	mac-address
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-ctag-levels *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm squelch-ingress-ctag-levels <i>number</i>
Tree	squelch-ingress-ctag-levels
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

snelch-gress-levels *number*

Synopsis Levels for which ETH-CFM packets are silently discarded

Context **configure service epipe** *string spoke-sdp string eth-cfm snelch-gress-levels number*

Tree [snelch-gress-levels](#)

Description This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.

Range 0 to 7

Max. 8

Instances

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

force-vc-forwarding *keyword*

Synopsis VC forwarding action

Context **configure service epipe** *string spoke-sdp string force-vc-forwarding keyword*

Tree [force-vc-forwarding](#)

Options vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag

Introduced 16.0.R1

Platforms All

hash-label

Synopsis Enable the **hash-label** context

Context **configure service epipe** *string spoke-sdp string hash-label*

Tree [hash-label](#)

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 16.0.R1

Platforms All

signal-capability

Synopsis Enable the signaling of the hash label between PE nodes
Context **configure service epipe** *string spoke-sdp string hash-label signal-capability*
Tree [signal-capability](#)
Introduced 16.0.R1
Platforms All

ingress

Synopsis Enter the **ingress** context
Context **configure service epipe** *string spoke-sdp string ingress*
Tree [ingress](#)
Introduced 16.0.R1
Platforms All

filter

Synopsis Enter the **filter** context
Context **configure service epipe** *string spoke-sdp string ingress filter*
Tree [filter](#)
Introduced 16.0.R1
Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure service epipe** *string spoke-sdp string ingress filter ip reference*
Tree [ip](#)
Reference **configure filter ip-filter** *string*
Introduced 16.0.R1
Platforms All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

mac reference

Synopsis	MAC filter policy name
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress filter mac <i>reference</i>
Tree	mac
Reference	configure filter mac-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

I2tpv3

Synopsis	Enter the I2tpv3 context
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress I2tpv3
Tree	I2tpv3
Introduced	16.0.R1
Platforms	All

cookie

Synopsis	Enter the cookie context
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress I2tpv3 cookie
Tree	cookie
Introduced	16.0.R1
Platforms	All

cookie1 *string*

Synopsis	Value of cookie-1 for the tunnel
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress l2tpv3 cookie cookie1 <i>string</i>
Tree	cookie1
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

cookie2 *string*

Synopsis	Value of cookie-1 for the tunnel
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress l2tpv3 cookie cookie2 <i>string</i>
Tree	cookie2
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of the forwarding-plane ingress Queue Group for this SDP binding
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>string</i>
Introduced	16.0.R1

Platforms All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end
 Context **configure service epipe** *string spoke-sdp string ingress vc-label number*
 Tree [vc-label](#)
 Range 1 to 1048575
 Introduced 16.0.R1
 Platforms All

monitor-oper-group *reference*

Synopsis Operational group identifier that affect the state of this SDP bind
 Context **configure service epipe** *string spoke-sdp string monitor-oper-group reference*
 Tree [monitor-oper-group](#)
 Reference **configure service oper-group** *string*
 Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
 Introduced 16.0.R1
 Platforms All

oper-group *reference*

Synopsis Operational group identifier
 Context **configure service epipe** *string spoke-sdp string oper-group reference*
 Tree [oper-group](#)
 Reference **configure service oper-group** *string*
 Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
 Introduced 16.0.R1
 Platforms All

pw-status

Synopsis	Enter the pw-status context
Context	configure service epipe <i>string spoke-sdp string pw-status</i>
Tree	pw-status
Introduced	16.0.R1
Platforms	All

block-on-peer-fault *boolean*

Synopsis	Block the user traffic on this SDP bind when peer PW status has fault bits set
Context	configure service epipe <i>string spoke-sdp string pw-status block-on-peer-fault boolean</i>
Tree	block-on-peer-fault
Default	false
Notes	The following elements are part of a choice: block-on-peer-fault or standby-signaling-slave .
Introduced	16.0.R1
Platforms	All

signaling *boolean*

Synopsis	Allow SDP binding to support pseudowire status signaling
Context	configure service epipe <i>string spoke-sdp string pw-status signaling boolean</i>
Tree	signaling
Default	true
Introduced	16.0.R1
Platforms	All

standby-signaling-slave *boolean*

Synopsis	Block spoke transmission when the spoke receives standby status notification from peer
Context	configure service epipe <i>string spoke-sdp string pw-status standby-signaling-slave boolean</i>
Tree	standby-signaling-slave
Default	false
Notes	The following elements are part of a choice: block-on-peer-fault or standby-signaling-slave .

Introduced 16.0.R1
Platforms All

source-bmac

Synopsis Enter the **source-bmac** context
Context **configure service epipe string spoke-sdp string source-bmac**
Tree [source-bmac](#)
Introduced 16.0.R1
Platforms All

use-sdp-bmac-lsb *boolean*

Synopsis Allow the spoke SDP to be part of a redundant pseudo-wire within PBB Epipe service
Context **configure service epipe string spoke-sdp string source-bmac use-sdp-bmac-lsb boolean**
Tree [use-sdp-bmac-lsb](#)
Default false
Introduced 16.0.R1
Platforms All

transit-policy

Synopsis Enable the **transit-policy** context
Context **configure service epipe string spoke-sdp string transit-policy**
Tree [transit-policy](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP transit policy ID

Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> transit-policy ip <i>reference</i>
Tree	ip
Reference	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i>
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> transit-policy prefix <i>reference</i>
Tree	prefix
Reference	configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i>
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding
Context	configure service epipe <i>string</i> spoke-sdp <i>string</i> vc-type <i>keyword</i>
Tree	vc-type
Default	ether
Options	ether, vlan
Introduced	16.0.R1
Platforms	All

vlan-vc-tag *number*

Synopsis	SDP bind VC tag
Context	configure <i>service epipe string spoke-sdp string</i> vlan-vc-tag <i>number</i>
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	16.0.R1
Platforms	All

test *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate as a test service
Context	configure <i>service epipe string</i> test <i>boolean</i>
Tree	test
Default	false
Introduced	16.0.R1
Platforms	All

vc-switching *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use PW switching signaling for spoke SDPs in service
Context	configure <i>service epipe string</i> vc-switching <i>boolean</i>
Tree	vc-switching
Default	false
Introduced	16.0.R1
Platforms	All

vpn-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	configure service epipe <i>string vpn-id number</i>
Tree	vpn-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

vxlan

Synopsis	Enter the vxlan context
Context	configure service epipe <i>string vxlan</i>
Tree	vxlan
Introduced	16.0.R1
Platforms	All

instance [[vxlan-instance](#)] *number*

Synopsis	Enter the instance list instance
Context	configure service epipe <i>string vxlan instance number</i>
Tree	instance
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[vxlan-instance] *number*

Synopsis	VXLAN instance
Context	configure service epipe <i>string vxlan instance number</i>
Tree	instance
Range	1

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

egress-vtep

Synopsis	Enter the egress-vtep context
Context	configure service epipe <i>string vxlan instance number</i> egress-vtep
Tree	egress-vtep
Introduced	16.0.R1
Platforms	All

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	VTEP IP address used when originating VXLAN packets
Context	configure service epipe <i>string vxlan instance number</i> egress-vtep ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	ip-address
Introduced	16.0.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group associated with egress VTEP address
Context	configure service epipe <i>string vxlan instance number</i> egress-vtep oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R1
Platforms	All

vni *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VNI of the VXLAN
Context	configure service epipe <i>string vxlan instance number vni number</i>
Tree	vni
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

source-vtep (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Vxlan source virtual tunnel endpoint information
Context	configure service epipe <i>string vxlan source-vtep (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	source-vtep
Introduced	16.0.R1
Platforms	All

ies [[service-name](#)] *string*

Synopsis	Enter the ies list instance
Context	configure service ies <i>string</i>
Tree	ies
Introduced	16.0.R1
Platforms	All

[service-name] *string*

Synopsis	Administrative service name
Context	configure service ies <i>string</i>
Tree	ies
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aa-interface [*interface-name*] *string*

Synopsis	Enter the aa-interface list instance
Context	configure service ies string aa-interface string
Tree	aa-interface
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[interface-name] *string*

Synopsis	Interface name
Context	configure service ies string aa-interface string
Tree	aa-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service ies string aa-interface string admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service ies string aa-interface string description string
Tree	description
String Length	1 to 255
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis IP MTU applied to outgoing packets
Context **configure service ies** *string aa-interface string ip-mtu number*
Tree [ip-mtu](#)
Range 512 to 9786
Units bytes
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context
Context **configure service ies** *string aa-interface string ipv4*
Tree [ipv4](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis Enable the **primary** context
Context **configure service ies** *string aa-interface string ipv4 primary*
Tree [primary](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis Primary IPv4 address assigned to the interface
Context **configure service ies** *string aa-interface string ipv4 primary address string*
Tree [address](#)
Notes This element is mandatory.
Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis IPv4 address prefix length
Context **configure service ies** *string aa-interface string ipv4 primary prefix-length number*
Tree [prefix-length](#)
Range 0 to 32
Notes This element is mandatory.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance
Context **configure service ies** *string aa-interface string sap string*
Tree [sap](#)
Max. Instances 1
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sap-id] *string*

Synopsis SAP ID
Context **configure service ies** *string aa-interface string sap string*
Tree [sap](#)
String Length 1 to 45
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the SAP

Context	configure service ies <i>string aa-interface string sap string admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service ies <i>string aa-interface string sap string description string</i>
Tree	description
String Length	1 to 160
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure service ies <i>string aa-interface string sap string egress</i>
Tree	egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the filter context
Context	configure service ies <i>string aa-interface string sap string egress filter</i>
Tree	filter
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis	IPv4 filter policy name
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Context	configure service ies <i>string aa-interface string sap string egress filter ip reference</i>
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure service ies <i>string aa-interface string sap string egress qos</i>
Tree	qos
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-egress

Synopsis	Enter the sap-egress context
Context	configure service ies <i>string aa-interface string sap string egress qos sap-egress</i>
Tree	sap-egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure service ies <i>string aa-interface string sap string egress qos sap-egress policy-name reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fwd-wholesale

Synopsis	Enter the fwd-wholesale context
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Context **configure service ies** *string aa-interface string sap string fwd-wholesale*
Tree [fwd-wholesale](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pppoe-service *reference*

Synopsis PPPoE service name
Context **configure service ies** *string aa-interface string sap string fwd-wholesale pppoe-service reference*
Tree [pppoe-service](#)
Reference **configure service epipe** *string*
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis Enter the **ingress** context
Context **configure service ies** *string aa-interface string sap string ingress*
Tree [ingress](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
Context **configure service ies** *string aa-interface string sap string ingress qos*
Tree [qos](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-ingress

Synopsis Enter the **sap-ingress** context
Context **configure service ies** *string aa-interface string sap string ingress qos sap-ingress*

Tree [sap-ingress](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis Enter the **overrides** context
Context **configure service ies** *string aa-interface string sap string ingress qos sap-ingress overrides*
Tree [overrides](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Policy ID
Context **configure service ies** *string aa-interface string sap string ingress qos sap-ingress policy-name reference*
Tree [policy-name](#)
Reference **configure qos sap-ingress** *string*
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis Enter the **lag** context
Context **configure service ies** *string aa-interface string sap string lag*
Tree [lag](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aarp-interface [[interface-name](#)] *string*

Synopsis Enter the **aarp-interface** list instance
Context **configure service ies** *string aarp-interface string*
Tree [aarp-interface](#)

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[interface-name] *string*

Synopsis Interface name
Context **configure** [service](#) [ies](#) *string* [aarp-interface](#) *string*
Tree [aarp-interface](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the interface
Context **configure** [service](#) [ies](#) *string* [aarp-interface](#) *string* **admin-state** *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [service](#) [ies](#) *string* [aarp-interface](#) *string* **description** *string*
Tree [description](#)
String Length 1 to 255
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis IP MTU applied to outgoing packets

Context	configure service ies <i>string aarp-interface string ip-mtu number</i>
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [**sdp-bind-id**] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure service ies <i>string aarp-interface string spoke-sdp string</i>
Tree	spoke-sdp
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sdp-bind-id] *string*

Synopsis	SDP binding ID
Context	configure service ies <i>string aarp-interface string spoke-sdp string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aarp

Synopsis	Enable the aarp context
Context	configure service ies <i>string aarp-interface string spoke-sdp string aarp</i>
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AARP instance ID
Context	configure service ies <i>string aarp-interface</i> <i>string spoke-sdp</i> <i>string aarp id reference</i>
Tree	id
Reference	configure application-assurance aarp <i>number</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Role of the spoke SDP referenced by the AARP
Context	configure service ies <i>string aarp-interface</i> <i>string spoke-sdp</i> <i>string aarp type keyword</i>
Tree	type
Options	subscriber-side-shunt, network-side-shunt
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of this service SDP binding
Context	configure service ies <i>string aarp-interface</i> <i>string spoke-sdp</i> <i>string admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress
Tree	egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the filter context
Context	configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress filter
Tree	filter
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IP filter ID
Context	configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VC egress value that indicates a specific connection
Context	configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> ingress
Tree	ingress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the filter context
Context	configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> ingress filter
Tree	filter
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IP filter name
Context	configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>string</i>

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis VC ingress value that indicates a specific connection
Context **configure** *service ies string aarp-interface string spoke-sdp string ingress vc-label number*
Tree *vc-label*
Range 1 to 1048575
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the service
Context **configure** *service ies string admin-state keyword*
Tree *admin-state*
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

customer *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Service customer ID
Context **configure** *service ies string customer reference*
Tree *customer*
Reference **configure** *service customer string*

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service ies <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service ies <i>string</i> eth-cfm
Tree	eth-cfm
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

igmp-host-tracking

Synopsis	Enter the igmp-host-tracking context
Context	configure service ies <i>string</i> igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP host tracking
Context	configure service ies <i>string</i> igmp-host-tracking admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	configure service ies <i>string</i> igmp-host-tracking expiry-time <i>number</i>
Tree	expiry-time
Range	1 to 65535
Default	260
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [**interface-name**] *string*

Synopsis	Enter the interface list instance
Context	configure service ies <i>string</i> interface <i>string</i>
Tree	interface
Description	Commands in this context create a logical IP routing interface. When created, attributes such as an IP address and SAP ID can be associated with the IP interface.
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	configure service ies <i>string</i> interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service ies string interface string admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

cflowd-parameters

Synopsis	Enter the cflowd-parameters context
Context	configure service ies string interface string cflowd-parameters
Tree	cflowd-parameters
Introduced	16.0.R1
Platforms	All

sampling [[sampling-type](#)] *keyword*

Synopsis	Enter the sampling list instance
Context	configure service ies string interface string cflowd-parameters sampling <i>keyword</i>
Tree	sampling
Introduced	16.0.R1
Platforms	All

[[sampling-type](#)] *keyword*

Synopsis	Traffic sampling type
Context	configure service ies string interface string cflowd-parameters sampling <i>keyword</i>
Tree	sampling
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	configure service ies <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> direction <i>keyword</i>
Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Default	ingress-only
Options	ingress-only, egress-only, both
Introduced	16.0.R1
Platforms	All

sample-profile (*keyword* | *number*)

Synopsis	Sample profile ID
Context	configure service ies <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> sample-profile (<i>keyword</i> <i>number</i>)
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	All

type *keyword*

Synopsis	Type of cflowd analysis
Context	configure service ies <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> type <i>keyword</i>
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

cpu-protection *reference*

Synopsis	CPU protection policy
Context	configure service ies <i>string</i> interface <i>string</i> cpu-protection <i>reference</i>
Tree	cpu-protection
Reference	configure system security cpu-protection <i>policy</i> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service ies <i>string</i> interface <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dynamic-tunnel-redundant-nexthop *string*

Synopsis	Redundant next-hop address for the dynamic IPsec tunnel
Context	configure service ies <i>string</i> interface <i>string</i> dynamic-tunnel-redundant-nexthop <i>string</i>
Tree	dynamic-tunnel-redundant-nexthop
Description	This command specifies the redundant next-hop address on a public or private IPsec interface (with public or private tunnel SAP) for a dynamic IPsec tunnel. The next-hop address is used by a standby node to shunt traffic to a master if it receives the address. The next-hop address is resolved in the routing table of a corresponding service.
Notes	The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop).
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis	Enter the hold-time context
Context	configure service ies string interface string hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure service ies string interface string hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the down context
Context	configure service ies string interface string hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service ies string interface string hold-time ipv4 down init-only <i>boolean</i>
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false

Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis Down hold time for the IP interface
Context **configure service ies** *string* **interface** *string* **hold-time ipv4 down seconds** *number*
Tree **seconds**
Range 1 to 1200
Units seconds
Introduced 16.0.R1
Platforms All

up

Synopsis Enter the **up** context
Context **configure service ies** *string* **interface** *string* **hold-time ipv4 up**
Tree **up**
Description Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis Up hold time for the IP interface
Context **configure service ies** *string* **interface** *string* **hold-time ipv4 up seconds** *number*
Tree **seconds**
Range 1 to 1200
Units seconds
Introduced 16.0.R1
Platforms All

ipv6

Synopsis	Enter the ipv6 context
Context	configure service ies <i>string</i> interface <i>string</i> hold-time ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the down context
Context	configure service ies <i>string</i> interface <i>string</i> hold-time ipv6 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service ies <i>string</i> interface <i>string</i> hold-time ipv6 down init-only <i>boolean</i>
Tree	init-only
Description	This command applies the delay only when when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service ies <i>string</i> interface <i>string</i> hold-time ipv6 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200

Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the up context
Context	configure service ies string interface string hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service ies string interface string hold-time ipv6 up seconds number
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

if-attribute

Synopsis	Enter the if-attribute context
Context	configure service ies string interface string if-attribute
Tree	if-attribute
Introduced	16.0.R1
Platforms	All

admin-group *reference*

Synopsis	Administrative group name for the interface
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Context	configure service ies <i>string</i> interface <i>string</i> if-attribute admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

srlg-group [*name*] *reference*

Synopsis	Add a list entry for srlg-group
Context	configure service ies <i>string</i> interface <i>string</i> if-attribute srlg-group <i>reference</i>
Tree	srlg-group
Introduced	16.0.R1
Platforms	All

[*name*] *reference*

Synopsis	SRLG name
Context	configure service ies <i>string</i> interface <i>string</i> if-attribute srlg-group <i>reference</i>
Tree	srlg-group
Reference	configure routing-options if-attribute srlg-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure service ies <i>string</i> interface <i>string</i> ingress
Tree	ingress
Introduced	19.7.R1
Platforms	All

destination-class-lookup *boolean*

Synopsis	Enable BGP destination class lookup
Context	configure service ies <i>string</i> interface <i>string</i> ingress destination-class-lookup <i>boolean</i>
Tree	destination-class-lookup
Description	When configured to true , the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the destination-class match criterion for an IP filter policy to filter egress traffic based on BGP destination classes. When configured to false , destination class lookup is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

policy-accounting *reference*

Synopsis	Ingress policy accounting template name
Context	configure service ies <i>string</i> interface <i>string</i> ingress policy-accounting <i>reference</i>
Tree	policy-accounting
Reference	configure routing-options policy-accounting policy-acct-template <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-stats *boolean*

Synopsis	Collect ingress statistics
Context	configure service ies <i>string</i> interface <i>string</i> ingress-stats <i>boolean</i>
Tree	ingress-stats
Default	false
Introduced	16.0.R1
Platforms	All

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	configure service ies <i>string</i> interface <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu

Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	All

ipsec

Synopsis	Enable the ipsec context
Context	configure service ies string interface string ipsec
Tree	ipsec
Description	Commands in this context configure an IPsec secured interface.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	configure service ies string interface string ipsec admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

ip-exception *reference*

Synopsis	IP exception filter
Context	configure service ies string interface string ipsec ip-exception reference
Tree	ip-exception
Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	configure filter ip-exception string
Introduced	22.7.R1
Platforms	VSR

ipsec-tunnel *[name]* *string*

Synopsis	Enter the ipsec-tunnel list instance
Context	configure <i>service ies string interface string ipsec ipsec-tunnel string</i>
Tree	<i>ipsec-tunnel</i>
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	22.7.R1
Platforms	VSR

[name] *string*

Synopsis	IPsec tunnel name
Context	configure <i>service ies string interface string ipsec ipsec-tunnel string</i>
Tree	<i>ipsec-tunnel</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	configure <i>service ies string interface string ipsec ipsec-tunnel string admin-state keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

bfd



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the bfd context
Context	configure service ies string interface string ipsec ipsec-tunnel string bfd
Tree	bfd
Introduced	22.7.R1
Platforms	VSR

bfd-designate *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	configure service ies string interface string ipsec ipsec-tunnel string bfd bfd-designate boolean
Tree	bfd-designate
Default	false
Introduced	22.7.R1
Platforms	VSR

bfd-liveness



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the bfd-liveness context
Context	configure service ies string interface string ipsec ipsec-tunnel string bfd bfd-liveness
Tree	bfd-liveness
Description	Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.

BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.

Introduced 22.7.R1
Platforms VSR

dest-ip *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Destination address used for the BFD session
Context **configure** *service ies string interface string ipsec ipsec-tunnel string bfd bfd-liveness dest-ip string*
Tree *dest-ip*
Notes This element is mandatory.
Introduced 22.7.R1
Platforms VSR

interface *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the interface used by the BFD session
Context **configure** *service ies string interface string ipsec ipsec-tunnel string bfd bfd-liveness interface string*
Tree *interface*
String Length 1 to 32
Notes This element is mandatory.
Introduced 22.7.R1
Platforms VSR

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure <i>service ies string interface string ipsec ipsec-tunnel string bfd bfd-liveness service-name string</i>
Tree	<i>service-name</i>
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

clear-df-bit *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	configure <i>service ies string interface string ipsec ipsec-tunnel string clear-df-bit boolean</i>
Tree	<i>clear-df-bit</i>
Description	When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	22.7.R1
Platforms	VSR

copy-traffic-class-upon-decapsulation *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
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Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> copy-traffic-class-upon-decapsulation <i>boolean</i>
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	22.7.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp-generation context
Context	configure service ies string interface string ipsec ipsec-tunnel string icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	22.7.R1
Platforms	VSR

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the frag-required context
Context	configure service ies string interface string ipsec ipsec-tunnel string icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	configure service ies string interface string ipsec ipsec-tunnel string icmp-generation frag-required admin-state <i>keyword</i>

Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Default	enable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Default	10
Units	seconds
Introduced	22.7.R1
Platforms	VSR

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count

Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	22.7.R1
Platforms	VSR

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big
Tree	packet-too-big
Description	<p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the configure router interface ipsec ipsec-tunnel ip-mtu command for the interface.</p>
Introduced	22.7.R1

Platforms VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big interval <i>number</i>
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Introduced	22.7.R1
Platforms	VSR

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

key-exchange



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key-exchange context
Context	configure service ies string interface string ipsec ipsec-tunnel string key-exchange
Tree	key-exchange
Introduced	22.7.R1
Platforms	VSR

dynamic



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the dynamic context
Context	configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic
Tree	dynamic
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	22.7.R1
Platforms	VSR

auto-establish *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic auto-establish boolean
Tree	auto-establish
Default	false
Introduced	22.7.R1
Platforms	VSR

cert



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the cert context
Context	configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	22.7.R1
Platforms	VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic cert cert-profile reference
Tree	cert-profile
Reference	configure ipsec cert-profile string
Introduced	22.7.R1
Platforms	VSR

status-verify



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the status-verify context
Context	configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	22.7.R1
Platforms	VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Default	revoked
Options	revoked, good
Introduced	22.7.R1
Platforms	VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify primary <i>keyword</i>
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Default	crl
Options	crl, ocsp
Introduced	22.7.R1
Platforms	VSR

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify secondary <i>keyword</i>
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Default	none
Options	none, crl, ocsp

Introduced 22.7.R1
Platforms VSR

trust-anchor-profile *reference*

Synopsis Trust anchor profile name
Context **configure** [service ies string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange dynamic cert trust-anchor-profile reference](#)
Tree [trust-anchor-profile](#)
Reference **configure** [ipsec trust-anchor-profile string](#)
Introduced 22.7.R1
Platforms VSR

id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context
Context **configure** [service ies string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange dynamic id](#)
Tree [id](#)
Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

Introduced 22.7.R1
Platforms VSR

fqdn *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id fqdn <i>string</i>
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ipv4 *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id ipv4 <i>string</i>
Tree	ipv4
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ike-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ike-policy <i>reference</i>
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The ipsec-transport-mode-profile configuration only supports IKEv2.
Reference	configure ipsec ike-policy <i>number</i>
Introduced	22.7.R1
Platforms	VSR

ipsec-transform *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ipsec-transform <i>reference</i>
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>
Max. Instances	4
Introduced	22.7.R1
Platforms	VSR

pre-shared-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic pre-shared-key <i>string</i>
Tree	pre-shared-key
String Length	1 to 115
Introduced	22.7.R1
Platforms	VSR

manual



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the manual context
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual
Tree	manual
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	22.7.R1
Platforms	VSR

keys [[security-association](#)] *number direction keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the keys list instance
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number direction keyword</i>
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.
Introduced	22.7.R1
Platforms	VSR

[**security-association**] *number*

Synopsis	SA entry ID
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

direction *keyword*

Synopsis	Direction of the IPsec tunnel
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

authentication-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 130

Introduced 22.7.R1
Platforms VSR

encryption-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Key used for the encryption algorithm
Context **configure** [service ies string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange manual keys number direction keyword](#) [encryption-key string](#)
Tree [encryption-key](#)
String Length 1 to 66
Introduced 22.7.R1
Platforms VSR

ipsec-transform *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Transform entry used by manual SAs
Context **configure** [service ies string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange manual keys number direction keyword](#) [ipsec-transform reference](#)
Tree [ipsec-transform](#)
Reference **configure** [ipsec ipsec-transform number](#)
Notes This element is mandatory.
Introduced 22.7.R1
Platforms VSR

spi number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> spi <i>number</i>
Tree	spi
Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

local-gateway-address-override (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> local-gateway-address-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-gateway-address-override
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	22.7.R1
Platforms	VSR

max-history-key-records



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the max-history-key-records context
Context	configure service ies string interface string ipsec ipsec-tunnel string max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	22.7.R1
Platforms	VSR

esp number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	configure service ies string interface string ipsec ipsec-tunnel string max-history-key-records esp number
Tree	esp
Range	1 to 48
Introduced	22.7.R1
Platforms	VSR

ike number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	configure service ies string interface string ipsec ipsec-tunnel string max-history-key-records ike number
Tree	ike

Range	1 to 3
Introduced	22.7.R1
Platforms	VSR

pmtu-discovery-aging *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Default	900
Units	seconds
Introduced	22.7.R1
Platforms	VSR

private-sap *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private SAP ID
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> private-sap <i>number</i>
Tree	private-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1

Platforms VSR

private-service *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Private service name

Context **configure** [service ies string](#) [interface string ipsec ipsec-tunnel string](#) [private-service string](#)

Tree [private-service](#)

Description This command configures the private service name.
If unconfigured, the private service is the service where the secured interface resides.

String Length 1 to 64

Introduced 22.7.R1

Platforms VSR

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis TCP maximum segment size (MSS) adjustment

Context **configure** [service ies string](#) [interface string ipsec ipsec-tunnel string](#) [private-tcp-mss-adjust number](#)

Tree [private-tcp-mss-adjust](#)

Description This command specifies the TCP MSS to adjust for the tunnel on the private side.
When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.

Range 512 to 9000

Units bytes

Introduced 22.7.R1

Platforms VSR

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

propagate-pmtu-v6 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> propagate-pmtu-v6 <i>boolean</i>
Tree	propagate-pmtu-v6
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

public-tcp-mss-adjust (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	22.7.R1
Platforms	VSR

remote-gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> remote-gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	remote-gateway-address
Introduced	22.7.R1
Platforms	VSR

replay-window *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
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Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> replay-window <i>number</i>
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 64 128 256 512
Units	packets
Introduced	22.7.R1
Platforms	VSR

security-policy



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the security-policy context
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> security-policy
Tree	security-policy
Description	Commands in this context specify a security policy used by the tunnel.
Introduced	22.7.R1
Platforms	VSR

id number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security policy ID for use by the tunnel
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> security-policy <i>id number</i>
Tree	id
Max. Range	0 to 4294967295
Introduced	22.7.R1
Platforms	VSR

strict-match *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> security-policy strict-match <i>boolean</i>
Tree	strict-match
Description	<p>When configured to true, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p>
Default	false
Introduced	22.7.R1
Platforms	VSR

ipv6-exception *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	configure service ies <i>string</i> interface <i>string</i> ipsec ipv6-exception <i>reference</i>
Tree	ipv6-exception
Description	<p>This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.</p>
Reference	configure filter ipv6-exception <i>string</i>
Introduced	22.7.R1
Platforms	VSR

public-sap *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Public SAP ID
Context	configure service ies <i>string</i> interface <i>string</i> ipsec public-sap <i>number</i>
Tree	public-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

tunnel-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID
Context	configure service ies <i>string</i> interface <i>string</i> ipsec tunnel-group <i>reference</i>
Tree	tunnel-group
Reference	configure isa tunnel-group <i>number</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service ies <i>string</i> interface <i>string</i> ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

addresses

Synopsis	Enter the addresses context
Context	configure service ies string interface string ipv4 addresses
Tree	addresses
Introduced	16.0.R1
Platforms	All

address [ipv4-address] string

Synopsis	Enter the address list instance
Context	configure service ies string interface string ipv4 addresses address string
Tree	address
Introduced	16.0.R1
Platforms	All

[ipv4-address] string

Synopsis	IPv4 address for the interface
Context	configure service ies string interface string ipv4 addresses address string
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

prefix-length number

Synopsis	IPv4 address prefix length
Context	configure service ies string interface string ipv4 addresses address string prefix-length number
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 allow-directed-broadcasts <i>boolean</i>
Tree	allow-directed-broadcasts
Default	false
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 bfd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1

Platforms All

multiplier *number*

Synopsis Number of consecutive BFD messages missed from the peer

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv4](#) [bfd](#) [multiplier](#) *number*

Tree [multiplier](#)

Description This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.

Range 1 to 20

Default 3

Introduced 16.0.R1

Platforms All

receive *number*

Synopsis BFD receive interval over this interface

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv4](#) [bfd](#) [receive](#) *number*

Tree [receive](#)

Description This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 16.0.R1

Platforms All

transmit-interval *number*

Synopsis BFD transmit interval over this interface

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv4](#) [bfd](#) [transmit-interval](#) *number*

Tree [transmit-interval](#)

Description This command configures the transmit intervals.

On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Local termination point for the BFD session
Context	configure service ies string interface string ipv4 bfd type keyword
Tree	type
Description	<p>This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.</p> <p>The options to specify where the BFD session runs are:</p> <ul style="list-style-type: none">• auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np.• cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.• fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Default	auto
Options	cpm-np, auto, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dhcp

Synopsis	Enter the dhcp context
Context	configure service ies string interface string ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	configure service ies string interface string ipv4 dhcp admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service ies string interface string ipv4 dhcp description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

gi-address *string*

Synopsis	GI address for the DHCP relay
Context	configure service ies string interface string ipv4 dhcp gi-address string
Tree	gi-address
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	All

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service ies string interface string ipv4 dhcp lease-populate

Tree	lease-populate
Introduced	16.0.R1
Platforms	All

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases allowed
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp lease-populate max-leases <i>number</i>
Tree	max-leases
Range	0 to 511999
Introduced	16.0.R1
Platforms	All

option-82

Synopsis	Enter the option-82 context
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp option-82 action <i>keyword</i>
Tree	action
Default	keep
Options	replace, drop, keep
Introduced	16.0.R1
Platforms	All

circuit-id

Synopsis	Enter the circuit-id context
Context	configure service ies string interface string ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	All

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	configure service ies string interface string ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

ifindex

Synopsis	Use the interface index for the circuit ID
Context	configure service ies string interface string ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the circuit ID
Context	configure service ies string interface string ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1

Platforms All

sap-id

Synopsis Use the SAP ID

Context **configure** *service ies string interface string ipv4 dhcp option-82 circuit-id sap-id*

Tree *sap-id*

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms All

vlan-ascii-tuple

Synopsis Include the VLAN ID and dot1p bits in the ASCII tuple

Context **configure** *service ies string interface string ipv4 dhcp option-82 circuit-id vlan-ascii-tuple*

Tree *vlan-ascii-tuple*

Description When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.
When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms All

remote-id

Synopsis Enter the **remote-id** context

Context **configure** *service ies string interface string ipv4 dhcp option-82 remote-id*

Tree *remote-id*

Description Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).

Introduced 16.0.R1

Platforms All

ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	configure service ies string interface string ipv4 dhcp option-82 remote-id ascii-string string
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	All

mac

Synopsis	Use the MAC address for the remote ID
Context	configure service ies string interface string ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the remote ID
Context	configure service ies string interface string ipv4 dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	All

vendor-specific-option

Synopsis	Enter the vendor-specific-option context
Context	configure service ies string interface string ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option

Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	All

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i>
Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	All

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option pool-name <i>boolean</i>
Tree	pool-name
Default	false
Introduced	16.0.R1
Platforms	All

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option sap-id <i>boolean</i>
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	All

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	configure service ies string interface string ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i>
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	configure service ies string interface string ipv4 dhcp option-82 vendor-specific-option string <i>string</i>
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	configure service ies string interface string ipv4 dhcp option-82 vendor-specific-option system-id <i>boolean</i>
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	All

proxy-server

Synopsis	Enter the proxy-server context
Context	configure service ies string interface string ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	configure service ies string interface string ipv4 dhcp proxy-server admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

emulated-server *string*

Synopsis	IP address used as the DHCP server address for the SAP
Context	configure service ies string interface string ipv4 dhcp proxy-server emulated-server <i>string</i>
Tree	emulated-server
Description	This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service.
Introduced	16.0.R1
Platforms	All

lease-time

Synopsis	Enter the lease-time context
Context	configure service ies string interface string ipv4 dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	All

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	configure service ies string interface string ipv4 dhcp proxy-server lease-time radius-override <i>boolean</i>
Tree	radius-override

Default	false
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	DHCP lease time
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp proxy-server lease-time <i>value number</i>
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

relay-plain-bootp *boolean*

Synopsis	Enable relaying of plain BOOTP packets
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp relay-plain-bootp <i>boolean</i>
Tree	relay-plain-bootp
Default	false
Introduced	16.0.R1
Platforms	All

relay-proxy

Synopsis	Enable the relay-proxy context
Context	configure service ies string interface string ipv4 dhcp relay-proxy
Tree	relay-proxy
Introduced	16.0.R1
Platforms	All

release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	configure service ies string interface string ipv4 dhcp relay-proxy release-update-src-ip <i>boolean</i>
Tree	release-update-src-ip
Default	false
Introduced	16.0.R1
Platforms	All

siaddr-override *string*

Synopsis	DHCP server IP address for address hiding function
Context	configure service ies string interface string ipv4 dhcp relay-proxy siaddr-override <i>string</i>
Tree	siaddr-override
Introduced	16.0.R1
Platforms	All

release-include-gi-address *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	configure service ies string interface string ipv4 dhcp release-include-gi-address <i>boolean</i>
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server string

Synopsis	IP addresses for DHCP server requests
Context	configure service ies string interface string ipv4 dhcp server string
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

src-ip-addr keyword

Synopsis	Type of source address to use for DHCP relay
Context	configure service ies string interface string ipv4 dhcp src-ip-addr keyword
Tree	src-ip-addr
Default	auto
Options	auto, gi-address
Introduced	16.0.R1
Platforms	All

trusted boolean

Synopsis	Relay untrusted packets
Context	configure service ies string interface string ipv4 dhcp trusted boolean
Tree	trusted
Description	When configured to true , the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request. A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit. This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.

Default	false
Introduced	16.0.R1
Platforms	All

use-arp *boolean*

Synopsis	Use ARP to determine the destination hardware address
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp use-arp <i>boolean</i>
Tree	use-arp
Default	false
Introduced	16.0.R1
Platforms	All

icmp

Synopsis	Enter the icmp context
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 icmp
Tree	icmp
Introduced	16.0.R1
Platforms	All

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 icmp mask-reply <i>boolean</i>
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the param-problem context
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 icmp param-problem
Tree	param-problem

Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 icmp param-problem admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 icmp param-problem number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 icmp param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1

Platforms All

redirects

Synopsis Enter the **redirects** context

Context **configure service ies string interface string ipv4 icmp redirects**

Tree **redirects**

Description Commands in this context configure the settings for ICMP redirect messages generated by the interface.
The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of sending ICMP redirect messages

Context **configure service ies string interface string ipv4 icmp redirects admin-state keyword**

Tree **admin-state**

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms All

number *number*

Synopsis Maximum number of ICMP redirect messages to send

Context **configure service ies string interface string ipv4 icmp redirects number number**

Tree **number**

Range 10 to 1000

Default 100

Introduced 16.0.R1

Platforms All

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	configure service ies string interface string ipv4 icmp redirects seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

ttl-expired

Synopsis	Enter the ttl-expired context
Context	configure service ies string interface string ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	configure service ies string interface string ipv4 icmp ttl-expired admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	configure service ies string interface string ipv4 icmp ttl-expired number <i>number</i>
Tree	number

Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 icmp ttl-expired seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the unreachables context
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 icmp unreachables admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

number *number*

Synopsis Maximum number of unreachable messages to send
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv4](#) [icmp](#) [unreachables](#) [number](#) *number*
Tree [number](#)
Range 10 to 2000
Default 100
Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis Time to limit the number of ICMP unreachable messages
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv4](#) [icmp](#) [unreachables](#) [seconds](#) *number*
Tree [seconds](#)
Range 1 to 60
Default 10
Units seconds
Introduced 16.0.R1
Platforms All

ip-helper-address *string*

Synopsis Gateway address
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv4](#) [ip-helper-address](#) *string*
Tree [ip-helper-address](#)
Introduced 16.0.R1
Platforms All

local-dhcp-server *reference*

Synopsis DHCP server for the interface
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv4](#) [local-dhcp-server](#) *reference*

Tree	local-dhcp-server
Reference	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

host-route

Synopsis	Enter the host-route context
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route
Tree	host-route
Introduced	19.10.R1
Platforms	All

populate [[route-type](#)] *keyword*

Synopsis	Enter the populate list instance
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i>
Tree	populate
Introduced	19.10.R1
Platforms	All

[[route-type](#)] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i>
Tree	populate

Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i> route-tag <i>number</i>
Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	19.10.R1
Platforms	All

learn-unsolicited *boolean*

Synopsis	Learn new entries from any received NA message
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery learn-unsolicited <i>boolean</i>
Tree	learn-unsolicited
Description	<p>When configured to true, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to false, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> • If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored. • If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.
Default	false

Introduced 16.0.R1
Platforms All

limit

Synopsis Enter the **limit** context
Context **configure service ies string interface string ipv4 neighbor-discovery limit**
Tree **limit**
Introduced 16.0.R1
Platforms All

log-only *boolean*

Synopsis Generate log entries only if limit is reached
Context **configure service ies string interface string ipv4 neighbor-discovery limit log-only boolean**
Tree **log-only**
Default false
Introduced 16.0.R1
Platforms All

max-entries *number*

Synopsis Maximum number of entries learned on an IP interface
Context **configure service ies string interface string ipv4 neighbor-discovery limit max-entries number**
Tree **max-entries**
Range 0 to 524288
Introduced 16.0.R1
Platforms All

threshold *number*

Synopsis Threshold value that triggers a warning message
Context **configure service ies string interface string ipv4 neighbor-discovery limit threshold number**

Tree	threshold
Range	1 to 100
Default	90
Units	percent
Introduced	16.0.R1
Platforms	All

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery local-proxy-arp <i>boolean</i>
Tree	local-proxy-arp
Description	When configured to true , the router enables local proxy ARP on the interface. When configured to false , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	All

populate *boolean*

Synopsis	Allow static and dynamic hosts to be populated in system ARP cache
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery populate <i>boolean</i>
Tree	populate
Default	false
Introduced	16.0.R1
Platforms	All

proactive-refresh *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery proactive-refresh <i>boolean</i>
Tree	proactive-refresh
Description	When configured to true , the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries).

When configured to **false**, the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.

Default	false
Introduced	16.0.R1
Platforms	All

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	configure service ies string interface string ipv4 neighbor-discovery proxy-arp-policy reference
Tree	proxy-arp-policy
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	configure service ies string interface string ipv4 neighbor-discovery remote-proxy-arp boolean
Tree	remote-proxy-arp
Default	false
Introduced	16.0.R1
Platforms	All

retry-timer *number*

Synopsis	ARP retry interval
Context	configure service ies string interface string ipv4 neighbor-discovery retry-timer number
Tree	retry-timer

Range	1 to 300
Default	50
Units	deciseconds
Introduced	16.0.R1
Platforms	All

static-neighbor [[ipv4-address](#)] *string*

Synopsis	Enter the static-neighbor list instance
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

[ipv4-address] *string*

Synopsis	IPv4 address that corresponds to the physical address
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

static-neighbor-unnumbered

Synopsis	Enable the static-neighbor-unnumbered context
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor-unnumbered
Tree	static-neighbor-unnumbered
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor-unnumbered mac-address <i>string</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Default	14400
Units	seconds
Introduced	16.0.R1
Platforms	All

primary

Synopsis	Enable the primary context
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Context	configure service ies <i>string</i> interface <i>string</i> ipv4 primary
Tree	primary
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 primary address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 primary broadcast <i>keyword</i>
Tree	broadcast
Default	host-ones
Options	all-ones, host-ones
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 primary prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 primary track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

qos-route-lookup *keyword*

Synopsis	QoS Route lookup
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 qos-route-lookup <i>keyword</i>
Tree	qos-route-lookup
Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary [*address*] *string*

Synopsis	Enter the secondary list instance
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i>
Tree	secondary
Introduced	16.0.R1
Platforms	All

[*address*] *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i>
Tree	secondary
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> broadcast <i>keyword</i>
Tree	broadcast
Default	host-ones
Options	all-ones, host-ones
Introduced	16.0.R1
Platforms	All

igp-inhibit *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> igp-inhibit <i>boolean</i>
Tree	igp-inhibit
Description	When configured to true , the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> track-srrp <i>number</i>
Tree	track-srrp

Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 tcp-mss <i>number</i>
Tree	tcp-mss
Range	384 to 9746
Introduced	16.0.R1
Platforms	All

unnumbered

Synopsis	Enter the unnumbered context
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 unnumbered
Tree	unnumbered
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	IP address of the unnumbered interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 unnumbered ip-address <i>string</i>
Tree	ip-address
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	16.0.R1
Platforms	All

ip-int-name *string*

Synopsis	IP interface name
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 unnumbered ip-int-name <i>string</i>
Tree	ip-int-name

String Length	1 to 32
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	16.0.R1
Platforms	All

system

Synopsis	IP interface as an unnumbered interface
Context	configure service ies string interface string ipv4 unnumbered system
Tree	system
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the urpf-check context
Context	configure service ies string interface string ipv4 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	configure service ies string interface string ipv4 urpf-check ignore-default boolean
Tree	ignore-default
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure service ies string interface string ipv4 urpf-check mode keyword

Tree	mode
Default	strict
Options	strict, loose, strict-no-ecmp
Introduced	16.0.R1
Platforms	All

vrrp [[virtual-router-id](#)] *number*

Synopsis	Enter the vrrp list instance
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i>
Tree	vrrp
Introduced	16.0.R1
Platforms	All

[virtual-router-id] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i>
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p>

Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.

An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the **admin-state** command within the parent IP interface node which administratively disables the IP interface.

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Password for simple text authentication
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp number authentication-key <i>string</i>
Tree	authentication-key
Description	<p>This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.</p> <p>If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.</p>
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

backup *string*

Synopsis	Virtual router IP addresses for the interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp number backup <i>string</i>
Tree	backup
Description	<p>This command associates virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p>

For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified *unicast-ipv4-address* must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.

Max. Instances	16
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service ies string interface string ipv4 vrrp number bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

dest-ip string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IP address to use for BFD session
Context	configure service ies string interface string ipv4 vrrp number bfd-liveness dest-ip string
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

interface-name string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
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Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> bfd-liveness interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

service-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> bfd-liveness service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> init-delay <i>number</i>
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> mac <i>string</i>

Tree	mac
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p>
Introduced	16.0.R1
Platforms	All

master-int-inherit *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> master-int-inherit <i>boolean</i>
Tree	master-int-inherit
Description	<p>When configured to true, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to false, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	16.0.R1
Platforms	All

message-interval *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> message-interval <i>number</i>
Tree	message-interval

Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the master-int-inherit command:</p> <ul style="list-style-type: none">• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The master-int-inherit command has no effect when operating as master.• When a non-owner is in the backup state with master-int-inherit disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.• When a non-owner is in the backup state with master-int-inherit enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.
Range	1 to 2559
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure service oper-group <i>string</i>

Introduced 22.2.R1
Platforms All

ntp-reply *boolean*

Synopsis Allow processing of NTP requests
Context **configure** *service ies string interface string ipv4 vrrp number ntp-reply boolean*
Tree [ntp-reply](#)
Description When configured to **true**, the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router.
When configured to **false**, the router does not process NTP requests.
Default false
Introduced 20.2.R1
Platforms All

oper-group *reference*

Synopsis Operational group name associated with the VRRP
Context **configure** *service ies string interface string ipv4 vrrp number oper-group reference*
Tree [oper-group](#)
Description This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference **configure** *service oper-group string*
Introduced 16.0.R1
Platforms All

owner *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Designate the virtual router instance as owner
Context **configure** *service ies string interface string ipv4 vrrp number owner boolean*

Tree	owner
Description	When configured to true , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router. When configured to false , this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

passive *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> passive <i>boolean</i>
Tree	passive
Description	When configured to true , the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down). When configured to false , this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> ping-reply <i>boolean</i>
Tree	ping-reply
Description	When configured to true , the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).

When configured to **false**, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.

Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.

Default	false
Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	VRRP priority control policy
Context	configure service ies string interface string ipv4 vrrp number policy reference
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	configure vrrp policy number
Introduced	16.0.R1
Platforms	All

preempt boolean

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure service ies string interface string ipv4 vrrp number preempt boolean
Tree	preempt
Description	<p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true

Introduced	16.0.R1
Platforms	All

priority number

Synopsis	Base priority for the VRRP
Context	configure service ies string interface string ipv4 vrrp number priority number
Tree	priority
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

ssh-reply boolean

Synopsis	Allow the non-owner master to reply to SSH requests
Context	configure service ies string interface string ipv4 vrrp number ssh-reply boolean
Tree	ssh-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).</p> <p>When configure to false, SSH requests to non-owner master virtual IP addresses are silently discarded.</p>
Default	false
Introduced	16.0.R1
Platforms	All

standby-forwarding boolean

Synopsis	Allow standby router to forward traffic
Context	configure service ies string interface string ipv4 vrrp number standby-forwarding boolean

Tree	standby-forwarding
Description	When configured to true , the standby router forwards all traffic. When configured to false , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> telnet-reply <i>boolean</i>
Tree	telnet-reply
Description	When configured to true , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to false , the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> traceroute-reply <i>boolean</i>
Tree	traceroute-reply
Description	When configured to true , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to false , the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	16.0.R1

Platforms All

ipv6

Synopsis Enable the **ipv6** context
Context **configure service ies string interface string ipv6**
Tree **ipv6**
Introduced 16.0.R1
Platforms All

address [ipv6-address] string

Synopsis Enter the **address** list instance
Context **configure service ies string interface string ipv6 address string**
Tree **address**
Introduced 16.0.R1
Platforms All

[ipv6-address] string

Synopsis IPv6 address assigned to the interface
Context **configure service ies string interface string ipv6 address string**
Tree **address**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

duplicate-address-detection boolean



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable Duplicate Address Detection
Context **configure service ies string interface string ipv6 address string duplicate-address-detection boolean**

Tree	duplicate-address-detection
Description	When configured to true , the router enables Duplicate Address Detection (DAD). When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

eui-64 *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	configure service ies string interface string ipv6 address string eui-64 <i>boolean</i>
Tree	eui-64
Description	When configured to true , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	configure service ies string interface string ipv6 address string prefix-length <i>number</i>
Tree	prefix-length
Range	4 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

primary-preference *number*

Synopsis	Index assigned to the IPv6 address of the interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 address <i>string</i> primary-preference <i>number</i>
Tree	primary-preference
Description	<p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP ID whose state is tracked on this IP address
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 address <i>string</i> track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 bfd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive *number*

Synopsis	BFD receive interval over this interface
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Context	configure service ies <i>string</i> interface <i>string</i> ipv6 bfd receive <i>number</i>
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 bfd transmit-interval <i>number</i>
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Local termination point for the BFD session
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 bfd type <i>keyword</i>
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none">• auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np.

- **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.
- **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.

Default	auto
Options	cpm-np, auto, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service ies string interface string ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	All

relay

Synopsis	Enter the relay context
Context	configure service ies string interface string ipv6 dhcp6 relay
Tree	relay
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	configure service ies string interface string ipv6 dhcp6 relay admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service ies string interface string ipv6 dhcp6 relay description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service ies string interface string ipv6 dhcp6 relay lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	All

max-nbr-of-leases *number*

Synopsis	Maximum number of lease states allocated by the DHCPv6 relay function, allowed on interface
Context	configure service ies string interface string ipv6 dhcp6 relay lease-populate max-nbr-of-leases number
Tree	max-nbr-of-leases
Range	0 to 32767
Default	0
Introduced	16.0.R1
Platforms	All

route-populate

Synopsis	Enter the route-populate context
Context	configure service ies string interface string ipv6 dhcp6 relay lease-populate route-populate
Tree	route-populate
Introduced	16.0.R1
Platforms	All

na *boolean*

Synopsis	Create route based on IA_NA prefix option in relay-reply message
Context	configure service ies string interface string ipv6 dhcp6 relay lease-populate route-populate na <i>boolean</i>
Tree	na
Default	false
Introduced	16.0.R1
Platforms	All

pd

Synopsis	Enable the pd context
Context	configure service ies string interface string ipv6 dhcp6 relay lease-populate route-populate pd
Tree	pd
Introduced	16.0.R1
Platforms	All

exclude *boolean*

Synopsis	Create back hole route based on prefix exclude option in relay-reply message
Context	configure service ies string interface string ipv6 dhcp6 relay lease-populate route-populate pd exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	16.0.R1
Platforms	All

ta *boolean*

Synopsis	Create route based on IA_TA prefix option in relay-reply message
Context	configure service ies string interface string ipv6 dhcp6 relay lease-populate route-populate ta <i>boolean</i>
Tree	ta
Default	false

Introduced 16.0.R1
Platforms All

link-address *string*

Synopsis Link address of the DHCPv6 relay messages
Context **configure service ies** *string* **interface** *string* **ipv6 dhcp6 relay link-address** *string*
Tree [link-address](#)
Introduced 16.0.R1
Platforms All

neighbor-resolution *boolean*

Synopsis Enable neighbor resolution via DHCPv6 relay
Context **configure service ies** *string* **interface** *string* **ipv6 dhcp6 relay neighbor-resolution** *boolean*
Tree [neighbor-resolution](#)
Default false
Introduced 16.0.R1
Platforms All

option

Synopsis Enter the **option** context
Context **configure service ies** *string* **interface** *string* **ipv6 dhcp6 relay option**
Tree [option](#)
Introduced 16.0.R1
Platforms All

interface-id

Synopsis Enter the **interface-id** context
Context **configure service ies** *string* **interface** *string* **ipv6 dhcp6 relay option interface-id**
Tree [interface-id](#)
Introduced 16.0.R1

Platforms All

ascii-tuple

Synopsis Use ASCII-encoded concatenated tuple

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [option](#) [interface-id](#) [ascii-tuple](#)

Tree [ascii-tuple](#)

Notes The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms All

if-index

Synopsis Use interface index in interface ID option in DHCPv6 relay packet

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [option](#) [interface-id](#) [if-index](#)

Tree [if-index](#)

Notes The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms All

sap-id

Synopsis Use SAP ID in interface ID option in DHCPv6 relay packet

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [option](#) [interface-id](#) [sap-id](#)

Tree [sap-id](#)

Notes The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms All

string *string*

Synopsis String for interface ID option in DHCPv6 relay packet

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [option](#) [interface-id](#) [string](#) [string](#)

Tree [string](#)

String Length	1 to 80
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1
Platforms	All

remote-id *boolean*

Synopsis	Allow remote ID option to be sent in the DHCPv6 relay packet
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option remote-id <i>boolean</i>
Tree	remote-id
Default	false
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

server *string*

Synopsis	DHCPv6 server to which the DHCPv6 requests are forwarded
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay server <i>string</i>
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

source-address *string*

Synopsis	Source IPv6 address of the DHCPv6 relay messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay source-address <i>string</i>
Tree	source-address
Introduced	16.0.R1
Platforms	All

user-db *reference*

Synopsis	Local user database for authentication
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server

Synopsis	Enter the server context
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 server
Tree	server
Introduced	16.0.R1
Platforms	All

max-nbr-of-leases *number*

Synopsis	DHCPv6 leases allowed
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 server max-nbr-of-leases <i>number</i>
Tree	max-nbr-of-leases
Range	0 to 8000
Default	8000
Introduced	16.0.R1
Platforms	All

prefix-delegation

Synopsis	Enter the prefix-delegation context
Context	configure service ies string interface string ipv6 dhcp6 server prefix-delegation
Tree	prefix-delegation
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the prefix delegation
Context	configure service ies string interface string ipv6 dhcp6 server prefix-delegation admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

prefix [[ipv6-prefix](#)] *string*

Synopsis	Enter the prefix list instance
Context	configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string
Tree	prefix
Introduced	16.0.R1
Platforms	All

[[ipv6-prefix](#)] *string*

Synopsis	IPv6 address and prefix
Context	configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

client-id

Synopsis Enter the **client-id** context

Context **configure** service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id

Tree client-id

Introduced 16.0.R1

Platforms All

duid string

Synopsis Requesting router ID

Context **configure** service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id duid string

Tree duid

String Length 1 to 130

Introduced 16.0.R1

Platforms All

iaid number

Synopsis IAID from the requesting router to match

Context **configure** service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id iaid number

Tree iaid

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

preferred-lifetime (number | keyword)

Synopsis Preferred lifetime of the prefix

Context **configure** service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string preferred-lifetime (number | keyword)

Tree preferred-lifetime

Range	1 to 4294967294
Default	604800
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

valid-lifetime (*number* | *keyword*)

Synopsis	Valid lifetime of the prefix
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 server prefix-delegation prefix <i>string</i> valid-lifetime (<i>number</i> <i>keyword</i>)
Tree	valid-lifetime
Range	1 to 4294967294
Default	2592000
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*

Synopsis	Enable/disable Duplicate Address Detection
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 duplicate-address-detection <i>boolean</i>
Tree	duplicate-address-detection
Default	true
Introduced	16.0.R1
Platforms	All

forward-ipv4-packets *boolean*

Synopsis	Forward unencapsulated IPv4 packets
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 forward-ipv4-packets <i>boolean</i>
Tree	forward-ipv4-packets
Default	false

Introduced 19.5.R1
Platforms All

icmp6

Synopsis Enter the **icmp6** context
Context **configure service ies string interface string ipv6 icmp6**
Tree [icmp6](#)
Introduced 16.0.R1
Platforms All

packet-too-big

Synopsis Enter the **packet-too-big** context
Context **configure service ies string interface string ipv6 icmp6 packet-too-big**
Tree [packet-too-big](#)
Description Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of Packet Too Big message sends
Context **configure service ies string interface string ipv6 icmp6 packet-too-big admin-state keyword**
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

number *number*

Synopsis Number of Packet Too big Messages issued per time frame
Context **configure service ies string interface string ipv6 icmp6 packet-too-big number number**

Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit Packet Too Big messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 packet-too-big seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the param-problem context
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem
Tree	param-problem
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Parameter Problem messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

redirects

Synopsis	Enter the redirects context
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 redirects
Tree	redirects
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Redirect message sends
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 redirects admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

number *number*

Synopsis Number to limit ICMPv6 Redirect messages per time frame
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [icmp6](#) [redirects](#) **number** *number*
Tree [number](#)
Range 10 to 1000
Default 100
Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis Time used to limit ICMPv6 Redirect messages
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [icmp6](#) [redirects](#) **seconds** *number*
Tree [seconds](#)
Range 1 to 60
Default 10
Introduced 16.0.R1
Platforms All

time-exceeded

Synopsis Enter the **time-exceeded** context
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [icmp6](#) **time-exceeded**
Tree [time-exceeded](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of Time Exceeded message sends
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [icmp6](#) **time-exceeded** **admin-state** *keyword*
Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the unreachables context
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 unreachables
Tree	unreachables
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Unreachable message sends
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 unreachablees admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit Unreachable messages per time frame
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 unreachablees number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Unreachable messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 unreachablees seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

link-local-address

Synopsis	Enter the link-local-address context
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 link-local-address
Tree	link-local-address

Introduced 16.0.R1
Platforms All

address *string*

Synopsis IPv6 link-local address
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [link-local-address](#) [address](#) [string](#)
Tree [address](#)
Introduced 16.0.R1
Platforms All

duplicate-address-detection *boolean*

Synopsis Enable Duplicate Address Detection
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [link-local-address](#) [duplicate-address-detection](#) [boolean](#)
Tree [duplicate-address-detection](#)
Description When configured to **true**, the router enables Duplicate Address Detection (DAD) on the interface.
When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default true
Introduced 16.0.R1
Platforms All

local-dhcp-server *reference*

Synopsis DHCP server for the interface
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [local-dhcp-server](#) [reference](#)
Tree [local-dhcp-server](#)
Reference **configure** [router](#) [string](#) [dhcp-server](#) [dhcpv6](#) [string](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service ies string interface string ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

host-route

Synopsis	Enter the host-route context
Context	configure service ies string interface string ipv6 neighbor-discovery host-route
Tree	host-route
Introduced	20.2.R1
Platforms	All

populate [[route-type](#)] *keyword*

Synopsis	Enter the populate list instance
Context	configure service ies string interface string ipv6 neighbor-discovery host-route populate keyword
Tree	populate
Introduced	20.2.R1
Platforms	All

[[route-type](#)] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service ies string interface string ipv6 neighbor-discovery host-route populate keyword
Tree	populate
Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	All

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service ies string interface string ipv6 neighbor-discovery host-route populate keyword route-tag <i>number</i>
Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	20.2.R1
Platforms	All

learn-unsolicited *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	configure service ies string interface string ipv6 neighbor-discovery learn-unsolicited keyword
Tree	learn-unsolicited
Description	This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set. When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the limit context
Context	configure service ies string interface string ipv6 neighbor-discovery limit
Tree	limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Generate log entries when limit is reached
Context	configure service ies string interface string ipv6 neighbor-discovery limit log-only boolean
Tree	log-only
Description	When configured to true , the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned. When configured to false , the router does not send the warning message.
Default	false
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	configure service ies string interface string ipv6 neighbor-discovery limit max-entries number
Tree	max-entries
Description	This command configures the maximum number of entries that can be learned on an IP interface. When unconfigured, no maximum limit is imposed.
Range	0 to 102400
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold percentage that triggers a warning message
Context	configure service ies string interface string ipv6 neighbor-discovery limit threshold number
Tree	threshold
Range	1 to 100
Default	90
Units	percent
Introduced	16.0.R1

Platforms All

local-proxy-nd *boolean*

Synopsis Enable local proxy neighbor discovery on the interface

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [neighbor-discovery](#) [local-proxy-nd](#) [boolean](#)

Tree [local-proxy-nd](#)

Description When configured to **true**, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.

When configured to **false**, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.

Default false

Introduced 16.0.R1

Platforms All

proactive-refresh *keyword*

Synopsis Proactive refresh of neighbor entries

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [neighbor-discovery](#) [proactive-refresh](#) [keyword](#)

Tree [proactive-refresh](#)

Description This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.

Options global, link-local, both

Introduced 16.0.R1

Platforms All

proxy-nd-policy *reference*

Synopsis Proxy Neighbor Discovery policy name for the interface

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [neighbor-discovery](#) [proxy-nd-policy](#) [reference](#)

Tree [proxy-nd-policy](#)

Reference **configure** [policy-options](#) [policy-statement](#) [string](#)

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery reachable-time <i>number</i>
Tree	reachable-time
Range	30 to 3600
Introduced	16.0.R1
Platforms	All

secure-nd

Synopsis	Enter the secure-nd context
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd
Tree	secure-nd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Secure Neighbor Discovery
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

allow-unsecured-msgs *boolean*

Synopsis	Accept unsecured messages
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd allow-unsecured-msgs <i>boolean</i>
Tree	allow-unsecured-msgs
Description	When configured to true , the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted. When configured to false , the router disables the acceptance of unsecured messages.
Default	true
Introduced	16.0.R1
Platforms	All

public-key-min-bits *number*

Synopsis	Minimum acceptable key length for public keys in CGA
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd public-key-min-bits <i>number</i>
Tree	public-key-min-bits
Range	512 to 1024
Default	1024
Introduced	16.0.R1
Platforms	All

security-parameter *number*

Synopsis	Security parameter used in the generation of a CGA
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd security-parameter <i>number</i>
Tree	security-parameter
Range	0 to 1
Default	1
Introduced	16.0.R1
Platforms	All

stale-time *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery stale-time <i>number</i>
Tree	stale-time
Range	60 to 65535
Introduced	16.0.R1
Platforms	All

static-neighbor [**ipv6-address**] *string*

Synopsis	Enter the static-neighbor list instance
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

[ipv6-address] *string*

Synopsis	IPv6 address corresponding to the physical address
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

qos-route-lookup *keyword*

Synopsis QoS Route lookup
Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) **qos-route-lookup** *keyword*
Tree [qos-route-lookup](#)
Options destination, source
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tcp-mss *number*

Synopsis TCP maximum segment size for the interface
Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) **tcp-mss** *number*
Tree [tcp-mss](#)
Range 1220 to 9726
Introduced 16.0.R1
Platforms All

urpf-check

Synopsis Enable the **urpf-check** context
Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) **urpf-check**
Tree [urpf-check](#)
Introduced 16.0.R1
Platforms All

ignore-default *boolean*

Synopsis Ignore default route when performing a uRPF check
Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) **urpf-check** **ignore-default** *boolean*
Tree [ignore-default](#)
Default false
Introduced 16.0.R1

Platforms All

mode *keyword*

Synopsis Unicast RPF check mode
 Context **configure service ies** *string* **interface** *string* **ipv6 urpf-check mode** *keyword*
 Tree **mode**
 Default strict
 Options strict, loose, strict-no-ecmp
 Introduced 16.0.R1
 Platforms All

vrrp [**virtual-router-id**] *number*

Synopsis Enter the **vrrp** list instance
 Context **configure service ies** *string* **interface** *string* **ipv6 vrrp** *number*
 Tree **vrrp**
 Max. Instances 4
 Introduced 16.0.R1
 Platforms All

[**virtual-router-id**] *number*

Synopsis Virtual Router Identifier (VRID) for the IP interface
 Context **configure service ies** *string* **interface** *string* **ipv6 vrrp** *number*
 Tree **vrrp**
 Range 1 to 255
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of VRRP

Context	configure service ies string interface string ipv6 vrrp number admin-state keyword
Tree	admin-state
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup string

Synopsis	Virtual router IP addresses for the interface
Context	configure service ies string interface string ipv6 vrrp number backup string
Tree	backup
Description	<p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.</p>
Max. Instances	4

Introduced 16.0.R1
Platforms All

bfd-liveness

Synopsis Enable the **bfd-liveness** context
Context **configure** [service ies string](#) [interface string](#) [ipv6 vrrp number](#) [bfd-liveness](#)
Tree [bfd-liveness](#)
Introduced 16.0.R1
Platforms All

dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Destination address for the BFD session
Context **configure** [service ies string](#) [interface string](#) [ipv6 vrrp number](#) [bfd-liveness](#) [dest-ip \(*ipv4-address-no-zone* | *ipv6-address-no-zone*\)](#)
Tree [dest-ip](#)
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

interface-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Name of the interface running BFD
Context **configure** [service ies string](#) [interface string](#) [ipv6 vrrp number](#) [bfd-liveness](#) [interface-name string](#)
Tree [interface-name](#)
String Length 1 to 32
Notes This element is mandatory.

Introduced 16.0.R1
Platforms All

service-name *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Administrative service name
Context **configure** *service ies string interface string ipv6 vrrp number bfd-liveness service-name string*
Tree *service-name*
String Length 1 to 64
Introduced 16.0.R1
Platforms All

init-delay *number*

Synopsis VRRP initialization delay timer
Context **configure** *service ies string interface string ipv6 vrrp number init-delay number*
Tree *init-delay*
Range 1 to 65535
Units seconds
Introduced 16.0.R1
Platforms All

mac *string*

Synopsis Virtual MAC address to use in ARP responses
Context **configure** *service ies string interface string ipv6 vrrp number mac string*
Tree *mac*
Description This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.

Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced	16.0.R1
Platforms	All

master-int-inherit *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	configure <i>service ies string interface string ipv6 vrrp number</i> master-int-inherit <i>boolean</i>
Tree	master-int-inherit
Description	<p>When configured to true, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to false, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	16.0.R1
Platforms	All

message-interval *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	configure <i>service ies string interface string ipv6 vrrp number</i> message-interval <i>number</i>
Tree	message-interval
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the master-int-inherit command:</p> <ul style="list-style-type: none">• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar

to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as the master.

- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	10 to 4095
Default	100
Units	centiseconds
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure service ies string interface string ipv6 vrrp number monitor-oper-group reference
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure service oper-group string
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure service ies string interface string ipv6 vrrp number ntp-reply boolean

Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> oper-group <i>reference</i>
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R1
Platforms	All

owner *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> owner <i>boolean</i>
Tree	owner
Description	When configured to true , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router. When configured to false , this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1

Platforms All

passive *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure <i>service ies string interface string ipv6 vrrp number</i> passive <i>boolean</i>
Tree	passive
Description	<p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure <i>service ies string interface string ipv6 vrrp number</i> ping-reply <i>boolean</i>
Tree	ping-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	VRRP priority control policy
Context	configure service ies string interface string ipv6 vrrp number policy reference
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	configure vrrp policy number
Introduced	16.0.R1
Platforms	All

preempt boolean

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure service ies string interface string ipv6 vrrp number preempt boolean
Tree	preempt
Description	<p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1
Platforms	All

priority number

Synopsis	Base priority for the VRRP
Context	configure service ies string interface string ipv6 vrrp number priority number

Tree	priority
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> standby-forwarding <i>boolean</i>
Tree	standby-forwarding
Description	<p>When configured to true, the standby router forwards all traffic.</p> <p>When configured to false, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure service ies <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> telnet-reply <i>boolean</i>
Tree	telnet-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to false, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p>
Default	false
Introduced	16.0.R1

Platforms All

traceroute-reply *boolean*

Synopsis Allow non-owner master to reply to traceroute requests

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv6 vrrp](#) *number* **traceroute-reply** *boolean*

Tree [traceroute-reply](#)

Description When configured to **true**, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.

When configured to **false**, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.

Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).

Default false

Introduced 16.0.R1

Platforms All

load-balancing

Synopsis Enter the **load-balancing** context

Context **configure** [service ies](#) *string* [interface](#) *string* **load-balancing**

Tree [load-balancing](#)

Introduced 16.0.R1

Platforms All

flow-label-load-balancing *boolean*

Synopsis Enable flow label load balancing

Context **configure** [service ies](#) *string* [interface](#) *string* **load-balancing** [flow-label-load-balancing](#) *boolean*

Tree [flow-label-load-balancing](#)

Description When configured to **true**, the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface.

When configured to **false**, the router disables load balancing in ECMP and LAG.

Default false

Introduced 21.5.R1

Platforms All

ip-load-balancing *keyword*

Synopsis IP load-balancing algorithm

Context **configure** [service ies](#) *string* [interface](#) *string* [load-balancing](#) [ip-load-balancing](#) *keyword*

Tree [ip-load-balancing](#)

Description This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the **I4-load-balancing** command is enabled, this command also includes the source or destination port in the hash inputs.

Default both

Options both, destination, source, inner-ip

Introduced 16.0.R3

Platforms All

spi-load-balancing *boolean*

Synopsis Enable SPI use in hashing

Context **configure** [service ies](#) *string* [interface](#) *string* [load-balancing](#) [spi-load-balancing](#) *boolean*

Tree [spi-load-balancing](#)

Description When configured to **true**, the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.

Default false

Introduced 16.0.R1

Platforms All

teid-load-balancing *boolean*

Synopsis Enable use of TEID in hashing

Context **configure** [service ies](#) *string* [interface](#) *string* [load-balancing](#) [teid-load-balancing](#) *boolean*

Tree [teid-load-balancing](#)

Default false

Introduced 16.0.R1

Platforms All

loopback *boolean*

Synopsis	Use interface as a loopback interface
Context	configure service ies string interface string loopback <i>boolean</i>
Tree	loopback
Default	false
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	MAC address for the interface
Context	configure service ies string interface string mac <i>string</i>
Tree	mac
Introduced	16.0.R1
Platforms	All

mac-accounting *boolean*

Synopsis	Enable MAC accounting functionality
Context	configure service ies string interface string mac-accounting <i>boolean</i>
Tree	mac-accounting
Default	false
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	configure service ies string interface string monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R1
Platforms	All

multi-chassis-shunting-profile *reference*

Synopsis	Multi-chassis shunting profile name
Context	configure service ies <i>string</i> interface <i>string</i> multi-chassis-shunting-profile <i>reference</i>
Tree	multi-chassis-shunting-profile
Description	This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces.
Reference	configure router <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i>
Notes	The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multicast-network-domain *reference*

Synopsis	Network domain name
Context	configure service ies <i>string</i> interface <i>string</i> multicast-network-domain <i>reference</i>
Tree	multicast-network-domain
Reference	configure router <i>string</i> network-domains network-domain <i>string</i>
Introduced	16.0.R1
Platforms	All

ping-template

Synopsis	Enable the ping-template context
Context	configure service ies <i>string</i> interface <i>string</i> ping-template
Tree	ping-template
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the ping template
Context	configure service ies <i>string</i> interface <i>string</i> ping-template admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ping template destination address
Context	configure service ies <i>string</i> interface <i>string</i> ping-template <i>destination-address</i> <i>string</i>
Tree	destination-address
Description	<p>This command configures the address to where the ICMP echo requests are directed to test connectivity. The source of the ICMP echo request is the primary IPv4 address of the interface under which the ping-template is configured. The destination address must be on the same subnet as the source IP address. A configuration warning message displays if the primary IPv4 address and the destination are not on the same subnet, INFO: PIP #2092 Ping template misconfiguration - destination-address and primary IP address should fall in the same subnet.</p> <p>Unnumbered interfaces and loopback addresses are not supported.</p> <p>The config service ies vprn interface ping-template must be administratively disabled to remove or change the destination-address ip-address.</p>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ping template name
Context	configure service ies <i>string</i> interface <i>string</i> ping-template <i>name</i> <i>reference</i>
Tree	name
Description	This command configures the name of the ping template to be assigned to the IP interface.
Reference	configure test-oam icmp ping-template <i>string</i>

Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ptp-hw-assist

Synopsis	Enter the ptp-hw-assist context
Context	configure service ies <i>string</i> interface <i>string</i> ptp-hw-assist
Tree	ptp-hw-assist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PTP time stamping assist
Context	configure service ies <i>string</i> interface <i>string</i> ptp-hw-assist admin-state <i>keyword</i>
Tree	admin-state
Description	This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support. Only one interface per physical port can have ptp-hw-assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

radius-auth-policy *reference*

Synopsis	Authentication policy
Context	configure service ies <i>string</i> interface <i>string</i> radius-auth-policy <i>reference</i>
Tree	radius-auth-policy
Reference	configure subscriber-mgmt radius-authentication-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis	Enter the sap list instance
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i>
Tree	sap
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[[sap-id](#)] *string*

Synopsis	SAP ID
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aarp

Synopsis	Enable the aarp context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis	AARP instance ID
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> id <i>reference</i>
Tree	id
Reference	configure application-assurance aarp <i>number</i>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Role referenced by the AARP
Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [aarp](#) [type](#) *keyword*
Tree [type](#)
Options dual-homed, dual-homed-secondary
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy
Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [accounting-policy](#) *reference*
Tree [accounting-policy](#)
Reference **configure** [log](#) [accounting-policy](#) *number*
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the SAP
Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [admin-state](#) *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

anti-spoof *keyword*

Synopsis Anti-spoof filtering
Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [anti-spoof](#) *keyword*
Tree [anti-spoof](#)

Options	source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis	SAP bandwidth
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> bandwidth <i>number</i>
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

calling-station-id *string*

Synopsis	Calling station ID
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> calling-station-id <i>string</i>
Tree	calling-station-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect accounting statistics
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Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

cpu-protection

Synopsis	Enter the cpu-protection context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the eth-cfm-monitoring context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
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Context	configure service ies string interface string sap string cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	configure service ies string interface string sap string cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	configure service ies string interface string sap string cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id reference

Synopsis	CPM protection policy
Context	configure service ies string interface string sap string cpu-protection policy-id reference
Tree	policy-id
Reference	configure system security cpu-protection policy number
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service ies string interface string sap string description string
Tree	description
String Length	1 to 160
Introduced	16.0.R1
Platforms	All

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	configure service ies string interface string sap string dist-cpu-protection reference
Tree	dist-cpu-protection
Reference	configure system security dist-cpu-protection policy string
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure service ies string interface string sap string egress
Tree	egress
Introduced	16.0.R1
Platforms	All

agg-rate

Synopsis	Enter the agg-rate context
Context	configure service ies string interface string sap string egress agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: agg-rate or percent-agg-rate .
Introduced	16.0.R1
Platforms	All

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate adaptation-rule <i>keyword</i>
Tree	adaptation-rule
Default	closest
Options	max, min, closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on all policers and queues associated with context
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Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate number

Synopsis	Enforced aggregate rate for all queues
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i>
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the root context
Context	configure service ies string interface string sap string egress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service ies string interface string sap string egress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service ies string interface string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service ies string interface string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes

Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [*priority-level*] *number*

Synopsis	Enter the priority list instance
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] *number*

Synopsis	Priority level
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i>
Tree	qinq-mark-top-only
Default	false
Introduced	16.0.R1
Platforms	All

sap-egress

Synopsis	Enter the sap-egress context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

hs-secondary-shaper *string*

Synopsis	HS Secondary Shaper
Context	configure service ies string interface string sap string egress qos sap-egress overrides hs-secondary-shaper string
Tree	hs-secondary-shaper
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [[group-id](#)] *reference*

Synopsis	Enter the hs-wrr-group list instance
Context	configure service ies string interface string sap string egress qos sap-egress overrides hs-wrr-group reference
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[[group-id](#)] *reference*

Synopsis	HS WRR group identifier
Context	configure service ies string interface string sap string egress qos sap-egress overrides hs-wrr-group reference
Tree	hs-wrr-group
Reference	configure qos sap-egress string hs-wrr-group number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override of the WRR group
Context	configure service ies string interface string sap string egress qos sap-egress overrides hs-wrr-group reference hs-class-weight number
Tree	hs-class-weight

Range	1 2 4 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis	Percent rate override applied to the HS WRR group
Context	configure service ies string interface string sap string egress qos sap-egress overrides hs-wrr-group reference percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Scheduling rate override applied to the HS WRR group
Context	configure service ies string interface string sap string egress qos sap-egress overrides hs-wrr-group reference rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure service ies string interface string sap string egress qos sap-egress overrides policer reference
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	configure service ies string interface string sap string egress qos sap-egress overrides policer reference
Tree	policer
Reference	configure qos sap-egress string policer number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service ies string interface string sap string egress qos sap-egress overrides policer reference cbs (number keyword)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service ies string interface string sap string egress qos sap-egress overrides policer reference mbs (number keyword)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service ies string interface string sap string egress qos sap-egress overrides policer reference packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service ies string interface string sap string egress qos sap-egress overrides policer reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service ies string interface string sap string egress qos sap-egress overrides policer reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service ies string interface string sap string egress qos sap-egress overrides policer reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis Enter the **rate** context
Context **configure service ies string interface string sap string egress qos sap-egress overrides policer reference rate**
Tree **rate**
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis CIR rate
Context **configure service ies string interface string sap string egress qos sap-egress overrides policer reference rate cir (*number* | *keyword*)**
Tree **cir**
Range 0 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis PIR rate
Context **configure service ies string interface string sap string egress qos sap-egress overrides policer reference rate pir (*number* | *keyword*)**
Tree **pir**
Range 1 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service ies string interface string sap string egress qos sap-egress overrides policer reference stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference
Tree	queue
Introduced	16.0.R1
Platforms	All

[[queue-id](#)] *reference*

Synopsis	Policer unique ID
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference
Tree	queue
Reference	configure qos sap-egress string queue number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference adaptation-rule

Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference avg-frame-overhead decimal-number
Tree	avg-frame-overhead
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size for the queue
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
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Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

hs-class-weight *number*

Synopsis	Class weight override for the queue
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the hs-wred-queue context
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy reference

Synopsis	Slope policy applied to the HSQ queue group queue
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference hs-wred-queue policy reference
Tree	policy
Reference	configure qos slope-policy string
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight number

Synopsis	Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference hs-wrr-weight number
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs (number | keyword)

Synopsis	MBS
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference mbs (number keyword)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
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Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to false , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service ies string interface string sap string egress qos sap-egress overrides queue reference parent
Tree	parent

Introduced 16.0.R1
Platforms All

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [parent](#) **cir-weight** *number*
Tree [cir-weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [parent](#) **weight** *number*
Tree [weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

percent-rate

Synopsis Enter the **percent-rate** context
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **percent-rate**
Tree [percent-rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms All

cir *decimal-number*

Synopsis CIR percent rate

Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max

Introduced 16.0.R1
Platforms All

pir (*number* | *keyword*)

Synopsis PIR rate
Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress qos sap-egress overrides](#)
[queue reference rate](#) **pir** (*number* | *keyword*)
Tree [pir](#)
Range 1 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms All

policy-name *reference*

Synopsis Policy ID to associate with SAP for mirrored service
Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress qos sap-egress](#) [policy-name reference](#)
Tree [policy-name](#)
Reference **configure** [qos sap-egress string](#)
Introduced 16.0.R1
Platforms All

port-redirect-group

Synopsis Enter the **port-redirect-group** context
Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress qos sap-egress](#) [port-redirect-group](#)
Tree [port-redirect-group](#)
Introduced 16.0.R1
Platforms All

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	configure service ies string interface string sap string egress qos sap-egress port-redirect-group group-name reference
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group string
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of port queue group
Context	configure service ies string interface string sap string egress qos sap-egress port-redirect-group instance number
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service ies string interface string sap string egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service ies string interface string sap string egress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [*scheduler-name*] *string*

Synopsis	Enter the scheduler list instance
Context	configure <i>service ies string interface string sap string egress qos scheduler-policy overrides scheduler string</i>
Tree	<i>scheduler</i>
Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure <i>service ies string interface string sap string egress qos scheduler-policy overrides scheduler string</i>
Tree	<i>scheduler</i>
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure <i>service ies string interface string sap string egress qos scheduler-policy overrides scheduler string parent</i>
Tree	<i>parent</i>

Introduced 16.0.R1
Platforms All

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [scheduler-policy](#)
[overrides](#) [scheduler](#) [string](#) [parent](#) [cir-weight](#) [number](#)
Tree [cir-weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

weight *number*

Synopsis Relative weight of the scheduler to feed the queue
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [scheduler-policy](#)
[overrides](#) [scheduler](#) [string](#) [parent](#) [weight](#) [number](#)
Tree [weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

rate

Synopsis Enter the **rate** context
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [scheduler-policy](#)
[overrides](#) [scheduler](#) [string](#) [rate](#)
Tree [rate](#)
Introduced 16.0.R1
Platforms All

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [scheduler-policy](#)
[overrides](#) [scheduler](#) [string](#) [rate](#) [cir](#) ([number](#) | [keyword](#))

Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service ies string interface string sap string egress qos scheduler-policy overrides scheduler string rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service ies string interface string sap string egress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy string
Introduced	16.0.R1
Platforms	All

queue-group-redirect-list *reference*

Synopsis	Assign queue-group redirect list
Context	configure service ies string interface string sap string egress queue-group-redirect-list <i>reference</i>
Tree	queue-group-redirect-list
Reference	configure qos queue-group-redirect-list string

Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service ies string interface string sap string eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure service ies string interface string sap string eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	configure service ies string interface string sap string eth-cfm collect-lmm-fc-stats fc keyword
Tree	fc
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p>

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i>
Tree	fc-in-profile
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Description	<p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis	Enter the mep list instance
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain string association string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais boolean
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification

Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean

Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size <i>number</i>
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the csf context
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf

Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier <i>decimal-number</i>
Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id <i>number</i> eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id <i>number</i> eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
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Context	configure <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	configure <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace</i>
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</i>

Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority <i>number</i>
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed <i>boolean</i>
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace boolean
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace boolean</i>
Tree	tx-eth-vsm-grace
Description	<p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number low-priority-defect keyword</i>
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number</i>
Tree	one-way-delay-threshold

Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm squelch-ingress-levels <i>number</i>
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fwd-wholesale

Synopsis	Enter the fwd-wholesale context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> fwd-wholesale
Tree	fwd-wholesale
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-service *reference*

Synopsis	PPPoE service name
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Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> fwd-wholesale pppoe-service <i>reference</i>
Tree	pppoe-service
Reference	configure service epipe <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-admin-state *keyword*

Synopsis	Administrative state of host creation on the SAP
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> host-admin-state <i>keyword</i>
Tree	host-admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis	Host lockout policy
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> host-lockout-policy <i>reference</i>
Tree	host-lockout-policy
Reference	configure subscriber-mgmt host-lockout-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

match-qinq-dot1p keyword

Synopsis	Ingress match QinQ Dot1p
Context	configure service ies string interface string sap string ingress qos match-qinq-dot1p keyword
Tree	match-qinq-dot1p
Options	top, bottom
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service ies string interface string sap string ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure service ies string interface string sap string ingress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the root context
Context	configure service ies string interface string sap string ingress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [[priority-level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>

Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] *number*

Synopsis	Priority level
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

sap-ingress

Synopsis Enter the **sap-ingress** context

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#)

Tree [sap-ingress](#)

Introduced 16.0.R1

Platforms All

fp-redirect-group

Synopsis Enter the **fp-redirect-group** context

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#)

Tree [fp-redirect-group](#)

Introduced 16.0.R1

Platforms All

group-name *reference*

Synopsis Queue group template name created on forwarding plane

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [ingress](#) [queue-group](#) *string*

Introduced 16.0.R1

Platforms All

instance *number*

Synopsis Queue group instance

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 16.0.R1
Platforms All

overrides

Synopsis Enter the **overrides** context
Context **configure service ies string interface string sap string ingress qos sap-ingress overrides**
Tree [overrides](#)
Introduced 16.0.R1
Platforms All

ip-criteria

Synopsis Enter the **ip-criteria** context
Context **configure service ies string interface string sap string ingress qos sap-ingress overrides ip-criteria**
Tree [ip-criteria](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis Tag ID activated for IPv4 criteria
Context **configure service ies string interface string sap string ingress qos sap-ingress overrides ip-criteria activate-entry-tag number**
Tree [activate-entry-tag](#)
Range 1 to 255
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-criteria

Synopsis Enter the **ipv6-criteria** context
Context **configure service ies string interface string sap string ingress qos sap-ingress overrides ipv6-criteria**
Tree [ipv6-criteria](#)

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis Tag ID activated for IPv6 criteria
Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag](#) *number*
Tree [activate-entry-tag](#)
Range 1 to 255
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance
Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides policer](#) *reference*
Tree [policer](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] *reference*

Synopsis Policer unique ID
Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides policer](#) *reference*
Tree [policer](#)
Reference **configure** [qos sap-ingress](#) *string* [policer](#) *number*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis CBS

Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference percent-rate

Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service ies string interface string sap string ingress qos sap-ingress overrides policer reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service ies string interface string sap string ingress qos sap-ingress overrides policer reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure service ies string interface string sap string ingress qos sap-ingress overrides policer reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [*queue-id*] *reference*

Synopsis	Enter the queue list instance
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *reference*

Synopsis	Policer unique ID
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i>
Tree	queue
Reference	configure qos sap-ingress <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Introduced	16.0.R1

Platforms All

pir *keyword*

Synopsis Constraint used when deriving the operational PIR value

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [adaptation-rule](#) **pir** *keyword*

Tree [pir](#)

Options max, min, closest

Introduced 16.0.R1

Platforms All

cbs (*number* | *keyword*)

Synopsis CBS

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) **cbs** (*number* | *keyword*)

Tree [cbs](#)

Range 0 to 1048576

Units kilobytes

Options auto

Introduced 16.0.R1

Platforms All

drop-tail

Synopsis Enter the **drop-tail** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) **drop-tail**

Tree [drop-tail](#)

Introduced 16.0.R1

Platforms All

low

Synopsis Enter the **low** context

Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1

Platforms All

fast-polling *boolean*

Synopsis Enable fast polling of the queue depth
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [monitor-queue-depth](#) [fast-polling](#) *boolean*
Tree [fast-polling](#)
Default false
Introduced 21.7.R1
Platforms All

parent

Synopsis Enter the **parent** context
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#)
Tree [parent](#)
Introduced 16.0.R1
Platforms All

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#) [cir-weight](#) *number*
Tree [cir-weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#) [weight](#) *number*
Tree [weight](#)

Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service ies string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service ies string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service ies string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID
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Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	16.0.R1
Platforms	All

queuing-type *keyword*

Synopsis	Queuing type
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress queuing-type <i>keyword</i>
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [*scheduler-name*] *string*

Synopsis	Enter the scheduler list instance
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent
Tree	parent
Introduced	16.0.R1

Platforms All

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** *service ies string interface string sap string ingress qos scheduler-policy overrides scheduler string parent cir-weight number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

weight *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** *service ies string interface string sap string ingress qos scheduler-policy overrides scheduler string parent weight number*

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

rate

Synopsis Enter the **rate** context

Context **configure** *service ies string interface string sap string ingress qos scheduler-policy overrides scheduler string rate*

Tree [rate](#)

Introduced 16.0.R1

Platforms All

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** *service ies string interface string sap string ingress qos scheduler-policy overrides scheduler string rate cir (number | keyword)*

Tree [cir](#)

Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

queue-group-redirect-list *reference*

Synopsis	Queue group redirect list
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress queue-group-redirect-list <i>reference</i>
Tree	queue-group-redirect-list
Reference	configure qos queue-group-redirect-list <i>string</i>
Introduced	16.0.R1

Platforms All

ip-tunnel [tunnel-name] *string*

Synopsis Enter the **ip-tunnel** list instance

Context **configure service ies** *string* **interface** *string* **sap** *string* **ip-tunnel** *string*

Tree **ip-tunnel**

Description Commands in this context configure an IP-GRE or IP-IP tunnel and associate it with a private tunnel SAP within an IES service.

Max. Instances 1

Introduced 16.0.R1

Platforms All

[tunnel-name] *string*

Synopsis IP tunnel name

Context **configure service ies** *string* **interface** *string* **sap** *string* **ip-tunnel** *string*

Tree **ip-tunnel**

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the IP tunnel

Context **configure service ies** *string* **interface** *string* **sap** *string* **ip-tunnel** *string* **admin-state** *keyword*

Tree **admin-state**

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

backup-remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup remote IP address that is applied to this tunnel
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> backup-remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	backup-remote-ip-address
Introduced	16.0.R1
Platforms	All

clear-df-bit *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear the Do-not-Fragment bit
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Description	When configured to true , the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum. When configured to false , clearing of the DF bit is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

delivery-service *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service to originate and terminate GRE packets
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> delivery-service <i>string</i>

Tree	delivery-service
Description	This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel. The GRE tunnel does not come up until a valid delivery service is configured.
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

description string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Text description
Context	configure service ies string interface string sap string ip-tunnel string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dest-ip [dest-ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for dest-ip
Context	configure service ies string interface string sap string ip-tunnel string dest-ip (ipv4-address-no-zone ipv6-address-no-zone)
Tree	dest-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[dest-ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	IP address of the remote IP tunnel endpoint
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Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> dest-ip (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	dest-ip
Description	This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dscp *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Differentiated Services Code Point (DSCP) name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet.

Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gre-header



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the gre-header context
Context	configure service ies string interface string sap string ip-tunnel string gre-header
Tree	gre-header
Introduced	16.0.R1
Platforms	All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the GRE header in the tunnel
Context	configure service ies string interface string sap string ip-tunnel string gre-header admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

key



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key context
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Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> gre-header key
Tree	key
Introduced	16.0.R1
Platforms	All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the keys in the GRE header
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> gre-header key admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

receive number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Receive key of the GRE header
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> gre-header key receive <i>number</i>
Tree	receive
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

send number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send key of the GRE header
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> gre-header <i>key</i> send <i>number</i>
Tree	send
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp-generation context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation
Tree	icmp-generation
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the frag-required context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required
Tree	frag-required
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send fragmentation required messages
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval that the ICMP messages can be sent
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages sent
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Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of ICMP messages that can be sent during the period specified by the interval command.
Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation
Tree	icmp6-generation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big
Tree	packet-too-big
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending Packet Too Big messages
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

number *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of PTB ICMPv6 messages that can be sent
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big number <i>number</i>
Tree	number
Description	This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

seconds *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval when PTB messages can be sent
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Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP MTU for the interface
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value. When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transport-mode-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transport mode profile name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> ipsec-transport-mode-profile <i>reference</i>
Tree	ipsec-transport-mode-profile

Reference	configure ipsec ipsec-transport-mode-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IP address of this tunnel
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> local-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-ip-address
Description	This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6). When this command specifies an IPv6 address, it must be a global unicast address.
Introduced	16.0.R1
Platforms	All

pmtu-discovery-aging *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to age out the learned path MTU
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation.
Range	900 to 3600
Default	900
Units	seconds

Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis TCP Maximum Segment Size (MSS) on the private side
Context **configure** *service ies string interface string sap string ip-tunnel string private-tcp-mss-adjust number*
Tree [private-tcp-mss-adjust](#)
Description This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range 512 to 9000
Units bytes
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable propagation of the path MTU to IPv4 hosts
Context **configure** *service ies string interface string sap string ip-tunnel string propagate-pmtu-v4 boolean*
Tree [propagate-pmtu-v4](#)
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v6 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of path MTU to IPv6 hosts
Context	configure <i>service ies string interface string sap string ip-tunnel string propagate-pmtu-v6 boolean</i>
Tree	propagate-pmtu-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust (*number | keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the public side
Context	configure <i>service ies string interface string sap string ip-tunnel string public-tcp-mss-adjust (number keyword)</i>
Tree	public-tcp-mss-adjust
Description	This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassemble (*number | keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum reassembly wait time
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Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> reassemble (<i>number</i> <i>keyword</i>)
Tree	reassemble
Description	This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly.
Range	1 to 5000
Units	milliseconds
Options	use-tunnel-group-setting, none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IP address of the tunnel
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	remote-ip-address
Introduced	16.0.R1
Platforms	All

ipsec-gateway [**name**] *string*

Synopsis	Enter the ipsec-gateway list instance
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i>
Tree	ipsec-gateway
Max. Instances	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	IPsec gateway name
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Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i>
Tree	ipsec-gateway
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec gateway
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert

Synopsis	Enter the cert context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert
Tree	cert
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

status-verify

Synopsis	Enter the status-verify context
Context	configure service ies string interface string sap string ipsec-gateway string cert status-verify
Tree	status-verify
Description	Commands in this context configure certificate revocation status verification.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-result *keyword*

Synopsis	Default result of Certificate Status Verification (CSV)
Context	configure service ies string interface string sap string ipsec-gateway string cert status-verify default-result keyword
Tree	default-result
Description	This command specifies the default result when both the primary and secondary methods fail to provide an answer.
Default	revoked
Options	revoked, good
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure service ies string interface string sap string ipsec-gateway string cert status-verify primary keyword
Tree	primary
Default	crI
Options	crI, ocsp
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secondary *keyword*

Synopsis	Secondary method of CSV to verify the revocation status
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert status-verify secondary <i>keyword</i>
Tree	secondary
Default	none
Options	none, crl , ocsp
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure ipsec trust-anchor-profile <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-db

Synopsis	Enable the client-db context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db
Tree	client-db
Description	Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fallback *boolean*

Synopsis	Fall back to the default authentication policy
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db fallback <i>boolean</i>
Tree	fallback

Description	When configured to true , this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database. When configured to false and the client database lookup fails to return a matched result, the system fails the tunnel setup.
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name reference

Synopsis	Client database name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db <i>name reference</i>
Tree	name
Reference	configure ipsec client-db <i>string</i>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-secure-service

Synopsis	Enable the default-secure-service context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service
Tree	default-secure-service
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private IPsec tunnel interface name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service interface <i>string</i>

Tree	interface
String Length	1 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default security service name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-tunnel-template *reference*

Synopsis	Default tunnel policy template for the gateway
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-tunnel-template <i>reference</i>
Tree	default-tunnel-template
Reference	configure ipsec tunnel-template <i>number</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-address-assignment

Synopsis	Enter the dhcp-address-assignment context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment
Tree	dhcp-address-assignment
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv4

Synopsis	Enable the dhcpv4 context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4
Tree	dhcpv4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec DHCPv4 server
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gi-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Gateway IP address of DHCPv4 packets sent by the system
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 gi-address <i>string</i>
Tree	gi-address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-release *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv4 release message when IPsec tunnel removed
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 send-release <i>boolean</i>
Tree	send-release
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the server context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 server
Tree	server
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv4 server addresses
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 server address <i>string</i>
Tree	address
Description	This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen.

Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance used to reach the DHCPv4 server
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 server router-instance <i>string</i>
Tree	router-instance
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv6

Synopsis	Enable the dhcpv6 context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6
Tree	dhcpv6
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 server
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Link address of the relayed DHCPv6 packets

Context **configure** *service ies string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 link-address string*

Tree *link-address*

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-release *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Send DHCPv6 release message when IPsec tunnel removed

Context **configure** *service ies string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 send-release boolean*

Tree *send-release*

Default true

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **server** context

Context **configure** *service ies string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 server*

Tree *server*

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server addresses
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 server address <i>string</i>
Tree	address
Description	This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance to reach the DHCPv6 server
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 server router-instance <i>string</i>
Tree	router-instance
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-policy *reference*

Synopsis	IKE policy ID
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Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> ike-policy <i>reference</i>
Tree	ike-policy
Reference	configure ipsec ike-policy <i>number</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis	Enter the local context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local
Tree	local
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-assignment

Synopsis	Enable the address-assignment context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment
Tree	address-assignment
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of local address assignments
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the ipv4 context
Context	configure service ies string interface string sap string ipsec-gateway string local address-assignment ipv4
Tree	ipv4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-server string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv4 server name
Context	configure service ies string interface string sap string ipsec-gateway string local address-assignment ipv4 dhcp-server string
Tree	dhcp-server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the pool defined in the specified DHCPv4 server
Context	configure service ies string interface string sap string ipsec-gateway string local address-assignment ipv4 pool string
Tree	pool
String Length	1 to 32

Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID for the local DHCPv4 server
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 router-instance <i>string</i>
Tree	router-instance
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secondary-pool *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the secondary pool defined in the DHCPv4 server
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 secondary-pool <i>string</i>
Tree	secondary-pool
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the ipv6 context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6
Tree	ipv6
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-server *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv6 server name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 dhcp-server <i>string</i>
Tree	dhcp-server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Secondary pool name defined in the DHCPv6 server
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 pool <i>string</i>
Tree	pool
String Length	1 to 32

Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID hosting the DHCPv6 connection
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 router-instance <i>string</i>
Tree	router-instance
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local gateway address of the IPsec gateway
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	gateway-address
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enter the id context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local id
Tree	id

Description	Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Select ID based on authentication method in IKE policy
Context	configure service ies string interface string sap string ipsec-gateway string local id auto
Tree	auto
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN as the local ID type
Context	configure service ies string interface string sap string ipsec-gateway string local id fqdn string
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 address as the local ID type
Context	configure service ies string interface string sap string ipsec-gateway string local id ipv4 string
Tree	ipv4
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address as the local ID type
Context	configure service ies string interface string sap string ipsec-gateway string local id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-history-key-records

Synopsis	Enter the max-history-key-records context
Context	configure service ies string interface string sap string ipsec-gateway string max-history-key-records
Tree	max-history-key-records
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp number

Synopsis	Maximum number of recent records
Context	configure service ies string interface string sap string ipsec-gateway string max-history-key-records esp number
Tree	esp
Range	1 to 48
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike number

Synopsis	Maximum number of historical IKE keys recorded
Context	configure service ies string interface string sap string ipsec-gateway string max-history-key-records ike number
Tree	ike
Range	1 to 3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pre-shared-key string

Synopsis	Pre-shared key for the IPsec gateway
Context	configure service ies string interface string sap string ipsec-gateway string pre-shared-key string
Tree	pre-shared-key
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the radius context
Context	configure service ies string interface string sap string ipsec-gateway string radius
Tree	radius
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> radius accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure ipsec radius accounting-policy <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *reference*

Synopsis	RADIUS authentication policy
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> radius authentication-policy <i>reference</i>
Tree	authentication-policy
Reference	configure ipsec radius authentication-policy <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ts-list *reference*

Synopsis	TS list used for IKEv2 TS negotiation
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> ts-list <i>reference</i>
Tree	ts-list
Reference	configure ipsec ts-list <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis	Enter the lag context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> lag
Tree	lag
Introduced	16.0.R1

Platforms All

link-map-profile *number*

Synopsis LAG link map profile for a SAP or network interface

Context **configure** *service ies string interface string sap string lag link-map-profile number*

Tree [link-map-profile](#)

Description This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

Range 1 to 64

Introduced 16.0.R1

Platforms All

per-link-hash

Synopsis Enter the **per-link-hash** context

Context **configure** *service ies string interface string sap string lag per-link-hash*

Tree [per-link-hash](#)

Introduced 16.0.R1

Platforms All

class *number*

Synopsis Class used on LAG egress using weighted per-link-hash

Context **configure** *service ies string interface string sap string lag per-link-hash class number*

Tree [class](#)

Range 1 to 3

Default 1

Introduced 16.0.R1

Platforms All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> lag per-link-hash weight <i>number</i>
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

multi-service-site *reference*

Synopsis	Multi service site name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> multi-service-site reference
Tree	multi-service-site
Reference	configure service customer <i>string</i> multi-service-site <i>string</i>
Introduced	16.0.R1
Platforms	All

static-host

Synopsis	Enter the static-host context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host
Tree	static-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 [[ip](#)] *string* [mac](#) *string*

Synopsis	Enter the ipv4 list instance
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i>
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ip] string

Synopsis	IP address
Context	configure service ies string interface string sap string static-host ipv4 string mac string
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string

Synopsis	MAC address
Context	configure service ies string interface string sap string static-host ipv4 string mac string
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the static host
Context	configure service ies string interface string sap string static-host ipv4 string mac string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string string

Synopsis	ANCP string
Context	configure service ies string interface string sap string static-host ipv4 string mac string ancp-string string
Tree	ancp-string
String Length	1 to 63

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis Enter the **app-profile** context
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [static-host](#) [ipv4](#) [string](#) [mac](#) [string](#) [app-profile](#)
Tree [app-profile](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis Application profile used by the static host
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [static-host](#) [ipv4](#) [string](#) [mac](#) [string](#) [app-profile](#) [profile](#) [reference](#)
Tree [profile](#)
Reference **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [app-profile](#) [string](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis Intermediate destination ID
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [static-host](#) [ipv4](#) [string](#) [mac](#) [string](#) [int-dest-id](#) [string](#)
Tree [int-dest-id](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis SLA profile name

Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Sub-profile name
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the subscriber-id context
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Subscriber identification
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id <i>string</i> <i>string</i>
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: string or use-sap-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	configure <i>service ies string interface string sap string static-host ipv4 string mac string subscriber-id use-sap-id</i>
Tree	<i>use-sap-id</i>
Notes	The following elements are part of a choice: string or use-sap-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transit-policy

Synopsis	Enable the transit-policy context
Context	configure <i>service ies string interface string sap string transit-policy</i>
Tree	<i>transit-policy</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	configure <i>service ies string interface string sap string transit-policy ip reference</i>
Tree	<i>ip</i>
Reference	configure <i>application-assurance group number partition number transit-ip-policy number</i>
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> transit-policy prefix <i>reference</i>
Tree	prefix
Reference	configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i>
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv4 reference

Synopsis	Host connectivity IPv4 policy
Context	configure service ies <i>string</i> interface <i>string</i> shcv-policy-ipv4 <i>reference</i>
Tree	shcv-policy-ipv4
Reference	configure subscriber-mgmt shcv-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[[sdp-bind-id](#)] *string*

Synopsis	SDP binding ID
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Context	configure service ies <i>string interface string spoke-sdp string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aarp

Synopsis	Enable the aarp context
Context	configure service ies <i>string interface string spoke-sdp string aarp</i>
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id reference

Synopsis	AARP instance ID
Context	configure service ies <i>string interface string spoke-sdp string aarp id reference</i>
Tree	id
Reference	configure application-assurance aarp <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis	Role referenced by the AARP
Context	configure service ies <i>string interface string spoke-sdp string aarp type keyword</i>
Tree	type
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Policy to collect accounting statistics
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

app-profile *reference*

Synopsis	Application profile name for this SDP
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance <i>group</i> <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the bfd context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> bfd
Tree	bfd
Introduced	21.2.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service ies string interface string spoke-sdp string bfd bfd-liveness
Tree	bfd-liveness
Introduced	21.2.R1
Platforms	All

encap keyword

Synopsis	BFD encapsulation used on the SDP binding
Context	configure service ies string interface string spoke-sdp string bfd bfd-liveness encap keyword
Tree	encap
Default	ipv4
Options	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template reference

Synopsis	BFD template associated with the SDP binding
Context	configure service ies string interface string spoke-sdp string bfd bfd-template reference
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context.
Reference	configure bfd bfd-template string
Introduced	21.2.R1
Platforms	All

failure-action keyword

Synopsis	VCCV BFD action taken on the SDP binding
Context	configure service ies string interface string spoke-sdp string bfd failure-action keyword

Tree	failure-action
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context.
Default	none
Options	none, down
Introduced	21.2.R1
Platforms	All

wait-for-up-timer *number*

Synopsis	Time waited for BFD up status
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	This command configures the time interval that is used to wait for a BFD session to come up. This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.
Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

control-word *boolean*

Synopsis	Use the control word as preferred
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i>
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cpu-protection

Synopsis	Enter the cpu-protection context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the eth-cfm-monitoring context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection policy-id reference
Tree	policy-id

Reference	configure system security cpu-protection policy number
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description string

Synopsis	Text description
Context	configure service ies string interface string spoke-sdp string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure service ies string interface string spoke-sdp string egress
Tree	egress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service ies string interface string spoke-sdp string egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies string interface string spoke-sdp string egress filter ip reference
Tree	ip
Reference	configure filter ip-filter string

Introduced 16.0.R1
Platforms All

ipv6 *reference*

Synopsis IPv6 filter policy name
Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress filter ipv6](#) *reference*
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter](#) *string*
Introduced 16.0.R1
Platforms All

qos

Synopsis Enter the **qos** context
Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos](#)
Tree [qos](#)
Introduced 16.0.R1
Platforms All

network

Synopsis Enter the **network** context
Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos network](#)
Tree [network](#)
Introduced 16.0.R1
Platforms All

policy-name *reference*

Synopsis Network policy ID
Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos network policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos network](#) *string*

Introduced 16.0.R1
Platforms All

port-redirect-group

Synopsis Enter the **port-redirect-group** context
Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network](#) [port-redirect-group](#)
Tree [port-redirect-group](#)
Introduced 16.0.R1
Platforms All

group-name *reference*

Synopsis Name of the egress port queue group
Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network](#) [port-redirect-group](#) [group-name reference](#)
Tree [group-name](#)
Reference **configure** [qos queue-group-templates](#) [egress queue-group string](#)
Introduced 16.0.R1
Platforms All

instance *number*

Synopsis Queue-group instance ID
Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network](#) [port-redirect-group](#) [instance number](#)
Tree [instance](#)
Range 1 to 65535
Introduced 16.0.R1
Platforms All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats

Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats fc <i>keyword</i>
Tree	fc
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile keyword

Synopsis	Forwarding class name for profile-aware counter
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i>
Tree	fc-in-profile
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p>

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Description	<p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the mep list instance
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain string association string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
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Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais <i>boolean</i>
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>

Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number
Tree	ccm-ltm-priority
Range	0 to 7
Default	7

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i>
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the csf context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf multiplier <i>decimal-number</i>
Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [description](#) [string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis Enable the **eth-test** context
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [eth-test](#)
Tree [eth-test](#)
Description Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis Lowest priority defect allowed to generate fault alarm
Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [eth-test](#) [bit-error-threshold](#) [number](#)
Tree [bit-error-threshold](#)
Range 0 to 11840
Default 1
Units bit errors
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation <i>keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window

Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i>
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed boolean

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i>
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed boolean

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis Enter the **eth-vsm-grace** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [grace](#) [eth-vsm-grace](#)

Tree [eth-vsm-grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis Receive and process Nokia ETH-CFM Grace PDU on the MEP

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [grace](#) [eth-vsm-grace](#) [rx-eth-vsm-grace](#) *boolean*

Tree [rx-eth-vsm-grace](#)

Description When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to **false**, the router disables the Nokia Grace function.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [grace](#) [eth-vsm-grace](#) [tx-eth-vsm-grace](#) *boolean*

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
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Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm squelch-ingress-levels <i>number</i>
Tree	squelch-ingress-levels
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hash-label

Synopsis	Enable the hash-label context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> hash-label
Tree	hash-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	16.0.R1
Platforms	All

signal-capability

Synopsis	Enable the signaling of the hash label between PE nodes
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> hash-label signal-capability
Tree	signal-capability
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
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Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos

Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of the forwarding-plane ingress Queue Group for this SDP binding
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group instance <i>number</i>

Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>string</i>
Introduced	16.0.R1
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

transit-policy

Synopsis	Enable the transit-policy context
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> transit-policy ip reference
Tree	ip
Reference	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i>
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> transit-policy prefix reference
Tree	prefix
Reference	configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i>
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding
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Context	configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> vc-type <i>keyword</i>
Tree	vc-type
Default	ether
Options	ether, ipipe
Introduced	16.0.R1
Platforms	All

static-tunnel-redundant-nexthop *string*

Synopsis	Address for the static ISA tunnel redundant next-hop
Context	configure service ies <i>string</i> interface <i>string</i> static-tunnel-redundant-nexthop <i>string</i>
Tree	static-tunnel-redundant-nexthop
Description	This command specifies the redundant next-hop address on public or private IPsec interfaces (with a public or private tunnel SAP) for the static IPsec tunnel. The next-hop address is resolved in the routing table of the corresponding service.
Notes	The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop) .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	configure service ies <i>string</i> interface <i>string</i> tos-marking-state <i>keyword</i>
Tree	tos-marking-state
Default	untrusted
Options	trusted, untrusted
Introduced	16.0.R1
Platforms	All

tunnel *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable/disable tunnel interface
Context	configure service ies <i>string</i> interface <i>string</i> tunnel <i>boolean</i>
Tree	tunnel
Default	false
Introduced	16.0.R1
Platforms	All

vas-if-type *keyword*

Synopsis	VAS interface type
Context	configure service ies <i>string</i> interface <i>string</i> vas-if-type <i>keyword</i>
Tree	vas-if-type
Options	to-from-access, to-from-network, to-from-both
Introduced	16.0.R1
Platforms	All

vpls [**vpls-name**] *string*

Synopsis	Enter the vpls list instance
Context	configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i>
Tree	vpls
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**vpls-name**] *string*

Synopsis	VPLS service
Context	configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i>
Tree	vpls
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure service ies string interface string vpls string egress
Tree	egress
Introduced	16.0.R1
Platforms	All

reclassify-using-qos *reference*

Synopsis	Egress QoS policy
Context	configure service ies string interface string vpls string egress reclassify-using-qos reference
Tree	reclassify-using-qos
Reference	configure qos sap-egress string
Introduced	16.0.R1
Platforms	All

routed-override-filter

Synopsis	Enter the routed-override-filter context
Context	configure service ies string interface string vpls string egress routed-override-filter
Tree	routed-override-filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	configure service ies string interface string vpls string egress routed-override-filter ip reference
Tree	ip
Reference	configure filter ip-filter string
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> egress routed-override-filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the evpn context
Context	configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> evpn
Tree	evpn
Introduced	19.10.R1
Platforms	All

arp

Synopsis	Enter the arp context
Context	configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp
Tree	arp
Introduced	19.10.R1
Platforms	All

advertise [[route-type](#)] *keyword*

Synopsis	Enter the advertise list instance
Context	configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp advertise <i>keyword</i>
Tree	advertise
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The learn-dynamic command must be set to false when using this functionality.
Introduced	19.10.R1

Platforms All

[route-type] keyword

Synopsis Type of ARP or ND entries that generate host routes

Context **configure service ies string interface string vpls string evpn arp advertise keyword**

Tree **advertise**

Description This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.

Options static, dynamic

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

route-tag number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tag value used with the host route from an ARP/ND entry

Context **configure service ies string interface string vpls string evpn arp advertise keyword route-tag number**

Tree **route-tag**

Description This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.

Range 0 to 255

Introduced 19.10.R1

Platforms All

flood-garp-and-unknown-req boolean

Synopsis Allow CPM originated ARP frames to flood R-VPLS service

Context **configure service ies string interface string vpls string evpn arp flood-garp-and-unknown-req boolean**

Tree **flood-garp-and-unknown-req**

Description	When configured to true , the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command. When configured to false , CPM-originated ARP flooding is suppressed.
Default	true
Introduced	19.10.R1
Platforms	All

learn-dynamic *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp learn-dynamic <i>boolean</i>
Tree	learn-dynamic
Default	true
Introduced	19.10.R1
Platforms	All

nd

Synopsis	Enter the nd context
Context	configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> evpn nd
Tree	nd
Introduced	20.5.R1
Platforms	All

advertise [[route-type](#)] *keyword*

Synopsis	Enter the advertise list instance
Context	configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> evpn nd advertise <i>keyword</i>
Tree	advertise
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The learn-dynamic command must be set to false when using this functionality.
Introduced	20.5.R1
Platforms	All

[route-type] keyword

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service ies string interface string vpls string evpn nd advertise <i>keyword</i>
Tree	advertise
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

route-tag number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service ies string interface string vpls string evpn nd advertise <i>keyword</i> route-tag <i>number</i>
Tree	route-tag
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	20.5.R1
Platforms	All

learn-dynamic boolean

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	configure service ies string interface string vpls string evpn nd learn-dynamic <i>boolean</i>
Tree	learn-dynamic
Default	true
Introduced	20.5.R1

Platforms All

ingress

Synopsis Enter the **ingress** context
Context **configure** [service ies string](#) [interface string](#) [vpls string](#) [ingress](#)
Tree [ingress](#)
Introduced 16.0.R1
Platforms All

routed-override-filter

Synopsis Enter the **routed-override-filter** context
Context **configure** [service ies string](#) [interface string](#) [vpls string](#) [ingress](#) [routed-override-filter](#)
Tree [routed-override-filter](#)
Introduced 16.0.R1
Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure** [service ies string](#) [interface string](#) [vpls string](#) [ingress](#) [routed-override-filter](#) [ip reference](#)
Tree [ip](#)
Reference **configure** [filter ip-filter string](#)
Introduced 16.0.R1
Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [service ies string](#) [interface string](#) [vpls string](#) [ingress](#) [routed-override-filter](#) [ipv6 reference](#)
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter string](#)
Introduced 16.0.R1

Platforms All

redundant-interface *[interface-name] string*

Synopsis Enter the **redundant-interface** list instance
Context **configure service ies string redundant-interface string**
Tree [redundant-interface](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[interface-name] *string*

Synopsis Interface name
Context **configure service ies string redundant-interface string**
Tree [redundant-interface](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the interface
Context **configure service ies string redundant-interface string admin-state keyword**
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure service ies string redundant-interface string description string**
Tree [description](#)

String Length 1 to 255
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis Enter the **hold-time** context
Context **configure service ies string redundant-interface string hold-time**
Tree **hold-time**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context
Context **configure service ies string redundant-interface string hold-time ipv4**
Tree **ipv4**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis Enter the **down** context
Context **configure service ies string redundant-interface string hold-time ipv4 down**
Tree **down**
Description Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only *boolean*

Synopsis Apply delay only at interface configuration or reboot

Context	configure service ies <i>string</i> redundant-interface <i>string</i> hold-time ipv4 down init-only <i>boolean</i>
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service ies <i>string</i> redundant-interface <i>string</i> hold-time ipv4 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the up context
Context	configure service ies <i>string</i> redundant-interface <i>string</i> hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service ies <i>string</i> redundant-interface <i>string</i> hold-time ipv4 up seconds <i>number</i>
Tree	seconds

Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	configure service ies <i>string</i> redundant-interface <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service ies <i>string</i> redundant-interface <i>string</i> ipv4
Tree	ipv4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis	Enable the primary context
Context	configure service ies <i>string</i> redundant-interface <i>string</i> ipv4 primary
Tree	primary
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	IPv4 address to be assigned to the interface
Context	configure service ies <i>string</i> redundant-interface <i>string</i> ipv4 primary address <i>string</i>

Tree	address
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service ies string redundant-interface string ipv4 primary prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-ip *string*

Synopsis	Remote IP address for the interface
Context	configure service ies string redundant-interface string ipv4 primary remote-ip <i>string</i>
Tree	remote-ip
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure service ies string redundant-interface string spoke-sdp <i>string</i>
Tree	spoke-sdp
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sdp-bind-id] *string*

Synopsis	SDP binding ID
Context	configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

control-word *boolean*

Synopsis	Use the control word as preferred
Context	configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i>
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> description <i>string</i>
Tree	description

String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis Enter the **egress** context
Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* **egress**
Tree [egress](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis Enter the **filter** context
Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [egress](#) **filter**
Tree [filter](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis IPv4 filter policy name
Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [egress](#) **filter** **ip** *reference*
Tree [ip](#)
Reference **configure** [filter](#) [ip-filter](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the filter context
Context	configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure service ies <i>string</i> service-id <i>number</i>
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

subscriber-interface [[interface-name](#)] *string*

Synopsis	Enter the subscriber-interface list instance
Context	configure service ies <i>string</i> subscriber-interface <i>string</i>
Tree	subscriber-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[interface-name] *string*

Synopsis	Subscriber interface name
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Context	configure service ies string subscriber-interface string
Tree	subscriber-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the subscriber interface
Context	configure service ies string subscriber-interface string admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure service ies string subscriber-interface string description string
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding service name
Context	configure service ies string subscriber-interface string fwd-service reference
Tree	fwd-service
Reference	configure service vprn string

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-subscriber-interface *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Forwarding subscriber interface name
Context **configure** *service ies* *string* *subscriber-interface* *string* *fwd-subscriber-interface* *reference*
Tree [fwd-subscriber-interface](#)
Reference **configure** *service vpn* *string* *subscriber-interface* *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface [[group-interface-name](#)] *string*

Synopsis Enter the **group-interface** list instance
Context **configure** *service ies* *string* *subscriber-interface* *string* *group-interface* *string*
Tree [group-interface](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[group-interface-name] *string*

Synopsis Group interface name
Context **configure** *service ies* *string* *subscriber-interface* *string* *group-interface* *string*
Tree [group-interface](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bonding-parameters

Synopsis	Enter the bonding-parameters context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters
Tree	bonding-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of ESM connection bonding
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

connection [**connection-index**] *number*

Synopsis	Enter the connection list instance
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters connection <i>number</i>
Tree	connection

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**connection-index**] *number*

Synopsis Bonding connection index
Context **configure service ies string subscriber-interface string group-interface string bonding-parameters connection number**
Tree [connection](#)
Range 1 to 2
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service *string*

Synopsis Connection service
Context **configure service ies string subscriber-interface string group-interface string bonding-parameters connection number service string**
Tree [service](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FPE that provisions bonding functionality
Context **configure service ies string subscriber-interface string group-interface string bonding-parameters fpe reference**
Tree [fpe](#)
Reference **configure fwd-path-ext fpe number**
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multicast

Synopsis Enter the **multicast** context

Context **configure** *service ies string subscriber-interface string group-interface string bonding-parameters multicast*

Tree *multicast*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

connection (*number | keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Multicast connection

Context **configure** *service ies string subscriber-interface string group-interface string bonding-parameters multicast connection (number | keyword)*

Tree *connection*

Range 1 to 2

Default use-incoming

Options use-incoming

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

brg

Synopsis Enter the **brg** context

Context **configure** *service ies string subscriber-interface string group-interface string brg*

Tree *brg*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BRG
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authenticated-brg-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow BRGs that have been pre-authenticated
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg authenticated-brg-only <i>boolean</i>
Tree	authenticated-brg-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-brg-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default BRG profile that can be overridden during authentication
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg default-brg-profile <i>reference</i>
Tree	default-brg-profile
Reference	configure subscriber-mgmt vrgw brg-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd-parameters

Synopsis	Enter the cflowd-parameters context
Context	configure service ies string subscriber-interface string group-interface string cflowd-parameters
Tree	cflowd-parameters
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sampling [sampling-type] keyword

Synopsis	Enter the sampling list instance
Context	configure service ies string subscriber-interface string group-interface string cflowd-parameters sampling keyword
Tree	sampling
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sampling-type] keyword

Synopsis	Traffic sampling type
Context	configure service ies string subscriber-interface string group-interface string cflowd-parameters sampling keyword
Tree	sampling
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

direction keyword

Synopsis	Direction of traffic for cflowd sampling
Context	configure service ies string subscriber-interface string group-interface string cflowd-parameters sampling keyword direction keyword

Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Default	ingress-only
Options	ingress-only, egress-only, both
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sample-profile (*keyword* | *number*)

Synopsis	Sample profile ID
Context	configure service ies string subscriber-interface string group-interface string cflowd-parameters sampling keyword sample-profile (<i>keyword</i> <i>number</i>)
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Type of cflowd analysis
Context	configure service ies string subscriber-interface string group-interface string cflowd-parameters sampling keyword type keyword
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data-trigger

Synopsis	Enter the data-trigger context
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> data-trigger
Tree	data-trigger
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of data-triggered host creation
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> data-trigger admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-routes-track-srrp

Synopsis	Enable the dynamic-routes-track-srrp context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> dynamic-routes-track-srrp
Tree	dynamic-routes-track-srrp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Delay before updating the route state after the last SRRP transition
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> dynamic-routes-track-srrp hold-time <i>number</i>
Tree	hold-time
Range	1 to 50
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-parameters

Synopsis	Enter the gtp-parameters context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> gtp-parameters
Tree	gtp-parameters
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of GTP access
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> gtp-parameters admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PE that provisions the GTP user interface
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Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>gtp-parameters fpe</i> <i>reference</i>
Tree	fpe
Reference	configure fwd-path-ext <i>fpe number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gx-policy *reference*

Synopsis	Diameter application policy
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>gx-policy reference</i>
Tree	gx-policy
Reference	configure subscriber-mgmt <i>diameter-gx-policy string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ingress</i>
Tree	ingress
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-accounting *reference*

Synopsis	Ingress policy accounting template name
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ingress policy-accounting reference</i>
Tree	policy-accounting
Reference	configure routing-options <i>policy-accounting policy-acct-template string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s

ingress-stats *boolean*

Synopsis	Collect ingress interface statistics
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ingress-stats <i>boolean</i>
Tree	ingress-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	Interface IP MTU
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-linking

Synopsis	Enter the ipoe-linking context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-linking
Tree	ipoe-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IPoE host linking
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-linking admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gratuitous-router-advertisement *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Send unsolicited router advertisement after DHCP setup
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-linking** **gratuitous-router-advertisement** *boolean*
Tree [gratuitous-router-advertisement](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shared-circuit-id *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable circuit ID in DHCPv4 Option82 to validate DHCPv6
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-linking** **shared-circuit-id** *boolean*
Tree [shared-circuit-id](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session

Synopsis Enter the **ipoe-session** context
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session**
Tree [ipoe-session](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of IPoE session management

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **description** *string*

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-auth

Synopsis Enter the **force-auth** context

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **force-auth**

Tree **force-auth**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cid-change *boolean*

Synopsis Ignore min-auth-interval when circuit ID changed

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **force-auth** **cid-change** *boolean*

Tree **cid-change**

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rid-change *boolean*

Synopsis Ignore min-auth-interval when remote ID changed
Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipoe-session](#) [force-auth](#) [rid-change](#) *boolean*
Tree [rid-change](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPoE Session policy to be used for new sessions
Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipoe-session](#) [ipoe-session-policy](#) *reference*
Tree [ipoe-session-policy](#)
Reference **configure** [subscriber-mgmt](#) [ipoe-session-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval (*keyword | number*)

Synopsis Minimum time between two authentication attempts
Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipoe-session](#) [min-auth-interval](#) (*keyword | number*)
Tree [min-auth-interval](#)
Range 1 to 32000000
Default infinite
Units seconds
Options infinite, always-reauthenticate
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-session-timeout *keyword*

Synopsis Session timeout attribute to be interpreted

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **radius-session-timeout** *keyword*

Tree **radius-session-timeout**

Options absolute, ignore, backwards-compatible

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-session-limit *number*

Synopsis Maximum number of sessions per SAP

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **sap-session-limit** *number*

Tree **sap-session-limit**

Range 1 to 131071

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis Maximum number of sessions on this group interface

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **session-limit** *number*

Tree **session-limit**

Range 1 to 500000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stateless-redundancy *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remove IPoE sessions when the system becomes stand-by in a stateless multi-chassis redundancy setup
Context	configure <i>service ies string subscriber-interface string group-interface string ipoe-session stateless-redundancy boolean</i>
Tree	stateless-redundancy
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database that is used to (pre-)authenticate new sessions
Context	configure <i>service ies string subscriber-interface string group-interface string ipoe-session user-db reference</i>
Tree	user-db
Reference	configure <i>subscriber-mgmt local-user-db string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>service ies string subscriber-interface string group-interface string ipv4</i>
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-host

Synopsis	Enter the arp-host context
Context	configure service ies string subscriber-interface string group-interface string ipv4 arp-host
Tree	arp-host
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of ARP hosts
Context	configure service ies string subscriber-interface string group-interface string ipv4 arp-host admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis	Maximum number of ARP hosts
Context	configure service ies string subscriber-interface string group-interface string ipv4 arp-host host-limit number
Tree	host-limit
Range	1 to 524287
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis	Minimum authentication interval
Context	configure service ies string subscriber-interface string group-interface string ipv4 arp-host min-auth-interval number
Tree	min-auth-interval
Range	1 to 6000
Default	15

Units	minutes
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-host-limit *number*

Synopsis	Maximum number of ARP hosts per SAP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host sap-host-limit <i>number</i>
Tree	sap-host-limit
Range	1 to 131071
Default	1
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp

Synopsis	Enter the dhcp context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp client-applications dhcp boolean
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis	Enable PPPoE clients to use DHCP relay or proxy server
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp client-applications ppp boolean
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis	DHCP filter ID for the group interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp filter reference
Tree	filter
Reference	configure filter dhcp-filter <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address string

Synopsis	GI address for the DHCP relay
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp gi-address <i>string</i>
Tree	gi-address
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

I2-header

Synopsis	Enable the I2-header context
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate l2-header
Tree	l2-header
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	IEEE address used in anti-spoofing entries for the SAP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate l2-header mac <i>string</i>
Tree	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate max-leases <i>number</i>
Tree	max-leases
Range	1 to 511999
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-circuit-id *boolean*

Synopsis	Enable Option 82 circuit ID on relayed DHCP packets
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp match-circuit-id <i>boolean</i>
Tree	match-circuit-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

offer-selection

Synopsis	Enter the offer-selection context
Context	configure service ies string subscriber-interface string group-interface string ipv4 dhcp offer-selection
Tree	offer-selection
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis	Enter the client-mac context
Context	configure service ies string subscriber-interface string group-interface string ipv4 dhcp offer-selection client-mac
Tree	client-mac
Notes	The following elements are part of a choice: client-mac or server .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	configure service ies string subscriber-interface string group-interface string ipv4 dhcp offer-selection client-mac discover-delay number
Tree	discover-delay
Description	This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis	Designated client MAC addresses for Offer selection
Context	configure service ies string subscriber-interface string group-interface string ipv4 dhcp offer-selection client-mac mac-address keyword

Tree	mac-address
Description	This command specifies the client MAC addresses for which the Discover delay applies.
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection discover-delay <i>number</i>
Tree	discover-delay
Description	This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [[ipv4-address](#)] *string*

Synopsis	Enter the server list instance
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i>
Tree	server
Max. Instances	8
Notes	The following elements are part of a choice: client-mac or server .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv4-address] *string*

Synopsis	IP address of the DHCP server
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i>

Tree	server
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	configure service ies string subscriber-interface string group-interface string ipv4 dhcp offer-selection server string discover-delay <i>number</i>
Tree	discover-delay
Description	This command configures the time to delay DHCP Discover messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-82

Synopsis	Enter the option-82 context
Context	configure service ies string subscriber-interface string group-interface string ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	configure service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 action <i>keyword</i>
Tree	action
Default	keep

Options	replace, drop, keep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Enter the circuit-id context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ifindex

Synopsis	Use the interface index for the circuit ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

none

Synopsis	Do not include the circuit ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use the SAP ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enter the remote-id context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac

Synopsis	Use the MAC address for the remote ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

none

Synopsis	Do not include the remote ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id none

Tree	none
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-specific-option

Synopsis	Enter the vendor-specific-option context
Context	configure service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	configure service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i>
Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	configure service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 vendor-specific-option pool-name <i>boolean</i>
Tree	pool-name
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option sap-id <i>boolean</i>
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i>
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option string <i>string</i>
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option system-id <i>boolean</i>
Tree	system-id

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the proxy-server context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp proxy-server admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp proxy-server emulated-server <i>string</i>
Tree	emulated-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis	Enter the lease-time context
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Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp proxy-server lease-time</i>
Tree	lease-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp proxy-server lease-time radius-override</i> <i>boolean</i>
Tree	radius-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	DHCP lease time
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp proxy-server lease-time value</i> <i>number</i>
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy name
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp python-policy</i> <i>reference</i>
Tree	python-policy
Description	This command associates a Python policy name with the interface.
Reference	configure python <i>python-policy string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay-proxy

Synopsis Enable the **relay-proxy** context

Context **configure service ies** *string* *subscriber-interface string* *group-interface string* *ipv4 dhcp relay-proxy*

Tree [relay-proxy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-update-src-ip *boolean*

Synopsis Update the source IP address of a DHCP RELEASE message

Context **configure service ies** *string* *subscriber-interface string* *group-interface string* *ipv4 dhcp relay-proxy release-update-src-ip* *boolean*

Tree [release-update-src-ip](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

siaddr-override *string*

Synopsis DHCP server IP address for address hiding function

Context **configure service ies** *string* *subscriber-interface string* *group-interface string* *ipv4 dhcp relay-proxy siaddr-override* *string*

Tree [siaddr-override](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-include-gi-address *boolean*

Synopsis Include gateway IP address in DHCP Release messages

Context **configure service ies** *string* *subscriber-interface string* *group-interface string* *ipv4 dhcp release-include-gi-address* *boolean*

Tree [release-include-gi-address](#)

Default false

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	IP addresses for DHCP server requests
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp server <i>string</i>
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp src-ip-addr <i>keyword</i>
Tree	src-ip-addr
Default	auto
Options	auto, gi-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trusted *boolean*

Synopsis	Relay untrusted packets
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp trusted <i>boolean</i>
Tree	trusted

Description	<p>When configured to true, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for authentication
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the icmp context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp mask-reply <i>boolean</i>
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

param-problem

Synopsis	Enter the param-problem context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem number <i>number</i>
Tree	number
Range	10 to 1000

Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redirects

Synopsis	Enter the redirects context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp redirects
Tree	redirects
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp redirects admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis Maximum number of ICMP redirect messages to send
Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *ipv4* *icmp*
redirects *number* *number*
Tree *number*
Range 10 to 1000
Default 100
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis Time used to limit the number of ICMP redirect messages
Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *ipv4* *icmp*
redirects *seconds* *number*
Tree *seconds*
Range 1 to 60
Default 10
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-expired

Synopsis Enter the **ttl-expired** context
Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *ipv4* *icmp*
ttl-expired
Tree *ttl-expired*
Description Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp tll-expired admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp tll-expired number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp tll-expired seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-matching-address *boolean*

Synopsis	Use the subscriber interface address as source address
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp tll-expired use-matching-address <i>boolean</i>
Tree	use-matching-address
Description	When configured to true , the system uses a matching subscriber interface address as the source address of the ICMP TTL expired message. For matching to occur, the source address of the offending packet must be in the same subnet of the subscriber interface address. When configured to false , the system uses the first configured address.
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unreachables

Synopsis	Enter the unreachables context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachables admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachables number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachables seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-df-bit *boolean*

Synopsis	Ignore DF bit in the IPv4 header when fragmenting
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 ignore-df-bit <i>boolean</i>
Tree	ignore-df-bit
Description	<p>When configured to true, fragmentation is applied according to the applicable egress MTU instead of the DF bit for frames egressing the WLAN-GW group. The DF bit is reset for frames that are fragmented.</p> <p>When configured to false, the router fragments a packet larger than the MTU if the DF bit is set to 0 and drops the packet if the DF bit is set to 1.</p>
Default	false
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery local-proxy-arp <i>boolean</i>
Tree	local-proxy-arp
Description	When configured to true , the router enables local proxy ARP on the interface. When configured to false , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

populate *boolean*

Synopsis	Allow static and dynamic hosts to be populated in system ARP cache
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery populate <i>boolean</i>
Tree	populate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i>
Tree	proxy-arp-policy

Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i>
Tree	remote-proxy-arp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Range	0 to 65535
Default	14400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos-route-lookup *keyword*

Synopsis	QoS route lookup
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 qos-route-lookup <i>keyword</i>
Tree	qos-route-lookup
Options	destination

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

urpf-check

Synopsis Enable the **urpf-check** context
Context **configure service ies string subscriber-interface string group-interface string ipv4 urpf-check**
Tree [urpf-check](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode keyword

Synopsis Unicast RPF check mode
Context **configure service ies string subscriber-interface string group-interface string ipv4 urpf-check mode keyword**
Tree [mode](#)
Default strict
Options strict, loose, strict-no-ecmp
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis Enable the **ipv6** context
Context **configure service ies string subscriber-interface string group-interface string ipv6**
Tree [ipv6](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-multiple-wan-addresses boolean

Synopsis Allow multiple WAN addresses
Context **configure service ies string subscriber-interface string group-interface string ipv6 allow-multiple-wan-addresses boolean**

Tree	allow-multiple-wan-addresses
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-reply

Synopsis	Enter the auto-reply context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply
Tree	auto-reply
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-solicitation *boolean*

Synopsis	Enable auto-reply for NS
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply neighbor-solicitation <i>boolean</i>
Tree	neighbor-solicitation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicitation *boolean*

Synopsis	Enable auto-reply for RS
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply router-solicitation <i>boolean</i>
Tree	router-solicitation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service ies string subscriber-interface string group-interface string ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis	DHCPv6 filter
Context	configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 filter reference
Tree	filter
Reference	configure filter dhcp6-filter number
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option

Synopsis	Enter the option context
Context	configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 option
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-id

Synopsis	Enter the interface-id context
Context	configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 option interface-id
Tree	interface-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

if-index

Synopsis	Use interface index in interface ID option in DHCPv6 relay packet
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id if-index
Tree	if-index
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use SAP ID in interface ID option in DHCPv6 relay packet
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	String for interface ID option in DHCPv6 relay packet
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id string <i>string</i>
Tree	string
String Length	1 to 80

Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Allow remote ID option to be sent in the DHCPv6 relay packet
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option remote-id <i>boolean</i>
Tree	remote-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

override-slaac *boolean*

Synopsis	Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 override-slaac <i>boolean</i>
Tree	override-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-managed-route

Synopsis	Enable the pd-managed-route context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 pd-managed-route
Tree	pd-managed-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-hop *keyword*

Synopsis	Next hop type
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 pd-managed-route next-hop <i>keyword</i>
Tree	next-hop
Default	ipv6
Options	ipv4, ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the proxy-server context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 proxy server
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server client-applications
Tree	client-applications

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis Enable IPoE clients to use DHCP relay or proxy server
Context **configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server client-applications dhcp boolean**
Tree [dhcp](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis Allow the PPP application to use DHCP relay functionality
Context **configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server client-applications ppp boolean**
Tree [ppp](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (number | keyword)

Synopsis Time for prefix to remain preferred on this interface
Context **configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server preferred-lifetime (number | keyword)**
Tree [preferred-lifetime](#)
Range 300 to 4294967294
Default 3600
Units seconds
Options infinite
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-timer *number*

Synopsis	Rebind timer (T2) for this interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server rebind-timer <i>number</i>
Tree	rebind-timer
Range	0 to 1209600
Default	2880
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-timer *number*

Synopsis	Renew timer (T1)
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server renew-timer <i>number</i>
Tree	renew-timer
Range	0 to 604800
Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis	Enter the server-id context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id
Tree	server-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-ascii *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-en-ascii <i>string</i>
Tree	duid-en-ascii
String Length	1 to 58
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-hex *string*

Synopsis	DUID system ID in hexadecimal format
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-en-hex <i>string</i>
Tree	duid-en-hex
String Length	1 to 118
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-ll

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-ll
Tree	duid-ll
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis	Time for prefix to remain valid on this interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server valid-lifetime (<i>number</i> <i>keyword</i>)
Tree	valid-lifetime
Range	300 to 4294967294

Default	86400
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay

Synopsis	Enter the relay context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay
Tree	relay
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

advertise-selection

Synopsis	Enter the advertise-selection context
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 dhcp6 relay advertise-selection</i>
Tree	<i>advertise-selection</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis	Enter the client-mac context
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 dhcp6 relay advertise-selection client-mac</i>
Tree	<i>client-mac</i>
Notes	The following elements are part of a choice: client-mac or server .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis	Designated client MAC addresses for Advertise selection
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 dhcp6 relay advertise-selection client-mac mac-address keyword</i>
Tree	<i>mac-address</i>
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the preference-option context
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 dhcp6 relay advertise-selection client-mac preference-option</i>
Tree	<i>preference-option</i>

Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac preference-option value number
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay number

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac solicit-delay number
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the preference-option context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis Preference option value for DHCPv6 Advertise messages

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 relay advertise-selection preference-option** **value** *number*

Tree **value**

Range 0 to 255

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [**ipv6-address**] *string*

Synopsis Enter the **server** list instance

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 relay advertise-selection server** *string*

Tree **server**

Max. Instances 8

Notes The following elements are part of a choice: **client-mac** or **server**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-address] *string*

Synopsis IP address of the DHCPv6 server

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 relay advertise-selection server** *string*

Tree **server**

Notes This element is part of a list key.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the preference-option context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> preference-option value <i>number</i>
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay number

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> solicit-delay <i>number</i>
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay number

Synopsis	Delay before sending DHCPv6 Solicit messages
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection solicit-delay <i>number</i>
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the server instance or the client-mac context.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay client-applications dhcp <i>boolean</i>
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis	Allow the PPP application to use DHCP relay functionality
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay client-applications ppp <i>boolean</i>
Tree	ppp
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 dhcp6 relay](#) [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-split

Synopsis Enter the **lease-split** context
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 dhcp6 relay](#) [lease-split](#)
Tree [lease-split](#)
Description Commands in this context configure DHCPv6 lease split.
DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:

- the renew time T1 committed by the server (long renew time)
- half of the preferred lifetime committed by the server when T1 committed by the server equals zero

Introduced 21.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of DHCPv6 lease split
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 dhcp6 relay](#) [lease-split](#) [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable

Introduced 21.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis DHCPv6 lease split valid lifetime (short lease time)
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 relay lease-split valid-lifetime** *number*
Tree **valid-lifetime**
Range 300 to 315446399
Default 3600
Units seconds
Introduced 21.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis Link address for the DHCPv6 relay messages
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 relay link-address** *string*
Tree **link-address**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis DHCP6 server(s) to which the DHCP6 requests are forwarded
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 relay server** *string*
Tree **server**
Max. Instances 8
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis	Source IPv6 address for the DHCPv6 relay messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay source-address <i>string</i>
Tree	source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

snooping

Synopsis	Enter the snooping context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 snooping
Tree	snooping
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 snooping
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 snooping admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

user-db *reference*

Synopsis	Local user database for authentication
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-ident *keyword*

Synopsis DHCP6 user identification for this interface

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 user-ident** *keyword*

Tree **user-ident**

Default mac

Options mac, mac-interface-id

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-bridged-mode *boolean*

Synopsis Enable IPv6 IPoE bridged mode

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 ipoe-bridged-mode** *boolean*

Tree **ipoe-bridged-mode**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis Enter the **neighbor-discovery** context

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 neighbor-discovery**

Tree **neighbor-discovery**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dad-snooping *boolean*

Synopsis Populate table via duplicate address detection packets

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 neighbor-discovery dad-snooping** *boolean*

Tree	dad-snooping
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-limit *number*

Synopsis	Maximum number of neighbor entries learned per SLAAC host
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 neighbor-discovery neighbor-limit <i>number</i>
Tree	neighbor-limit
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos-route-lookup *keyword*

Synopsis	QoS route lookup
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 qos-route-lookup <i>keyword</i>
Tree	qos-route-lookup
Options	destination
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

router-advertisements

Synopsis	Enter the router-advertisements context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements
Tree	router-advertisements
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of router advertisements
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast *keyword*

Synopsis	Protocol with forced multicast
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements force-mcast <i>keyword</i>
Tree	force-mcast
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-advertisement-interval *number*

Synopsis	Maximum advertisement interval
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements max-advertisement-interval <i>number</i>
Tree	max-advertisement-interval
Range	900 to 1800
Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-advertisement-interval *number*

Synopsis	Minimum advertisement interval
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements min-advertisement-interval <i>number</i>
Tree	min-advertisement-interval
Range	900 to 1350
Default	900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

current-hop-limit *number*

Synopsis	Hop limit to be advertised
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options current-hop-limit <i>number</i>
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enter the dns context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options dns
Tree	dns
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis Include the RDNSS server option 25

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **router-advertisements** **options** **dns** **include-rdnss** *boolean*

Tree [include-rdnss](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime (*number* | *keyword*)

Synopsis Maximum time for the RDNSS address to remain valid

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **router-advertisements** **options** **dns** **rdnss-lifetime** (*number* | *keyword*)

Tree [rdnss-lifetime](#)

Range 900 to 3600

Default 3600

Units seconds

Options infinite

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-configuration *boolean*

Synopsis Managed address configuration flag

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **router-advertisements** **options** **managed-configuration** *boolean*

Tree [managed-configuration](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu (*number* | *keyword*)

Synopsis	Advertised MTU value
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options mtu (<i>number</i> <i>keyword</i>)
Tree	mtu
Range	1280 to 9212
Default	not-included
Units	bytes
Options	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other-stateful-configuration *boolean*

Synopsis	Other stateful configuration flag
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options other-stateful-configuration <i>boolean</i>
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reachable-time *number*

Synopsis	Neighbor discovery reachable time that is advertised for this group interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options reachable-time <i>number</i>
Tree	reachable-time
Range	0 to 3600000
Default	0
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retransmit-timer *number*

Synopsis	Neighbor discovery retransmit timer that is advertised for this group interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options retransmit-timer <i>number</i>
Tree	retransmit-timer
Range	0 to 1800000
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-lifetime (*number* | *keyword*)

Synopsis	Router lifetime
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options router-lifetime (<i>number</i> <i>keyword</i>)
Tree	router-lifetime
Range	2700 to 9000
Default	4500
Units	seconds
Options	no-default-router
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-options

Synopsis	Enter the prefix-options context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options
Tree	prefix-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

autonomous *boolean*

Synopsis	Value of the autonomous flag
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options autonomous <i>boolean</i>
Tree	autonomous
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options on-link <i>boolean</i>
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number* | *keyword*)

Synopsis	Time for a prefix to remain preferred
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options preferred-lifetime (<i>number</i> <i>keyword</i>)
Tree	preferred-lifetime
Range	0 to 4294967294
Default	3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis	Time for a prefix to remain valid
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options valid-lifetime (<i>number</i> <i>keyword</i>)
Tree	valid-lifetime

Range	0 to 4294967294
Default	86400
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicit

Synopsis	Enter the router-solicit context
Context	configure service ies string subscriber-interface string group-interface string ipv6 router-solicit
Tree	router-solicit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of router-solicit based authentication
Context	configure service ies string subscriber-interface string group-interface string ipv6 router-solicit admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inactivity-timer (number | keyword)

Synopsis	Time before an inactive host is removed
Context	configure service ies string subscriber-interface string group-interface string ipv6 router-solicit inactivity-timer (number keyword)
Tree	inactivity-timer
Range	1 to 31536000
Default	300
Units	seconds

Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis	Minimum interval between two consecutive authentication attempts for the same host
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit min-auth-interval <i>number</i>
Tree	min-auth-interval
Range	1 to 360000
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user-database that is used for router solicit based authentication
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

urpf-check

Synopsis	Enable the urpf-check context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 urpf-check mode <i>keyword</i>
Tree	mode
Default	strict
Options	strict, loose, strict-no-ecmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enter the local-address-assignment context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment
Tree	local-address-assignment
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Local Address Assignment
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv4
Tree	ipv4

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis Enter the **client-applications** context
Context **configure service ies string subscriber-interface string group-interface string local-address-assignment ipv4 client-applications**
Tree [client-applications](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe boolean

Synopsis Request local addresses for non-DHCP/managed IPoE hosts
Context **configure service ies string subscriber-interface string group-interface string local-address-assignment ipv4 client-applications ipoe boolean**
Tree [ipoe](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis Request local addresses for PPP IPCP hosts
Context **configure service ies string subscriber-interface string group-interface string local-address-assignment ipv4 client-applications ppp boolean**
Tree [ppp](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pool string

Synopsis Default pools
Context **configure service ies string subscriber-interface string group-interface string local-address-assignment ipv4 default-pool string**

Tree	default-pool
String Length	1 to 32
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server reference

Synopsis	Local DHCP server that contains pools for local address assignment
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv4 server <i>reference</i>
Tree	server
Reference	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-slaac *boolean*

Synopsis	Request local addresses for IPoE SLAAC hosts
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications ipoe-slaac <i>boolean</i>
Tree	ipoe-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-wan *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications ipoe-wan <i>boolean</i>
Tree	ipoe-wan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-slaac *boolean*

Synopsis	Request local addresses for PPP SLAAC hosts
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications ppp-slaac <i>boolean</i>
Tree	ppp-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis	Local DHCPv6 server that contains pools for local address assignment
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 server <i>reference</i>
Tree	server

Reference **configure** [router](#) *string* [dhcp-server](#) [dhcpv6](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis MAC address for the interface
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [mac](#) *string*
Tree [mac](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq-auth-policy *reference*

Synopsis Diameter NASREQ application policy to use for authentication
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [nasreq-auth-policy](#) *reference*
Tree [nasreq-auth-policy](#)
Reference **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-up-while-empty *boolean*

Synopsis Enable this group interface without any active SAPs
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [oper-up-while-empty](#) *boolean*
Tree [oper-up-while-empty](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis Enter the **pppoe** context
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe](#)

Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of PPPoE
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis	PPPoE anti-spoof filtering
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe anti-spoof <i>keyword</i>
Tree	anti-spoof
Default	mac-sid
Options	mac-sid, mac-sid-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client

Synopsis	Enter the dhcp-client context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe dhcp-client
Tree	dhcp-client
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-id *keyword*

Synopsis	Type of information that DHCP option 61 contains
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe dhcp-client client-id <i>keyword</i>
Tree	client-id
Options	mac-pppoe-session-id
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	PPPoE policy
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe policy <i>reference</i>
Tree	policy
Reference	configure subscriber-mgmt ppp-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy used to modify PPPoE packets
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-session-limit *number*

Synopsis Maximum PPPoE sessions per SAP
Context **configure** *service ies string subscriber-interface string group-interface string pppoe sap-session-limit number*
Tree [sap-session-limit](#)
Range 1 to 131071
Default 1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis Maximum PPPoE sessions
Context **configure** *service ies string subscriber-interface string group-interface string pppoe session-limit number*
Tree [session-limit](#)
Range 1 to 333823
Default 1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Local user database for authentication
Context **configure** *service ies string subscriber-interface string group-interface string pppoe user-db reference*
Tree [user-db](#)
Reference **configure** *subscriber-mgmt local-user-db string*
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *reference*

Synopsis RADIUS authentication policy

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [radius-auth-policy](#) *reference*

Tree [radius-auth-policy](#)

Reference **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redundant-interface *reference*

Synopsis Redundant interface

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [redundant-interface](#) *reference*

Tree [redundant-interface](#)

Reference **configure** [service ies](#) *string* [redundant-interface](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string*

Tree [sap](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sap-id] *string*

Synopsis SAP ID

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string*

Tree [sap](#)

String Length 1 to 45

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis	Type of anti-spoof filtering
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> anti-spoof <i>keyword</i>
Tree	anti-spoof
Options	source-ip-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *string*

Synopsis	Calling station ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> calling-station-id <i>string</i>
Tree	calling-station-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpu-protection

Synopsis	Enter the cpu-protection context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection
Tree	cpu-protection
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context

Context **configure** *service ies string subscriber-interface string group-interface string sap string*
cpu-protection eth-cfm-monitoring

Tree [eth-cfm-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure** *service ies string subscriber-interface string group-interface string sap string*
cpu-protection eth-cfm-monitoring aggregate

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure** *service ies string subscriber-interface string group-interface string sap string*
cpu-protection eth-cfm-monitoring car

Tree [car](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

ip-src-monitoring

Synopsis Enable IP source monitoring for CPU protection

Context **configure** *service ies string subscriber-interface string group-interface string sap string*
cpu-protection ip-src-monitoring

Tree [ip-src-monitoring](#)

Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

policy-id *reference*

Synopsis	CPM protection policy
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection policy-id <i>reference</i>
Tree	policy-id
Reference	configure system security cpu-protection policy <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

default-host

Synopsis	Enter the default-host context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host
Tree	default-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ipv4 [address] reference prefix-length number

Synopsis	Enter the ipv4 list instance
Context	configure service ies string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

[address] reference

Synopsis	IPv4 default host address
Context	configure service ies string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number
Tree	ipv4
Reference	configure service ies string subscriber-interface string ipv4 address string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

prefix-length number

Synopsis	IPv4 address prefix length
Context	configure service ies string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number
Tree	ipv4
Range	0 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

next-hop string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop IP address
Context	configure service ies <i>string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number next-hop string</i>
Tree	next-hop
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ipv6 [[address](#)] *string prefix-length number*

Synopsis	Enter the ipv6 list instance
Context	configure service ies <i>string subscriber-interface string group-interface string sap string default-host ipv6 string prefix-length number</i>
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

[address] *string*

Synopsis	IPv6 default host address
Context	configure service ies <i>string subscriber-interface string group-interface string sap string default-host ipv6 string prefix-length number</i>
Tree	ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	configure service ies <i>string subscriber-interface string group-interface string sap string default-host ipv6 string prefix-length number</i>
Tree	ipv6
Range	0 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

next-hop *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Next hop IP address

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **default-host** **ipv6** *string* **prefix-length** *number* **next-hop** *string*

Tree **next-hop**

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis Text description

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **description** *string*

Tree **description**

String Length 1 to 160

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **dist-cpu-protection** *reference*

Tree **dist-cpu-protection**

Reference **configure** **system** **security** **dist-cpu-protection** **policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Enter the agg-rate context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate
Tree	agg-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate adaptation-rule <i>keyword</i>
Tree	adaptation-rule
Default	closest
Options	max, min, closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto

Units	bytes
Options	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on all policers and queues associated with context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i>
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the filter context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos
Tree	qos
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis Enter the **policer-control-policy** context

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos policer-control-policy**

Tree **policer-control-policy**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Policer control policy name

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos policer-control-policy policy-name** *reference*

Tree **policy-name**

Reference **configure qos policer-control-policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qinq-mark-top-only *boolean*

Synopsis Mark top Q-tags

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos qinq-mark-top-only** *boolean*

Tree **qinq-mark-top-only**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-egress

Synopsis Enter the **sap-egress** context

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos sap-egress**

Tree [sap-egress](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Policy ID to associate with SAP for mirrored service
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos](#) [sap-egress](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy

Synopsis Enter the **scheduler-policy** context
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#)
Tree [scheduler-policy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Scheduler policy name
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos](#) [scheduler-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eth-cfm

Synopsis Enter the **eth-cfm** context

Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc <i>keyword</i>
Tree	fc
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fc-in-profile *keyword*

Synopsis Forwarding class name for profile-aware counter

Context **configure** *service ies string subscriber-interface string group-interface string sap string eth-cfm collect-lmm-fc-stats fc-in-profile keyword*

Tree [fc-in-profile](#)

Description This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options be, l2, af, l1, h2, ef, h1, nc

Max. Instances 8

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

collect-lmm-stats *boolean*

Synopsis Collect statistics for loss measurement message tests

Context **configure** *service ies string subscriber-interface string group-interface string sap string eth-cfm collect-lmm-stats boolean*

Tree [collect-lmm-stats](#)

Description When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.

The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters.

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mep *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis	Enter the mep list instance
Context	configure <i>service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure <i>service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Reference	configure <i>eth-cfm domain string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure <i>service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Reference	configure <i>eth-cfm domain string association string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure <i>service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>

Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais <i>boolean</i>
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.

Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i>
Tree	ccm
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i>
Tree	ccm-padding-size
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

csf

Synopsis	Enable the csf context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf

Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf multiplier <i>decimal-number</i>
Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-test

Synopsis	Enable the eth-test context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

pattern *keyword*

Synopsis Test pattern for Ethernet Test frames

Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *sap* *string* *eth-cfm* *mep* *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number* *eth-test* *test-pattern* *pattern* *keyword*

Tree [pattern](#)

Description This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.

Default all-zeros

Options all-zeros, all-ones

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fault-propagation *keyword*

Synopsis Fault propagation for the MEP

Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *sap* *string* *eth-cfm* *mep* *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number* *fault-propagation* *keyword*

Tree [fault-propagation](#)

Options use-if-status-tlv, suspend-ccm

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

grace

Synopsis Enter the **grace** context

Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *sap* *string* *eth-cfm* *mep* *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number* *grace*

Tree [grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-ed

Synopsis Enter the **eth-ed** context

Context **configure** *service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed*

Tree [eth-ed](#)

Description Commands in this context configure the ITU-T Y.1731 ETH-ED function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

max-rx-defect-window *number*

Synopsis Maximum received ETH-ED expected defect window duration

Context **configure** *service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number*

Tree [max-rx-defect-window](#)

Range 1 to 86400

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

priority *number*

Synopsis Transmission priority for ETH-ED PDUs

Context **configure** *service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number*

Tree [priority](#)

Range 0 to 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i>
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace
Description	When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to false , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>

Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm squelch-ingress-levels <i>number</i>
Tree	squelch-ingress-levels
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fwd-wholesale

Synopsis	Enter the fwd-wholesale context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> fwd-wholesale
Tree	fwd-wholesale
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-service *reference*

Synopsis	PPPoE service name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> fwd-wholesale pppoe-service <i>reference</i>
Tree	pppoe-service
Reference	configure service epipe <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-admin-state *keyword*

Synopsis	Administrative state of the hosts
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> host-admin-state <i>keyword</i>
Tree	host-admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis	Host lockout policy
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> host-lockout-policy <i>reference</i>
Tree	host-lockout-policy

Reference	configure subscriber-mgmt host-lockout-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-host-tracking

Synopsis	Enter the igmp-host-tracking context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking expiry-time <i>number</i>
Tree	expiry-time
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of multicast groups to be tracked per group
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of multicast groups to be tracked
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of multicast sources to be tracked
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable IGMP router alert check option
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis Enter the **ingress** context
Context **configure service ies** *string subscriber-interface string group-interface string sap string ingress*
Tree [ingress](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis Enter the **filter** context
Context **configure service ies** *string subscriber-interface string group-interface string sap string ingress filter*
Tree [filter](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis IPv4 filter policy name
Context **configure service ies** *string subscriber-interface string group-interface string sap string ingress filter ip reference*
Tree [ip](#)
Reference **configure filter ip-filter** *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure service ies** *string subscriber-interface string group-interface string sap string ingress filter ipv6 reference*

Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos match-qinq-dot1p <i>keyword</i>
Tree	match-qinq-dot1p
Options	top, bottom
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policer control policy name
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Context	configure service ies string subscriber-interface string group-interface string sap string ingress qos policer-control-policy policy-name reference
Tree	policy-name
Reference	configure qos policer-control-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-ingress

Synopsis	Enter the sap-ingress context
Context	configure service ies string subscriber-interface string group-interface string sap string ingress qos sap-ingress
Tree	sap-ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID
Context	configure service ies string subscriber-interface string group-interface string sap string ingress qos sap-ingress policy-name reference
Tree	policy-name
Reference	configure qos sap-ingress string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis	Queuing type
Context	configure service ies string subscriber-interface string group-interface string sap string ingress qos sap-ingress queuing-type keyword
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis	Enter the lag context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag
Tree	lag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag link-map-profile <i>number</i>
Tree	link-map-profile
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator

assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

per-link-hash

Synopsis	Enter the per-link-hash context
Context	configure service ies string subscriber-interface string group-interface string sap string lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

class number

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	configure service ies string subscriber-interface string group-interface string sap string lag per-link-hash class number
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight number

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	configure service ies string subscriber-interface string group-interface string sap string lag per-link-hash weight number
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group *reference*

Synopsis Monitor operational group

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [monitor-oper-group](#) *reference*

Tree [monitor-oper-group](#)

Reference **configure** [service](#) [oper-group](#) *string*

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multi-service-site *reference*

Synopsis Multi service site name

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [multi-service-site](#) *reference*

Tree [multi-service-site](#)

Reference **configure** [service](#) [customer](#) *string* [multi-service-site](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-group *reference*

Synopsis Operational group

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [oper-group](#) *reference*

Tree [oper-group](#)

Reference **configure** [service](#) [oper-group](#) *string*

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

static-host

Synopsis	Enter the static-host context
Context	configure service ies string subscriber-interface string group-interface string sap string static-host
Tree	static-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 [ip] string mac string

Synopsis	Enter the ipv4 list instance
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ip] string

Synopsis	IPv4 address used by the static host
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string

Synopsis	MAC address used by the static host
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the static host
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string ancp-string <i>string</i>
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis	Enter the app-profile context
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string app-profile
Tree	app-profile
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis	Application profile used by the static host
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string app-profile <i>profile</i> <i>reference</i>
Tree	profile

Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	Scope of the static host application profile
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> app-profile scope <i>keyword</i>
Tree	scope
Default	subscriber
Options	subscriber, mac
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> int-dest-id <i>string</i>
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-route [[prefix](#)] *string*

Synopsis	Enter the managed-route list instance
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i>
Tree	managed-route
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[prefix] string

Synopsis	Managed route prefix associated with IPv4 static host
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string managed-route string
Tree	managed-route
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpe-check

Synopsis	Enable the cpe-check context
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string managed-route string cpe-check
Tree	cpe-check
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the target CPE device
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string managed-route string cpe-check destination-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	destination-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop-count number

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string managed-route string cpe-check drop-count number

Tree	drop-count
Range	1 to 255
Default	3
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failed-action

Synopsis	Enter the failed-action context
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string managed-route string cpe-check failed-action
Tree	failed-action
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric number

Synopsis	Metric associated with the provisioned managed route
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string managed-route string cpe-check failed-action metric number
Tree	metric
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference number

Synopsis	Preference associated to the provisioned managed route
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string managed-route string cpe-check failed-action preference number
Tree	preference
Range	0 to 255

Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag number

Synopsis	Route tag used if CPE check fails
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action tag <i>number</i>
Tree	tag
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

withdraw boolean

Synopsis	Withdraw the route when the CPE check fails
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action withdraw <i>boolean</i>
Tree	withdraw
Default	false
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval number

Synopsis	Interval between ICMP pings to the target CPE IP address
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check interval <i>number</i>
Tree	interval
Range	1 to 255

Default	1
Units	seconds
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string managed-route string cpe-check log <i>boolean</i>
Tree	log
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string managed-route string cpe-check padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Default	56
Units	bytes
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address used in the ICMP messages
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv4 string mac string managed-route string cpe-check source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time interval determining that a ping is missed
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	1
Units	seconds
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the provisioned managed route
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> metric <i>number</i>
Tree	metric
Description	This command configures a metric to associate with the provisioned managed route.
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated to the provisioned managed route
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> preference <i>number</i>
Tree	preference
Description	This command configures the preference associated with the provisioned managed route.
Range	0 to 255
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag number

Synopsis	Route tag used if CPE check fails
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> tag number
Tree	tag
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip-policy reference

Synopsis	RIP policy name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> rip-policy reference
Tree	rip-policy
Reference	configure subscriber-mgmt rip-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv

Synopsis	Enter the shcv context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> shcv
Tree	shcv
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile reference

Synopsis	SLA profile name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sla-profile reference
Tree	sla-profile

Reference **configure subscriber-mgmt sla-profile** *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis Sub-profile name
Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv4** *string* **mac** *string* **sub-profile** *reference*
Tree **sub-profile**
Reference **configure subscriber-mgmt sub-profile** *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis Enter the **subscriber-id** context
Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv4** *string* **mac** *string* **subscriber-id**
Tree **subscriber-id**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis Subscriber identification
Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv4** *string* **mac** *string* **subscriber-id** *string* **string**
Tree **string**
String Length 1 to 64
Notes The following elements are part of a choice: **string** or **use-sap-id**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id use-sap-id
Tree	use-sap-id
Notes	The following elements are part of a choice: string or use-sap-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 [[prefix](#)] [string](#) [mac](#) *string*

Synopsis	Enter the ipv6 list instance
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i>
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[\[prefix\]](#) *string*

Synopsis	IPv6 prefix
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i>
Tree	ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[mac](#) *string*

Synopsis	MAC address
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i>
Tree	ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the static host

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host](#) [ipv6](#) *string* [mac](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis ANCP string

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host](#) [ipv6](#) *string* [mac](#) *string* **ancp-string** *string*

Tree [ancp-string](#)

String Length 1 to 63

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis Enter the **app-profile** context

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host](#) [ipv6](#) *string* [mac](#) *string* **app-profile**

Tree [app-profile](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis Application profile used by the static host

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host](#) [ipv6](#) *string* [mac](#) *string* **app-profile** *profile reference*

Tree	profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	Scope of the static host application profile
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> app-profile scope <i>keyword</i>
Tree	scope
Default	subscriber
Options	subscriber, mac
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> int-dest-id <i>string</i>
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-linking *string*

Synopsis	IPv6 host associated with the IPv4 host through the learned MAC address
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> mac-linking <i>string</i>
Tree	mac-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-route [ipv6-prefix] string

Synopsis	Enter the managed-route list instance
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string
Tree	managed-route
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-prefix] string

Synopsis	Managed route prefix associated with IPv6 static host
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string
Tree	managed-route
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpe-check

Synopsis	Enable the cpe-check context
Context	configure service ies string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check
Tree	cpe-check
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the target CPE device
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Context	configure service ies <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check destination-ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	destination-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure service ies <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check drop-count number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failed-action

Synopsis	Enter the failed-action context
Context	configure service ies <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check failed-action</i>
Tree	failed-action
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the provisioned managed route
Context	configure service ies <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check failed-action metric number</i>
Tree	metric
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated to the provisioned managed route
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action preference <i>number</i>
Tree	preference
Range	0 to 255
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag *number*

Synopsis	Route tag used if CPE check fails
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action tag <i>number</i>
Tree	tag
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

withdraw *boolean*

Synopsis	Withdraw the route when the CPE check fails
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action withdraw <i>boolean</i>
Tree	withdraw
Default	false
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .

Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis Interval between ICMP pings to the target CPE IP address
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host ipv6](#) *string* [mac](#) *string* [managed-route](#) *string* [cpe-check](#) [interval](#) *number*
Tree [interval](#)
Range 1 to 255
Default 1
Units seconds
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

log *boolean*

Synopsis Log CPE connectivity checks transitions
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host ipv6](#) *string* [mac](#) *string* [managed-route](#) *string* [cpe-check](#) [log](#) *boolean*
Tree [log](#)
Default false
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padding-size *number*

Synopsis Padding size for CPE connectivity checks
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host ipv6](#) *string* [mac](#) *string* [managed-route](#) *string* [cpe-check](#) [padding-size](#) *number*
Tree [padding-size](#)
Range 0 to 16384
Default 56
Units bytes
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address used in the ICMP messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time interval determining that a ping is missed
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	1
Units	seconds
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the provisioned managed route
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> metric <i>number</i>
Tree	metric
Description	This command configures a metric to associate with the provisioned managed route.
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated to the provisioned managed route
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> preference <i>number</i>
Tree	preference
Description	This command configures the preference associated with the provisioned managed route.
Range	0 to 255
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag *number*

Synopsis	Route tag used if CPE check fails
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> tag <i>number</i>
Tree	tag
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retail-svc-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Retail service ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> retail-svc-id <i>number</i>
Tree	retail-svc-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv

Synopsis	Enter the shcv context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> shcv
Tree	shcv
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Sub-profile name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the subscriber-id context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> subscriber-id
Tree	subscriber-id
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis Subscriber identification

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **subscriber-id** *string* *string*

Tree **string**

String Length 1 to 64

Notes The following elements are part of a choice: **string** or **use-sap-id**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis Use the SAP id as subscriber ID

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **subscriber-id** **use-sap-id**

Tree **use-sap-id**

Notes The following elements are part of a choice: **string** or **use-sap-id**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-learning

Synopsis Enter the **mac-learning** context

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **mac-learning**

Tree **mac-learning**

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data-triggered *boolean*

Synopsis Enable learning of MAC addresses from data packets

Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host mac-learning data-triggered <i>boolean</i>
Tree	data-triggered
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-mac *boolean*

Synopsis	Enforce single MAC address and subscriber for the SAP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host mac-learning single-mac <i>boolean</i>
Tree	single-mac
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-sla-mgmt

Synopsis	Enter the sub-sla-mgmt context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt
Tree	sub-sla-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of SAP subscriber management
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the defaults context
Context	configure service ies string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Default application profile name for this SAP
Context	configure service ies string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults app-profile reference
Tree	app-profile
Reference	configure application-assurance group number partition number policy app-profile string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id

Synopsis	Enter the int-dest-id context
Context	configure service ies string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults int-dest-id
Tree	int-dest-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Use the configured string
Context	configure service ies string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults int-dest-id string string
Tree	string
String Length	1 to 32
Notes	The following elements are part of a choice: string or top-q-tag .

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

top-q-tag

Synopsis Use the top Q-tag of this SAP
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [sub-sla-mgmt](#) [defaults](#) [int-dest-id](#) [top-q-tag](#)
Tree [top-q-tag](#)
Notes The following elements are part of a choice: **string** or **top-q-tag**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis Default SLA profile for hosts on this SAP
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [sub-sla-mgmt](#) [defaults](#) [sla-profile](#) *reference*
Tree [sla-profile](#)
Reference **configure** [subscriber-mgmt](#) [sla-profile](#) [string](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis Default subscriber profile used for subscribers on this SAP
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [sub-sla-mgmt](#) [defaults](#) [sub-profile](#) *reference*
Tree [sub-profile](#)
Reference **configure** [subscriber-mgmt](#) [sub-profile](#) [string](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis Enter the **subscriber-id** context

Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt defaults subscriber-id</i>
Tree	<i>subscriber-id</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis	Use auto-generated subscriber identification string
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt defaults subscriber-id auto-id</i>
Tree	<i>auto-id</i>
Notes	The following elements are part of a choice: auto-id , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use SAP ID as default subscriber identification string
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt defaults subscriber-id sap-id</i>
Tree	<i>sap-id</i>
Notes	The following elements are part of a choice: auto-id , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Default subscriber identification string for the SAP
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt defaults subscriber-id string string</i>
Tree	<i>string</i>
String Length	1 to 64
Notes	The following elements are part of a choice: auto-id , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-sub-parameters

Synopsis	Enter the single-sub-parameters context
Context	configure service ies string subscriber-interface string group-interface string sap string sub-sla-mgmt single-sub-parameters
Tree	single-sub-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

non-sub-traffic

Synopsis	Enable the non-sub-traffic context
Context	configure service ies string subscriber-interface string group-interface string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic
Tree	non-sub-traffic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name for all non-subscriber traffic
Context	configure service ies string subscriber-interface string group-interface string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group number partition number policy app-profile string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile applicable for all non-subscriber traffic
Context	configure service ies string subscriber-interface string group-interface string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile string
Notes	This element is mandatory.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis Subscriber ID profile applied for all non-subscriber traffic
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [single-sub-parameters](#) [non-sub-traffic](#) [sub-profile](#) *reference*
Tree [sub-profile](#)
Reference **configure** [subscriber-mgmt](#) [sub-profile](#) *string*
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Subscriber ID applied for all non-subscriber traffic
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [single-sub-parameters](#) [non-sub-traffic](#) [subscriber-id](#) *string*
Tree [subscriber-id](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profiled-traffic-only *boolean*

Synopsis Include all traffic in subscriber profile
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [single-sub-parameters](#) [profiled-traffic-only](#) *boolean*
Tree [profiled-traffic-only](#)
Default false
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis Subscriber identification policy used on this SAP

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [sub-ident-policy](#) *reference*

Tree [sub-ident-policy](#)

Reference **configure** [subscriber-mgmt](#) [sub-ident-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit (*keyword* | *number*)

Synopsis Maximum number of subscribers on this SAP

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [subscriber-limit](#) (*keyword* | *number*)

Tree [subscriber-limit](#)

Range 1 to 131071

Default 1

Options no-limit

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-parameters

Synopsis Enter the **sap-parameters** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap-parameters](#)

Tree [sap-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis Anti-spoof type of the SAP

Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters anti-spoof</i> <i>keyword</i>
Tree	anti-spoof
Default	ip-mac
Options	ip-mac, nh-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-sla-mgmt

Synopsis	Enter the sub-sla-mgmt context
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters sub-sla-mgmt</i>
Tree	sub-sla-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the defaults context
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters sub-sla-mgmt defaults</i>
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Default application profile name
Context	configure service ies string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults app-profile reference
Tree	app-profile
Reference	configure application-assurance group number partition number policy app-profile string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Default SLA profile
Context	configure service ies string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults sla-profile reference
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Default subscriber profile
Context	configure service ies string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults sub-profile reference
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the subscriber-id context
Context	configure service ies string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults subscriber-id
Tree	subscriber-id
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis Subscriber ID that is autogenerated

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap-parameters](#) [sub-sla-mgmt](#) [defaults](#) [subscriber-id](#) [auto-id](#)

Tree [auto-id](#)

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis String to be used as default subscriber ID

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap-parameters](#) [sub-sla-mgmt](#) [defaults](#) [subscriber-id](#) [string](#) [string](#)

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis Subscriber identification policy

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap-parameters](#) [sub-sla-mgmt](#) [sub-ident-policy](#) [reference](#)

Tree [sub-ident-policy](#)

Reference **configure** [subscriber-mgmt](#) [sub-ident-policy](#) [string](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy *reference*

Synopsis Subscriber host connectivity verification policy for IPv4 and IPv6

Context	configure service ies <i>string subscriber-interface string group-interface string shcv-policy reference</i>
Tree	shcv-policy
Reference	configure subscriber-mgmt shcv-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv4 *reference*

Synopsis	Subscriber host connectivity verification policy for IPv4
Context	configure service ies <i>string subscriber-interface string group-interface string shcv-policy-ipv4 reference</i>
Tree	shcv-policy-ipv4
Reference	configure subscriber-mgmt shcv-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv6 *reference*

Synopsis	Subscriber host connectivity verification policy for IPv6
Context	configure service ies <i>string subscriber-interface string group-interface string shcv-policy-ipv6 reference</i>
Tree	shcv-policy-ipv6
Reference	configure subscriber-mgmt shcv-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

srrp [[srrp-id](#)] *number*

Synopsis	Enter the srrp list instance
Context	configure service ies <i>string subscriber-interface string group-interface string srrp number</i>
Tree	srrp
Max. Instances	1
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[srrp-id] *number*

Synopsis SRRP instance ID
Context **configure** *service ies string subscriber-interface string group-interface string srrp number*
Tree [srrp](#)
Range 1 to 4294967295
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of SRRP
Context **configure** *service ies string subscriber-interface string group-interface string srrp number admin-state keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd-liveness

Synopsis Enable the **bfd-liveness** context
Context **configure** *service ies string subscriber-interface string group-interface string srrp number bfd-liveness*
Tree [bfd-liveness](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dest-ip *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IPv4 prefix
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp number bfd-liveness dest-ip <i>string</i>
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp number bfd-liveness interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp number bfd-liveness service-name <i>string</i>
Tree	service-name

String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **description** *string*
Tree **description**
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gw-mac *string*

Synopsis Gateway MAC address
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **gw-mac** *string*
Tree **gw-mac**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keep-alive-interval *number*

Synopsis Interval between SRRP advertisements
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **keep-alive-interval** *number*
Tree **keep-alive-interval**
Range 1 to 100
Default 10
Units deciseconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

message-path *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to use as the SRRP message path
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> message-path <i>reference</i>
Tree	message-path
Reference	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group

Synopsis	Enter the monitor-oper-group context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group
Tree	monitor-oper-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-name *reference*

Synopsis	Operational group name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group group-name <i>reference</i>
Tree	group-name
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority-step *number*

Synopsis	Step value to change priority of SRRP instance
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group priority-step <i>number</i>

Tree	priority-step
Range	1 to 10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

one-garp-per-sap *boolean*

Synopsis	Send one gratuitous ARP to each SAP
Context	configure service ies string subscriber-interface string group-interface string srrp number one-garp-per-sap <i>boolean</i>
Tree	one-garp-per-sap
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	VRRP priority control policy associated with the SRRP
Context	configure service ies string subscriber-interface string group-interface string srrp number policy <i>reference</i>
Tree	policy
Reference	configure vrrp policy number
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preempt *boolean*

Synopsis	Allow the SRRP instance to override an existing master
Context	configure service ies string subscriber-interface string group-interface string srrp number preempt <i>boolean</i>
Tree	preempt
Default	true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority *number*

Synopsis Priority for this interface at this level

Context **configure** *service ies string subscriber-interface string group-interface string srrp number priority number*

Tree [priority](#)

Range 1 to 254

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-fib-population-packets *keyword*

Synopsis Mode used to send FIB population packets (such as ARP) on switchover

Context **configure** *service ies string subscriber-interface string group-interface string srrp number send-fib-population-packets keyword*

Tree [send-fib-population-packets](#)

Default all

Options all, outer-tag-only

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suppress-aa-sub *boolean*

Synopsis Enable application assurance suppression for ESM subscribers

Context **configure** *service ies string subscriber-interface string group-interface string suppress-aa-sub boolean*

Tree [suppress-aa-sub](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> tos-marking-state <i>keyword</i>
Tree	tos-marking-state
Default	untrusted
Options	trusted, untrusted
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Group interface type
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> type <i>keyword</i>
Tree	type
Default	plain
Options	plain, lns, wlan-gw, gtp, bonding
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the wlan-gw context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WLAN Gateway
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-address [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the gateway-address list instance
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	gateway-address
Max. Instances	10
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Gateway endpoint address of the WLAN Gateway tunnel
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	gateway-address
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

purpose

Synopsis	Enter the purpose context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) purpose
Tree	purpose
Introduced	16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect *boolean*

Synopsis Use tunnel IP address for crosse-connect traffic

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **gateway-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **purpose** **xconnect** **boolean**

Tree **xconnect**

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-router *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Routing instance the WLAN-GW endpoint resides in

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **gateway-router** *string*

Tree **gateway-router**

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

group-encryption

Synopsis Enter the **group-encryption** context

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **group-encryption**

Tree **group-encryption**

Introduced 21.10.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-keygroup-inbound *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw group-encryption encryption-keygroup-inbound <i>reference</i>
Tree	encryption-keygroup-inbound
Reference	configure group-encryption encryption-keygroup <i>number</i>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-keygroup-outbound *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw group-encryption encryption-keygroup-outbound <i>reference</i>
Tree	encryption-keygroup-outbound
Reference	configure group-encryption encryption-keygroup <i>number</i>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2-ap

Synopsis	Enter the I2-ap context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw I2-ap
Tree	I2-ap
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-point [[sap-id](#)] *string*

Synopsis	Enter the access-point list instance
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw I2-ap access-point <i>string</i>
Tree	access-point
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sap-id] *string*

Synopsis	SAP ID for the Layer 2 access point
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i>
Tree	access-point
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the L2 access points
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service encapsulation type of this access point
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> encap-type <i>keyword</i>
Tree	encap-type
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

epipe-sap-template *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Parameters template for the internal connections with the ISA cards
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> epipe-sap-template <i>reference</i>
Tree	epipe-sap-template
Reference	configure service template epipe-sap-template <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-sub-id-fmt *keyword*

Synopsis	Format of the auto-generated subscriber ID
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap auto-sub-id-fmt <i>keyword</i>
Tree	auto-sub-id-fmt
Default	include-ap-tags
Options	include-ap-tags, sap-only
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default encapsulation type for Layer 2 access points
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap default-encap-type <i>keyword</i>
Tree	default-encap-type
Default	null
Options	null, dot1q, qinq
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **lanext** context

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#)
[lanext](#)

Tree [lanext](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-bd *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of bridge domains

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#)
[lanext](#) [max-bd](#) *number*

Tree [max-bd](#)

Range 1 to 131071

Default 131071

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-ap-mac

Synopsis Enable the **learn-ap-mac** context

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#)
[learn-ap-mac](#)

Tree [learn-ap-mac](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

delay-auth *boolean*

Synopsis	Delay authentication until ARP/ND is answered or timed out, after which AP MAC can be included
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw learn-ap-mac delay-auth <i>boolean</i>
Tree	delay-auth
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility

Synopsis	Enter the mobility context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility
Tree	mobility
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Minimum time between two mobility events for a single UE
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility hold-time <i>number</i>
Tree	hold-time
Range	0 to 255
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

inter-tunnel-type *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable mobility between terminating tunnel types
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility inter-tunnel-type <i>boolean</i>
Tree	inter-tunnel-type
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

inter-vlan *boolean*

Synopsis	Enable mobility within different VLANs within the same range of VLAN Q-tags
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility inter-vlan <i>boolean</i>
Tree	inter-vlan
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

trigger

Synopsis	Enter the trigger context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility trigger
Tree	trigger
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

control *boolean*

Synopsis	Use control traffic (DHCP, DHCPv6, and ICMPv6-RS messages) as mobility trigger
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility trigger control <i>boolean</i>

Tree	control
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

data *boolean*

Synopsis	Use data traffic as mobility trigger
Context	configure service ies string subscriber-interface string group-interface string wlan-gw mobility trigger data <i>boolean</i>
Tree	data
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

iapp *boolean*

Synopsis	Use Inter Access Point Protocol (IAPP) messages as mobility trigger
Context	configure service ies string subscriber-interface string group-interface string wlan-gw mobility trigger iapp <i>boolean</i>
Tree	iapp
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

oper-down-on-group-degrade *boolean*

Synopsis	Bring interface operationally down when its ISA WLAN Gateway becomes degraded
Context	configure service ies string subscriber-interface string group-interface string wlan-gw oper-down-on-group-degrade <i>boolean</i>
Tree	oper-down-on-group-degrade
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-mss-adjust *number*

Synopsis	Value for the TCP Maximum Segment Size (MSS) option if not present, or if value is higher
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tcp-mss-adjust <i>number</i>
Tree	tcp-mss-adjust
Range	160 to 10240
Units	bytes
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-egress-qos

Synopsis	Enter the tunnel-egress-qos context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos
Tree	tunnel-egress-qos
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of egress QoS for WLAN-GW tunnels
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

agg-rate-limit (*number* | *keyword*)

Synopsis	Aggregate rate limit of each shaper associated with this interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos agg-rate-limit (<i>number</i> <i>keyword</i>)
Tree	agg-rate-limit
Range	1 to 100000000
Default	max
Options	max
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Granularity of the egress shaping for WLAN Gateway
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos granularity <i>keyword</i>
Tree	granularity
Default	per-tunnel
Options	per-tunnel, per-retailer
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time (*number* | *keyword*)

Synopsis	Minimum time that the egress QoS resources associated with a tunnel (such as a shaper) are held
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos hold-time (<i>number</i> <i>keyword</i>)
Tree	hold-time
Range	1 to 86400
Units	seconds
Options	infinite
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-client-only *boolean*

Synopsis Tunnel traffic to shape when multiple UEs use this tunnel

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [tunnel-egress-qos](#) **multi-client-only** *boolean*

Tree [multi-client-only](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Identifier of the egress QoS policy associated with each tunnel of this interface

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [tunnel-egress-qos](#) **qos** *reference*

Tree [qos](#)

Reference **configure** [qos sap-egress](#) *string*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Identifier of the egress scheduler policy associated with each tunnel of this interface

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [tunnel-egress-qos](#) **scheduler-policy** *reference*

Tree [scheduler-policy](#)

Reference **configure** [qos scheduler-policy](#) *string*

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-encaps

Synopsis Enter the **tunnel-encaps** context
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)
[tunnel-encaps](#)
Tree [tunnel-encaps](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-l2tp-cookie (*keyword* | *hex-string*)

Synopsis System that learns the cookie from L2TP tunnels terminating on this interface
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)
[tunnel-encaps](#) [learn-l2tp-cookie](#) (*keyword* | *hex-string*)
Tree [learn-l2tp-cookie](#)
String Length 6
Default never
Options never, always
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-range [[range](#)] *string*

Synopsis Enter the **vlan-range** list instance
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)
[vlan-range](#) *string*
Tree [vlan-range](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[range](#)] *string*

Synopsis IEEE 802.1q VLAN tag range

Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i>
Tree	vlan-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication

Synopsis	Enter the authentication context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication
Tree	authentication
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Minimum time to hold a UE down after an authentication failure
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication hold-time <i>number</i>
Tree	hold-time
Range	0 to 3600
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis	Enable the local context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication local
Tree	local
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

coa-policy *reference*

Synopsis	RADIUS ISA policy applied to CoA or disconnect messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication local coa-policy <i>reference</i>
Tree	coa-policy
Reference	configure aaa radius isa-policy <i>string</i>
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-ue-state *keyword*

Synopsis	UE state accepted for immediate authentication
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication local default-ue-state <i>keyword</i>
Tree	default-ue-state
Options	portal, dsm
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

on-control-plane *boolean*

Synopsis	Trigger authentication on first control plane packet instead of first data packet
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication on-control-plane <i>boolean</i>
Tree	on-control-plane
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	RADIUS policy for authentication
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication policy <i>reference</i>

Tree	policy
Reference	configure aaa radius isa-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-mismatch-timeout *number*

Synopsis	Timeout value for the RADIUS proxy cache if a packet is received with a non-matching VLAN
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication vlan-mismatch-timeout <i>number</i>
Tree	vlan-mismatch-timeout
Range	5 to 60
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

data-triggered-ue-creation

Synopsis	Enter the data-triggered-ue-creation context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation
Tree	data-triggered-ue-creation
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of data-triggered UE creation
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp *boolean*

Synopsis	Authenticate ARP packets received from an unknown UE
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string data-triggered-ue-creation arp <i>boolean</i>
Tree	arp
Default	false
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

create-proxy-cache-entry

Synopsis	Enter the create-proxy-cache-entry context
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string data-triggered-ue-creation create-proxy-cache-entry
Tree	create-proxy-cache-entry
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string data-triggered-ue-creation create-proxy-cache-entry mac-format <i>string</i>
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enable the proxy-server context
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string data-triggered-ue-creation create-proxy-cache-entry proxy-server
Tree	proxy-server

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis RADIUS Proxy server name
Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw
vlan-range string data-triggered-ue-creation create-proxy-cache-entry proxy-server
name string*
Tree *name*
String Length 1 to 32
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis Router instance of the RADIUS proxy server
Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw
vlan-range string data-triggered-ue-creation create-proxy-cache-entry proxy-server
router-instance string*
Tree *router-instance*
Notes This element is mandatory.
Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp4

Synopsis Enter the **dhcp4** context
Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw
vlan-range string dhcp4*
Tree *dhcp4*
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv4
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns *string*

Synopsis	DNS servers signaled in DHCP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 dns <i>string</i>
Tree	dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware-ip-address (*ipv4-unicast-address* | *keyword*)

Synopsis	L2-Aware NAT inside IP address
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 l2-aware-ip-address (<i>ipv4-unicast-address</i> <i>keyword</i>)
Tree	l2-aware-ip-address
Options	from-pool
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis	Enter the lease-time context
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Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw</i> <i>vlan-range string</i> <i>dhcp4 lease-time</i>
Tree	<i>lease-time</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active number

Synopsis	IP address lease time for the UE after successful (portal) authentication
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw</i> <i>vlan-range string</i> <i>dhcp4 lease-time active number</i>
Tree	<i>active</i>
Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	IP address lease time that is provided before and during (portal) authentication to the UE
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw</i> <i>vlan-range string</i> <i>dhcp4 lease-time initial number</i>
Tree	<i>initial</i>
Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nbns string

Synopsis	NetBIOS servers signaled in DHCP
Context	configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw</i> <i>vlan-range string</i> <i>dhcp4 nbns string</i>
Tree	<i>nbns</i>

Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the protocol
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime

Synopsis	Enter the preferred-lifetime context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 preferred-lifetime
Tree	preferred-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active number

Synopsis	Preferred signaled lifetime after full authentication
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 preferred-lifetime active number
Tree	active
Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	Preferred signaled lifetime when the UE is not fully authenticated
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 preferred-lifetime initial number
Tree	initial
Range	300 to 3600
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime

Synopsis	Enter the valid-lifetime context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 valid-lifetime
Tree	valid-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active number

Synopsis	Signaled valid lifetime after full authentication
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 valid-lifetime active <i>number</i>
Tree	active
Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	Valid signaled lifetime when the UE is not fully authenticated
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 valid-lifetime initial <i>number</i>
Tree	initial
Range	300 to 3600
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dsm

Synopsis	Enter the dsm context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm
Tree	dsm
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA Radius Policy for accounting
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure aaa radius isa-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-update

Synopsis	Enable the accounting-update context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm accounting-update
Tree	accounting-update
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Time interval between consecutive Interim accounting update messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm accounting-update interval <i>number</i>
Tree	interval
Range	5 to 259200
Units	minutes
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DSM
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application-assurance

Synopsis Enter the **application-assurance** context
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [dsm](#) [application-assurance](#)
Tree [application-assurance](#)
Introduced 21.10.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-statistics *boolean*

Synopsis Collect AA statistics
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [dsm](#) [application-assurance](#) [accounting-statistics](#) [boolean](#)
Tree [accounting-statistics](#)
Default false
Introduced 21.10.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis AA application profile used for portal authentication
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [dsm](#) [application-assurance](#) [profile](#) [reference](#)
Tree [profile](#)
Reference **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [app-profile](#) [string](#)
Introduced 21.10.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-parameter *string*

Synopsis AA URL parameter included for HTTP portal redirect

Context **configure service ies** *string* *subscriber-interface string* *group-interface string* *wlan-gw*
vlan-range string *dsm* *application-assurance url-parameter string*

Tree [url-parameter](#)

String Length 1 to 247

Introduced 22.2.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis Enter the **egress** context

Context **configure service ies** *string* *subscriber-interface string* *group-interface string* *wlan-gw*
vlan-range string *dsm* **egress**

Tree [egress](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer reference

Synopsis Policer for egress traffic

Context **configure service ies** *string* *subscriber-interface string* *group-interface string* *wlan-gw*
vlan-range string *dsm* **egress** *policer reference*

Tree [policer](#)

Reference **configure subscriber-mgmt isa-policer** *string*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis Enter the **ingress** context

Context **configure service ies** *string* *subscriber-interface string* *group-interface string* *wlan-gw*
vlan-range string *dsm* **ingress**

Tree [ingress](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-filter *reference*

Synopsis	Filter for ingress traffic
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm ingress ip-filter <i>reference</i>
Tree	ip-filter
Reference	configure subscriber-mgmt isa-filter <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*

Synopsis	Policer for ingress traffic
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm ingress policer <i>reference</i>
Tree	policer
Reference	configure subscriber-mgmt isa-policer <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

soft-quota-exhausted-filter *reference*

Synopsis	Filter applied when soft volume quota is reached
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm ingress soft-quota-exhausted-filter <i>reference</i>
Tree	soft-quota-exhausted-filter
Description	This command applies a filter when a soft volume quota is reached. The filter replaces the currently applied filter (which can be preconfigured using the ip-filter command in the configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm ingress ip-filter context or be set using a RADIUS CoA message) for the UE upon quota exhaustion. If the quota is extended using a RADIUS CoA message, the filter is automatically reverted. Configuration changes apply only to new DSM UEs and not to existing UEs.
Reference	configure subscriber-mgmt isa-filter <i>string</i>
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

one-time-redirect

Synopsis	Enter the one-time-redirect context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm one-time-redirect
Tree	one-time-redirect
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*

Synopsis	Destination port of packets considered for HTTP redirect
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm one-time-redirect port <i>number</i>
Tree	port
Range	1 to 65535
Default	80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url *string*

Synopsis	URL for redirected HTTP protocol packets that can be overridden by AAA
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm one-time-redirect url <i>string</i>
Tree	url
String Length	1 to 255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

volume-quota-direction *keyword*

Synopsis	Volume quota direction for WLAN GW
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm volume-quota-direction <i>keyword</i>
Tree	volume-quota-direction

Description	This command specifies the direction that volume quotas are applied. Configuration changes apply only to new DSM UEs and not to existing UEs.
Default	both
Options	both, ingress, egress
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

extension [[extension-range](#)] *string*

Synopsis	Add a list entry for extension
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> extension <i>string</i>
Tree	extension
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[extension-range] *string*

Synopsis	VLAN tag range used for matching
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> extension <i>string</i>
Tree	extension
Description	This command configures the additional VLAN range that is used for matching. Any traffic within the extension range is considered part of the same VLAN range for purposes of intra-SSID mobility.
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect-policy *reference*

Synopsis	Default HTTP redirect policy for portal authentication
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> http-redirect-policy <i>reference</i>
Tree	http-redirect-policy
Reference	configure subscriber-mgmt http-redirect-policy <i>string</i>

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

idle-timeout-action *keyword*

Synopsis Action to perform when the idle timeout expires
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw**
vlan-range *string* **idle-timeout-action** *keyword*
Tree **idle-timeout-action**
Default remove
Options remove, shcv
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2-service

Synopsis Enable the **I2-service** context
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw**
vlan-range *string* **I2-service**
Tree **I2-service**
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of Layer 2 service for VLAN range
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw**
vlan-range *string* **I2-service** **admin-state** *keyword*
Tree **admin-state**
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string l2-service description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

service *reference*

Synopsis	Layer 2 service associated with the range
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string l2-service service reference
Tree	service
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy for DSM and ISA portal authentication
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string nat-policy reference
Tree	nat-policy
Reference	configure service nat nat-policy string
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

retail-service *string*

Synopsis	Default retail service for new UEs in this range
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string retail-service string
Tree	retail-service

String Length 1 to 64
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac

Synopsis Enter the **slaac** context
Context **configure service ies string subscriber-interface string group-interface string wlan-gw
vlan-range string slaac**
Tree **slaac**
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of the protocol
Context **configure service ies string subscriber-interface string group-interface string wlan-gw
vlan-range string slaac admin-state keyword**
Tree **admin-state**
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime

Synopsis Enter the **preferred-lifetime** context
Context **configure service ies string subscriber-interface string group-interface string wlan-gw
vlan-range string slaac preferred-lifetime**
Tree **preferred-lifetime**
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active number

Synopsis Preferred signaled lifetime after full authentication

Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac preferred-lifetime active <i>number</i>
Tree	active
Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Preferred signaled lifetime when the UE is not fully authenticated
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac preferred-lifetime initial <i>number</i>
Tree	initial
Range	300 to 3600
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime

Synopsis	Enter the valid-lifetime context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac valid-lifetime
Tree	valid-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis	Signaled valid lifetime after full authentication
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac valid-lifetime active <i>number</i>
Tree	active

Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	Valid signaled lifetime when the UE is not fully authenticated
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac valid-lifetime initial number
Tree	initial
Range	300 to 3600
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vrgw

Synopsis	Enter the vrgw context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw
Tree	vrgw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of vRGW
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

brg

Synopsis Enter the **brg** context

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#)
[vlan-range](#) [string](#) [vrgw](#) [brg](#)

Tree [brg](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authenticated-brg-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Only allow hosts from BRGs pre-authenticated using the radius-proxy

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#)
[vlan-range](#) [string](#) [vrgw](#) [brg](#) [authenticated-brg-only](#) [boolean](#)

Tree [authenticated-brg-only](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-brg-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Default BRG profile to use if the AAA server does not specify one

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#)
[vlan-range](#) [string](#) [vrgw](#) [brg](#) [default-brg-profile](#) [reference](#)

Tree [default-brg-profile](#)

Reference **configure** [subscriber-mgmt](#) [vrgw](#) [brg-profile](#) [string](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext

Synopsis Enter the **lanext** context

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw](#) **lanext**

Tree [lanext](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **access** context

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw](#) [lanext](#) **access**

Tree [access](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-mac number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of allowed MAC entries on access side

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw](#) [lanext](#) [access](#) **max-mac** *number*

Tree [max-mac](#)

Range 1 to 256

Default 20

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-access *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow multiple access points
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext access multi-access <i>boolean</i>
Tree	multi-access
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress home traffic
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext access policer <i>reference</i>
Tree	policer
Reference	configure subscriber-mgmt isa-policer <i>string</i>
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of HLE
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

assistive-address-resolution *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis ISA assists in address resolution

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **vrgw lanext assistive-address-resolution** *boolean*

Tree **assistive-address-resolution**

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bd-mac-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Prefix from which BD MACs for MAC translation are derived

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **vrgw lanext bd-mac-prefix** *string*

Tree **bd-mac-prefix**

String Length 8

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-translation *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Hide MAC address of home host by translating it to BD MAC

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **vrgw lanext mac-translation** *boolean*

Tree	mac-translation
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

network



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the network context
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext network
Tree	network
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the HLE network
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext network admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-mac number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of allowed MAC entries on network side
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext network max-mac number
Tree	max-mac
Range	1 to 64
Default	20
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress data center traffic
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext network policer reference
Tree	policer
Reference	configure subscriber-mgmt isa-policer <i>string</i>
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect

Synopsis	Enter the xconnect context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect
Tree	xconnect
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting

Synopsis	Enter the accounting context
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string xconnect accounting
Tree	accounting
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility-updates *boolean*

Synopsis	Accounting updates triggered by mobility
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string xconnect accounting mobility-updates <i>boolean</i>
Tree	mobility-updates
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS accounting policy for cross-connected UEs
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string xconnect accounting policy <i>reference</i>
Tree	policy
Reference	configure aaa radius isa-policy string
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

update-interval *number*

Synopsis	Time between consecutive Interim accounting update messages
Context	configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string xconnect accounting update-interval <i>number</i>

Tree	update-interval
Range	5 to 259200
Units	minutes
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the cross-connect
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Identifier of the WLAN Gateway ISA group to terminate UEs for this group interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw wlan-gw-group <i>reference</i>
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis	Enable the wpp context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp
Tree	wpp

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of WPP
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#) [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial

Synopsis Enter the **initial** context
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#) [initial](#)
Tree [initial](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis Initial application profile name
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#) [initial](#) [app-profile](#) *reference*
Tree [app-profile](#)
Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string*
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis Initial SLA profile

Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Initial subscriber profile
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time *number*

Synopsis	Lease time
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp lease-time <i>number</i>
Tree	lease-time
Range	10 to 315446399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal

Synopsis	Enter the portal context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal
Tree	portal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Web portal server name
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal name <i>string</i>
Tree	name
String Length	1 to 32
Notes	The following elements are part of a choice: portal-group or (name and router-instance).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal-group *reference*

Synopsis	WPP portal group for this interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal portal-group <i>reference</i>
Tree	portal-group
Reference	configure aaa wpp portal-group <i>string</i>
Notes	The following elements are part of a choice: portal-group or (name and router-instance).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	The virtual router instance of the WPP portal for this interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal router-instance <i>string</i>
Tree	router-instance
Notes	The following elements are part of a choice: portal-group or (name and router-instance).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

restore-to-initial-on-disconnect *boolean*

Synopsis	Restore initial profiles after a host has disconnected
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp restore-to-initial-on-disconnect <i>boolean</i>
Tree	restore-to-initial-on-disconnect
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

triggered-hosts *boolean*

Synopsis	Enable/disable triggered hosts
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp triggered-hosts <i>boolean</i>
Tree	triggered-hosts
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	User database
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis	Enter the hold-time context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service ies string subscriber-interface string hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis	Enter the down context
Context	configure service ies string subscriber-interface string hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service ies string subscriber-interface string hold-time ipv4 down init-only boolean
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service ies string subscriber-interface string hold-time ipv4 down seconds number

Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the up context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time ipv4 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis	Enter the down context
Context	configure service ies string subscriber-interface string hold-time ipv6 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service ies string subscriber-interface string hold-time ipv6 down init-only boolean
Tree	init-only
Description	This command applies the delay only when when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service ies string subscriber-interface string hold-time ipv6 down seconds number
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the up context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-linking

Synopsis	Enter the ipoe-linking context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipoe-linking
Tree	ipoe-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gratuitous-router-advertisement *boolean*

Synopsis	Send unsolicited router advertisement after DHCP setup
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipoe-linking gratuitous-router-advertisement <i>boolean</i>
Tree	gratuitous-router-advertisement
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session

Synopsis Enter the **ipoe-session** context
Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipoe-session](#)
Tree [ipoe-session](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis Maximum number of sessions on this group interface
Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipoe-session](#) **session-limit** *number*
Tree [session-limit](#)
Range 1 to 500000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context
Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipv4](#)
Tree [ipv4](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address [[ipv4-address](#)] *string*

Synopsis Enter the **address** list instance
Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipv4](#) **address** *string*
Tree [address](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv4-address] *string*

Synopsis IP address associated with the subscriber subnet

Context **configure** *service ies string subscriber-interface string ipv4 address string*

Tree *address*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gateway *string*

Synopsis Gateway IP address within the subnet for SRRP routing

Context **configure** *service ies string subscriber-interface string ipv4 address string gateway string*

Tree *gateway*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

holdup-time *number*

Synopsis Wait time before accepting new state attribute

Context **configure** *service ies string subscriber-interface string ipv4 address string holdup-time number*

Tree *holdup-time*

Range 100 to 5000

Units milliseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

populate-host-routes *boolean*

Synopsis Populate subscriber host routes in local FIB

Context **configure** *service ies string subscriber-interface string ipv4 address string populate-host-routes boolean*

Tree	populate-host-routes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 <i>address</i> <i>string</i> prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 <i>address</i> <i>string</i> track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-unmatching-subnets *boolean*

Synopsis	Allow subscriber hosts without a matching subnet
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 allow-unmatching-subnets <i>boolean</i>
Tree	allow-unmatching-subnets
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-dns *string*

Synopsis	Default DNS server addresses
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 default-dns <i>string</i>
Tree	default-dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp

Synopsis	Enter the dhcp context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis	Enable IPoE clients to use the DHCP relay or proxy server
Context	configure service ies string subscriber-interface string ipv4 dhcp client-applications dhcp boolean
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis	Enable PPPoE clients to use DHCP relay or proxy server
Context	configure service ies string subscriber-interface string ipv4 dhcp client-applications ppp boolean
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure service ies string subscriber-interface string ipv4 dhcp description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address string

Synopsis	GI address for the DHCP relay
Context	configure service ies string subscriber-interface string ipv4 dhcp gi-address string
Tree	gi-address

Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service ies string subscriber-interface string ipv4 dhcp lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases
Context	configure service ies string subscriber-interface string ipv4 dhcp lease-populate max-leases number
Tree	max-leases
Range	0 to 511999
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-82

Synopsis	Enter the option-82 context
Context	configure service ies string subscriber-interface string ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-specific-option

Synopsis Enter the **vendor-specific-option** context

Context **configure service ies** *string* **subscriber-interface** *string* **ipv4 dhcp option-82 vendor-specific-option**

Tree **vendor-specific-option**

Description Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac-address *boolean*

Synopsis Send the MAC address in the VSO

Context **configure service ies** *string* **subscriber-interface** *string* **ipv4 dhcp option-82 vendor-specific-option client-mac-address** *boolean*

Tree **client-mac-address**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis Send SAP ID in the sub-option of the DHCP relay packet

Context **configure service ies** *string* **subscriber-interface** *string* **ipv4 dhcp option-82 vendor-specific-option sap-id** *boolean*

Tree **sap-id**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *boolean*

Synopsis Send the service ID in the Vendor Specific Option

Context	configure service ies string subscriber-interface string ipv4 dhcp option-82 vendor-specific-option service-id boolean
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string string

Synopsis	User-defined ASCII string for the VSO
Context	configure service ies string subscriber-interface string ipv4 dhcp option-82 vendor-specific-option string string
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-id boolean

Synopsis	Send the system ID in the VSO
Context	configure service ies string subscriber-interface string ipv4 dhcp option-82 vendor-specific-option system-id boolean
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the proxy-server context
Context	configure service ies string subscriber-interface string ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server emulated-server <i>string</i>
Tree	emulated-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis	Enter the lease-time context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server lease-time radius-override <i>boolean</i>
Tree	radius-override
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis DHCP lease time
Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp proxy-server lease-time](#) *value number*
Tree [value](#)
Range 300 to 315446399
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis Python policy
Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp python-policy](#) *reference*
Tree [python-policy](#)
Reference **configure** [python](#) [python-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay-proxy

Synopsis Enable the **relay-proxy** context
Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp relay-proxy](#)
Tree [relay-proxy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-update-src-ip *boolean*

Synopsis Update the source IP address of a DHCP RELEASE message
Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp relay-proxy release-update-src-ip](#) *boolean*

Tree	release-update-src-ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

siaddr-override *string*

Synopsis	DHCP server IP address for address hiding function
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp relay-proxy siaddr-override <i>string</i>
Tree	siaddr-override
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-include-gi-address *boolean*

Synopsis	Include the GI address in DHCP relay messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp release-include-gi-address <i>boolean</i>
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	DHCP server IP addresses
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp server <i>string</i>
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	configure service ies <i>string subscriber-interface string ipv4 dhcp src-ip-addr keyword</i>
Tree	src-ip-addr
Default	auto
Options	auto, gi-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

virtual-subnet *boolean*

Synopsis	Enable a virtual subnet for DHCPv4 hosts
Context	configure service ies <i>string subscriber-interface string ipv4 dhcp virtual-subnet boolean</i>
Tree	virtual-subnet
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

export-host-routes *boolean*

Synopsis	Allow export of subscriber management host routes
Context	configure service ies <i>string subscriber-interface string ipv4 export-host-routes boolean</i>
Tree	export-host-routes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unnumbered

Synopsis	Enter the unnumbered context
Context	configure service ies <i>string subscriber-interface string ipv4 unnumbered</i>
Tree	unnumbered
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address for the subscriber interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 unnumbered ip-address <i>string</i>
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or ip-int-name .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis	Interface name from which an IPv4 address is borrowed
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 unnumbered ip-int-name <i>string</i>
Tree	ip-int-name
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or ip-int-name .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enable the ipv6 context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address [[ipv6-address](#)] *string*

Synopsis	Enter the address list instance
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 address <i>string</i>
Tree	address
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-address] *string*

Synopsis IPv6 address for the subscriber interface
Context **configure** *service ies string subscriber-interface string ipv6 address string*
Tree [address](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Host type for subscriber interface prefixes
Context **configure** *service ies string subscriber-interface string ipv6 address string host-type keyword*
Tree [host-type](#)
Default pd
Options pd, wan, pd-wan
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis IPv6 address prefix length
Context **configure** *service ies string subscriber-interface string ipv6 address string prefix-length number*
Tree [prefix-length](#)
Range 0 to 128
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-multiple-wan-addresses *boolean*

Synopsis	Allow multiple WAN addresses
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 allow-multiple-wan-addresses <i>boolean</i>
Tree	allow-multiple-wan-addresses
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-unmatching-prefixes *boolean*

Synopsis	Allow subscriber hosts without a matching prefix
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 allow-unmatching-prefixes <i>boolean</i>
Tree	allow-unmatching-prefixes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-dns *string*

Synopsis	Default DNS server addresses
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 default-dns <i>string</i>
Tree	default-dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-length (*number* | *keyword*)

Synopsis	IPv6 delegated prefix length
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 delegated-prefix-length (<i>number</i> <i>keyword</i>)

Tree	delegated-prefix-length
Range	48 to 64
Default	64
Options	variable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

override-slaac *boolean*

Synopsis	Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 override-slaac <i>boolean</i>
Tree	override-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-managed-route

Synopsis	Enable the pd-managed-route context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 pd-managed-route
Tree	pd-managed-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-hop *keyword*

Synopsis	Next hop type
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 pd-managed-route next-hop <i>keyword</i>
Tree	next-hop
Default	ipv6
Options	ipv4, ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the proxy-server context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 proxy server
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server client-applications
Tree	client-applications
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis Enable IPoE clients to use DHCP relay or proxy server
Context **configure** [service ies string subscriber-interface string ipv6 dhcp6 proxy-server client-applications dhcp boolean](#)
Tree [dhcp](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis Allow the PPP application to use DHCP relay functionality
Context **configure** [service ies string subscriber-interface string ipv6 dhcp6 proxy-server client-applications ppp boolean](#)
Tree [ppp](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (number | keyword)

Synopsis Time for prefix to remain preferred on this interface
Context **configure** [service ies string subscriber-interface string ipv6 dhcp6 proxy-server preferred-lifetime \(number | keyword\)](#)
Tree [preferred-lifetime](#)
Range 300 to 4294967294
Default 3600
Units seconds
Options infinite
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-timer *number*

Synopsis	Rebind timer (T2) for this interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server rebind-timer <i>number</i>
Tree	rebind-timer
Range	0 to 1209600
Default	2880
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-timer *number*

Synopsis	Renew timer (T1)
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server renew-timer <i>number</i>
Tree	renew-timer
Range	0 to 604800
Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis	Enter the server-id context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server server-id
Tree	server-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-ascii *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)
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Context	configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server server-id duid-en-ascii string
Tree	duid-en-ascii
String Length	1 to 58
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-hex string

Synopsis	DUID system ID in hexadecimal format
Context	configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server server-id duid-en-hex string
Tree	duid-en-hex
String Length	1 to 118
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-ll

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server server-id duid-ll
Tree	duid-ll
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (number | keyword)

Synopsis	Time for prefix to remain valid on this interface
Context	configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server valid-lifetime (number keyword)
Tree	valid-lifetime
Range	300 to 4294967294

Default	86400
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay

Synopsis	Enter the relay context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay
Tree	relay
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service ies string subscriber-interface string ipv6 dhcp6 relay client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	configure service ies string subscriber-interface string ipv6 dhcp6 relay client-applications dhcp boolean
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis	Allow the PPP application to use DHCP relay functionality
Context	configure service ies string subscriber-interface string ipv6 dhcp6 relay client-applications ppp boolean
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure service ies string subscriber-interface string ipv6 dhcp6 relay description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-split

Synopsis Enter the **lease-split** context

Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay lease-split**

Tree **lease-split**

Description Commands in this context configure DHCPv6 lease split.

DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:

- the renew time T1 committed by the server (long renew time)
- half of the preferred lifetime committed by the server when T1 committed by the server equals zero

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of DHCPv6 lease split

Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay lease-split admin-state keyword**

Tree **admin-state**

Default disable

Options enable, disable

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis DHCPv6 lease split valid lifetime (short lease time)

Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay lease-split valid-lifetime number**

Tree **valid-lifetime**

Range 300 to 315446399

Default 3600

Units seconds

Introduced 21.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis Link address for the DHCPv6 relay messages
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [link-address](#) *string*
Tree [link-address](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis DHCP6 server(s) to which the DHCP6 requests are forwarded
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [server](#) *string*
Tree [server](#)
Max. Instances 8
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis Source IPv6 address for the DHCPv6 relay messages
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [source-address](#) *string*
Tree [source-address](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-bridged-mode *boolean*

Synopsis Enable IPv6 IPoE bridged mode
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [ipoe-bridged-mode](#) *boolean*

Tree	ipoe-bridged-mode
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-local-address

Synopsis	Enter the link-local-address context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 link-local-address
Tree	link-local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	IPv6 link local address
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 link-local-address address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix [[ipv6-prefix](#)] *string*

Synopsis	Enter the prefix list instance
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i>
Tree	prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[ipv6-prefix](#)] *string*

Synopsis	IPv6 address for a router interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i>
Tree	prefix

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

holdup-time *number*

Synopsis	Time to wait before route accepts new state attribute
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> holdup-time <i>number</i>
Tree	holdup-time
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Host type for subscriber interface prefixes
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> host-type <i>keyword</i>
Tree	host-type
Default	pd
Options	pd, wan, pd-wan
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-advertisements

Synopsis Enter the **router-advertisements** context
Context **configure service ies string subscriber-interface string ipv6 router-advertisements**
Tree [router-advertisements](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of router advertisements
Context **configure service ies string subscriber-interface string ipv6 router-advertisements admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast keyword

Synopsis Protocol with forced multicast
Context **configure service ies string subscriber-interface string ipv6 router-advertisements force-mcast keyword**
Tree [force-mcast](#)
Options ip, ip-mac
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-advertisement-interval number

Synopsis Maximum advertisement interval

Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements max-advertisement-interval <i>number</i>
Tree	max-advertisement-interval
Range	900 to 1800
Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-advertisement-interval *number*

Synopsis	Minimum advertisement interval
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements min-advertisement-interval <i>number</i>
Tree	min-advertisement-interval
Range	900 to 1350
Default	900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

current-hop-limit *number*

Synopsis	Hop limit to be advertised
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options current-hop-limit <i>number</i>
Tree	current-hop-limit

Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enter the dns context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options dns
Tree	dns
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis	Include the RDNSS server option 25
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options dns include-rdnss <i>boolean</i>
Tree	include-rdnss
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime (*number* | *keyword*)

Synopsis	Maximum time for the RDNSS address to remain valid
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options dns rdnss-lifetime (<i>number</i> <i>keyword</i>)
Tree	rdnss-lifetime
Range	900 to 3600
Default	3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-configuration *boolean*

Synopsis	Managed address configuration flag
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options managed-configuration <i>boolean</i>
Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu (*number* | *keyword*)

Synopsis	Advertised MTU value
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options mtu (<i>number</i> <i>keyword</i>)
Tree	mtu
Range	1280 to 9212
Default	not-included
Units	bytes
Options	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other-stateful-configuration *boolean*

Synopsis	Other stateful configuration flag
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options other-stateful-configuration <i>boolean</i>
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reachable-time *number*

Synopsis	Neighbor discovery reachable time that is advertised for this group interface
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options reachable-time <i>number</i>
Tree	reachable-time
Range	0 to 3600000
Default	0
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retransmit-timer *number*

Synopsis	Neighbor discovery retransmit timer that is advertised for this group interface
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options retransmit-timer <i>number</i>
Tree	retransmit-timer
Range	0 to 1800000
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-lifetime (*number* | *keyword*)

Synopsis	Router lifetime
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options router-lifetime (<i>number</i> <i>keyword</i>)
Tree	router-lifetime
Range	2700 to 9000
Default	4500
Units	seconds
Options	no-default-router
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-options

Synopsis	Enter the prefix-options context
Context	configure service ies string subscriber-interface string ipv6 router-advertisements prefix-options
Tree	prefix-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

autonomous *boolean*

Synopsis	Value of the autonomous flag
Context	configure service ies string subscriber-interface string ipv6 router-advertisements prefix-options autonomous boolean
Tree	autonomous
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	configure service ies string subscriber-interface string ipv6 router-advertisements prefix-options on-link boolean
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number | keyword*)

Synopsis	Time for a prefix to remain preferred
Context	configure service ies string subscriber-interface string ipv6 router-advertisements prefix-options preferred-lifetime (number keyword)
Tree	preferred-lifetime
Range	0 to 4294967294
Default	3600

Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis	Time for a prefix to remain valid
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements prefix-options valid-lifetime (<i>number</i> <i>keyword</i>)
Tree	valid-lifetime
Range	0 to 4294967294
Default	86400
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicit

Synopsis	Enter the router-solicit context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-solicit
Tree	router-solicit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inactivity-timer (*number* | *keyword*)

Synopsis	Time before an inactive host is removed
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-solicit inactivity-timer (<i>number</i> <i>keyword</i>)
Tree	inactivity-timer
Range	1 to 31536000
Default	300
Units	seconds
Options	infinite

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis Enter the **local-address-assignment** context
Context **configure service ies string subscriber-interface string local-address-assignment**
Tree [local-address-assignment](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of Local Address Assignment
Context **configure service ies string subscriber-interface string local-address-assignment admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context
Context **configure service ies string subscriber-interface string local-address-assignment ipv4**
Tree [ipv4](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis Enter the **client-applications** context
Context **configure service ies string subscriber-interface string local-address-assignment ipv4 client-applications**
Tree [client-applications](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis Request local addresses for PPP IPCP hosts
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [local-address-assignment](#) [ipv4](#)
[client-applications](#) [ppp](#) *boolean*
Tree [ppp](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pool *string*

Synopsis Default pools
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [local-address-assignment](#) [ipv4](#)
[default-pool](#) *string*
Tree [default-pool](#)
String Length 1 to 32
Max. Instances 2
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis Local DHCP server that contains pools for local address assignment
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [local-address-assignment](#) [ipv4](#)
[server](#) *reference*
Tree [server](#)
Reference **configure** [router](#) [string](#) [dhcp-server](#) [dhcpv4](#) [string](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure service ies string subscriber-interface string local-address-assignment ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service ies string subscriber-interface string local-address-assignment ipv6 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-slaac *boolean*

Synopsis	Request local addresses for IPoE SLAAC hosts
Context	configure service ies string subscriber-interface string local-address-assignment ipv6 client-applications ipoe-slaac boolean
Tree	ipoe-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-wan *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	configure service ies string subscriber-interface string local-address-assignment ipv6 client-applications ipoe-wan boolean
Tree	ipoe-wan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-slaac *boolean*

Synopsis	Request local addresses for PPP SLAAC hosts
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6 client-applications ppp-slaac <i>boolean</i>
Tree	ppp-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis	Local DHCPv6 server that contains pools for local address assignment
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6 server <i>reference</i>
Tree	server
Reference	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the pppoe context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> pppoe
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> pppoe description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis Maximum PPPoE sessions
Context **configure service ies** *string* **subscriber-interface** *string* **pppoe session-limit** *number*
Tree [session-limit](#)
Range 1 to 333823
Default 1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-mode *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Mode of operation for hosts with /128 WAN IPv6 address
Context **configure service ies** *string* **subscriber-interface** *string* **wan-mode** *keyword*
Tree [wan-mode](#)
Default mode64
Options mode64, mode128
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis Enable the **wlan-gw** context
Context **configure service ies** *string* **subscriber-interface** *string* **wlan-gw**
Tree [wlan-gw](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-manager

Synopsis	Enter the pool-manager context
Context	configure service ies string subscriber-interface string wlan-gw pool-manager
Tree	pool-manager
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6-client

Synopsis	Enter the dhcp6-client context
Context	configure service ies string subscriber-interface string wlan-gw pool-manager dhcp6-client
Tree	dhcp6-client
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv4-nat

Synopsis	Enter the dhcpv4-nat context
Context	configure service ies string subscriber-interface string wlan-gw pool-manager dhcp6-client dhcpv4-nat
Tree	dhcpv4-nat
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	configure service ies string subscriber-interface string wlan-gw pool-manager dhcp6-client dhcpv4-nat admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	IPv6 address in the link address field of relay header
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client dhcpv4-nat link-address <i>string</i>
Tree	link-address
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client dhcpv4-nat pool-name <i>string</i>
Tree	pool-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ia-na

Synopsis	Enter the ia-na context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na
Tree	ia-na
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	IPv6 address in the link address field of relay header
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na link-address <i>string</i>
Tree	link-address
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na pool-name <i>string</i>
Tree	pool-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lease-query

Synopsis	Enable the lease-query context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client lease-query
Tree	lease-query
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-retries *number*

Synopsis	Maximum number of retries before the lease query assumes that no existing subnets were allocated
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Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client lease-query max-retries <i>number</i>
Tree	max-retries
Range	0 to 10
Default	2
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

servers *string*

Synopsis	DHCPv6 servers that are used for requesting addresses
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client servers <i>string</i>
Tree	servers
Max. Instances	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac

Synopsis	Enter the slaac context
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client slaac
Tree	slaac
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client slaac admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis IPv6 address in the link address field of relay header

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **wlan-gw** **pool-manager** **dhcp6-client** **slaac** **link-address** *string*

Tree [link-address](#)

Default ::

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis Pool name to be sent in the DHCPv6 messages

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **wlan-gw** **pool-manager** **dhcp6-client** **slaac** **pool-name** *string*

Tree [pool-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-ip (*keyword* | *ipv6-address*)

Synopsis Source IP address that is used by the DHCPv6 client

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **wlan-gw** **pool-manager** **dhcp6-client** **source-ip** (*keyword* | *ipv6-address*)

Tree [source-ip](#)

Default use-interface-ip

Options use-interface-ip

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis Enter the **watermarks** context

Context	configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager</i> <i>watermarks</i>
Tree	<i>watermarks</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	New prefix that is used when the ISA level reaches high watermark
Context	configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager</i> <i>watermarks high number</i>
Tree	<i>high</i>
Range	51 to 99
Default	95
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Prefix that is released if the usage level without this prefix is below the low watermark
Context	configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager</i> <i>watermarks low number</i>
Tree	<i>low</i>
Range	50 to 98
Default	90
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

Synopsis	Identifier of the WLAN Gateway ISA group on which the prefixes are installed
Context	configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager</i> <i>wlan-gw-group reference</i>
Tree	<i>wlan-gw-group</i>
Reference	configure isa <i>wlan-gw-group number</i>
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis Enter the **redundancy** context
Context **configure service ies string subscriber-interface string wlan-gw redundancy**
Tree [redundancy](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of WLAN-GW redundancy
Context **configure service ies string subscriber-interface string wlan-gw redundancy admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Route to export to peer
Context **configure service ies string subscriber-interface string wlan-gw redundancy export string**
Tree [export](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Peer route to monitor
Context	configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw redundancy monitor <i>string</i>
Tree	monitor
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure service ies <i>string</i> subscriber-mgmt
Tree	subscriber-mgmt
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-id *number*

Synopsis	Shunt ID for a pair of resilient nodes
Context	configure service ies <i>string</i> subscriber-mgmt multi-chassis-shunt-id <i>number</i>
Tree	multi-chassis-shunt-id
Description	<p>This command configures the shunt ID that is used to shunt downstream traffic from a standby node to an active node. Because this ID identifies the traffic service on the standby node, the same ID must be configured per service on each node.</p> <p>This configuration is required for BNG CUPS inter-UPF resiliency shunting, but not for non-BNG CUPS shunting. However, when configured, it is also used for shunting non-BNG CUPS sessions in the same service.</p>
Range	1 to 8191
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up-resiliency

Synopsis	Enter the up-resiliency context
Context	configure service ies string subscriber-mgmt up-resiliency
Tree	up-resiliency
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group [[oper-group](#)] *reference*

Synopsis	Enter the monitor-oper-group list instance
Context	configure service ies string subscriber-mgmt up-resiliency monitor-oper-group reference

Tree [monitor-oper-group](#)

Description Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).

Note:

The following is only applicable for the **configure service vpls capture-sap** context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups.

Max. Instances	4
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[oper-group](#)] *reference*

Synopsis	Operational group name
Context	configure service ies string subscriber-mgmt up-resiliency monitor-oper-group reference

Tree [monitor-oper-group](#)

Reference **configure service oper-group string**

Notes This element is part of a list key.

Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

health-drop *number*

Synopsis	Number subtracted from the health value per failure
Context	configure service ies <i>string</i> subscriber-mgmt up-resiliency monitor-oper-group <i>reference</i> health-drop <i>number</i>
Tree	health-drop
Description	This command defines how the failure of an operational group member affects the health value. The base health value is 255; the value decreases with the defined number per member failure to a minimum of 0.
Range	1 to 255
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

video-interface [*interface-name*] *string*

Synopsis	Enter the video-interface list instance
Context	configure service ies <i>string</i> video-interface <i>string</i>
Tree	video-interface
Max. Instances	9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[interface-name] *string*

Synopsis	Video interface name
Context	configure service ies <i>string</i> video-interface <i>string</i>
Tree	video-interface
String Length	1 to 29
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

accounting-policy *reference*

Synopsis	Accounting Policy
Context	configure service ies <i>string</i> video-interface <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

address [[ip-address](#)] *string*

Synopsis	Add a list entry for address
Context	configure service ies <i>string</i> video-interface <i>string</i> address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[[ip-address](#)] *string*

Synopsis	IPv4 address for the video interface within the service
Context	configure service ies <i>string</i> video-interface <i>string</i> address <i>string</i>
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

adi



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enter the adi context
Context	configure service ies <i>string</i> video-interface <i>string</i> adi
Tree	adi

Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

scte30



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enter the scte30 context
Context	configure service ies string video-interface string adi scte30
Tree	scte30
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ad-server [[address](#)] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Add a list entry for ad-server
Context	configure service ies string video-interface string adi scte30 ad-server string
Tree	ad-server
Max. Instances	4
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[[address](#)] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Ad server address
Context	configure service ies string video-interface string adi scte30 ad-server string
Tree	ad-server
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-address



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enable the local-address context
Context	configure service ies string video-interface string adi scte30 local-address
Tree	local-address
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

control string



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Control
Context	configure service ies string video-interface string adi scte30 local-address control string
Tree	control
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

data *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Data
Context	configure service ies <i>string</i> video-interface <i>string</i> adi scte30 local-address data <i>string</i>
Tree	data
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the video interface
Context	configure service ies <i>string</i> video-interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

channel [[mcast-address](#)] *string* **source** *string*

Synopsis	Enter the channel list instance
Context	configure service ies <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i>
Tree	channel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[mcast-address] *string*

Synopsis	Multicast channel address
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Context	configure service ies string video-interface string channel string source string
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source string

Synopsis	Unicast source address
Context	configure service ies string video-interface string channel string source string
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

channel-name string

Synopsis	Channel name
Context	configure service ies string video-interface string channel string source string channel-name string
Tree	channel-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description string

Synopsis	Text description
Context	configure service ies string video-interface string channel string source string description string
Tree	description
String Length	1 to 80

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

scte35-action *keyword*

Synopsis	Enable downstream forwarding of SCTE 35 cue avails
Context	configure service ies <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> scte35-action <i>keyword</i>
Tree	scte35-action
Default	forward
Options	forward, drop
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

zone-channel [**zone-mcast-address**] *string* **zone-source** *string*

Synopsis	Enter the zone-channel list instance
Context	configure service ies <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i>
Tree	zone-channel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[zone-mcast-address] *string*

Synopsis	Multicast zone channel address
Context	configure service ies <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i>
Tree	zone-channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

zone-source *string*

Synopsis	Unicast source address
Context	configure service ies <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i>
Tree	zone-channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

adi-channel-name *string*

Synopsis	Zone channel name
Context	configure service ies <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i> adi-channel-name <i>string</i>
Tree	adi-channel-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cpu-protection *reference*

Synopsis	CPU protection policy
Context	configure service ies <i>string</i> video-interface <i>string</i> cpu-protection <i>reference</i>
Tree	cpu-protection
Reference	configure system security cpu-protection <i>policy</i> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure service ies <i>string</i> video-interface <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

multicast-service *number*

Synopsis	Associated multicast service ID
Context	configure service ies <i>string</i> video-interface <i>string</i> multicast-service <i>number</i>
Tree	multicast-service
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

output-format *keyword*

Synopsis	Output format
Context	configure service ies <i>string</i> video-interface <i>string</i> output-format <i>keyword</i>
Tree	output-format
Default	rtp-udp
Options	udp, rtp-udp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-client



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enable the rt-client context
Context	configure service ies <i>string</i> video-interface <i>string</i> rt-client
Tree	rt-client
Introduced	16.0.R2
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

src-address *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	IP address for the RET client on the video interface
Context	configure service ies <i>string</i> video-interface <i>string</i> rt-client src-address <i>string</i>
Tree	src-address
Notes	This element is mandatory.
Introduced	16.0.R2
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-sap

Synopsis	Enable the video-sap context
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap
Tree	video-sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

egress

Synopsis	Enter the egress context
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter

Synopsis	Enter the filter context
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap egress filter

Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap egress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos

Synopsis	Enter the qos context
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

policy-name reference

Synopsis	SAP egress QoS policy ID
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap egress qos policy-name reference
Tree	policy-name
Reference	configure qos sap-egress <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ingress

Synopsis	Enter the ingress context
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter

Synopsis	Enter the filter context
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos

Synopsis	Enter the qos context
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

policy-name *reference*

Synopsis	SAP ingress QoS policy ID
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap ingress qos policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group-id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Video group ID
Context	configure service ies <i>string</i> video-interface <i>string</i> video-sap video-group-id <i>reference</i>
Tree	video-group-id
Reference	configure isa video-group <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vpn-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	configure service ies <i>string</i> vpn-id <i>number</i>
Tree	vpn-id
Range	1 to 2147483647
Introduced	16.0.R1

Platforms All

ipfix

Synopsis Enter the **ipfix** context

Context **configure service ipfix**

Tree **ipfix**

Introduced 16.0.R1

Platforms All

export-policy [**name**] *string*

Synopsis Enter the **export-policy** list instance

Context **configure service ipfix export-policy string**

Tree **export-policy**

Introduced 16.0.R1

Platforms All

[name] *string*

Synopsis IPFIX policy name

Context **configure service ipfix export-policy string**

Tree **export-policy**

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

collector **router-instance** *string* **ip-address** *string*

Synopsis Enter the **collector** list instance

Context **configure service ipfix export-policy string collector router-instance string ip-address string**

Tree **collector**

Introduced 16.0.R1

Platforms All

router-instance *string*

Synopsis Router where the collector is reached

Context **configure** [service](#) [ipfix export-policy](#) *string* [collector](#) [router-instance](#) *string* [ip-address](#) *string*

Tree [collector](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

ip-address *string*

Synopsis IPv4 address of the external collector node

Context **configure** [service](#) [ipfix export-policy](#) *string* [collector](#) [router-instance](#) *string* [ip-address](#) *string*

Tree [collector](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the collector

Context **configure** [service](#) [ipfix export-policy](#) *string* [collector](#) [router-instance](#) *string* [ip-address](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum Transmission Unit
Context	configure service ipfix export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> mtu <i>number</i>
Tree	mtu
Range	512 to 9212
Default	1500
Units	octets
Introduced	16.0.R1
Platforms	All

refresh-timeout *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPFIX template refresh time
Context	configure service ipfix export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> refresh-timeout <i>number</i>
Tree	refresh-timeout
Range	240 to 86400
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	All

source-ip-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IP address used in communication towards the collector
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Context	configure service ipfix export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> source-ip-address <i>string</i>
Tree	source-ip-address
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service ipfix export-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

template-format *keyword*

Synopsis	Template format used by this IPFIX export policy
Context	configure service ipfix export-policy <i>string</i> template-format <i>keyword</i>
Tree	template-format
Default	format1
Options	format1, format2
Introduced	16.0.R1
Platforms	All

ipipe [*service-name*] *string*

Synopsis	Enter the ipipe list instance
Context	configure service ipipe <i>string</i>
Tree	ipipe
Introduced	20.10.R1
Platforms	All

[service-name] *string*

Synopsis	Administrative service name
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Context	configure service ipipe string
Tree	ipipe
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the service
Context	configure service ipipe string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

ce-address-discovery

Synopsis	Enable the ce-address-discovery context
Context	configure service ipipe string ce-address-discovery
Tree	ce-address-discovery
Introduced	20.10.R1
Platforms	All

customer reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	configure service ipipe string customer reference
Tree	customer
Reference	configure service customer string

Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service ipipe <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

endpoint [**name**] *string*

Synopsis	Enter the endpoint list instance
Context	configure service ipipe <i>string</i> endpoint <i>string</i>
Tree	endpoint
Max. Instances	2
Introduced	20.10.R1
Platforms	All

[**name**] *string*

Synopsis	Service endpoint name
Context	configure service ipipe <i>string</i> endpoint <i>string</i>
Tree	endpoint
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service ipipe <i>string</i> endpoint <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

hold-time-active *number*

Synopsis	Time to hold the active state before entering standby when a local MC-LAG SAP goes down
Context	configure service ipipe <i>string</i> endpoint <i>string</i> hold-time-active <i>number</i>
Tree	hold-time-active
Range	1 to 60
Units	deciseconds
Introduced	20.10.R1
Platforms	All

revert-time (*number* | *keyword*)

Synopsis	Time to wait before reverting back to the primary spoke-sdp defined on this service endpoint
Context	configure service ipipe <i>string</i> endpoint <i>string</i> revert-time (<i>number</i> <i>keyword</i>)
Tree	revert-time
Range	1 to 600
Default	immediate
Units	seconds
Options	never, immediate
Introduced	20.10.R1
Platforms	All

standby-signaling *keyword*

Synopsis	Endpoint behavior for status of sending PW standby bit
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Context	configure service ipipe <i>string endpoint string standby-signaling keyword</i>
Tree	standby-signaling
Options	master
Introduced	20.10.R1
Platforms	All

sap [[sap-id](#)] *string*

Synopsis	Enter the sap list instance
Context	configure service ipipe <i>string sap string</i>
Tree	sap
Introduced	20.10.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
Context	configure service ipipe <i>string sap string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure service ipipe <i>string sap string accounting-policy reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service ipipe <i>string</i> sap <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

app-profile *reference*

Synopsis	Application profile name
Context	configure service ipipe <i>string</i> sap <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis	SAP bandwidth
Context	configure service ipipe <i>string</i> sap <i>string</i> bandwidth <i>number</i>
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	20.10.R1
Platforms	All

ce-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the CE device
Context	configure service ipipe <i>string</i> sap <i>string</i> ce-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ce-address
Introduced	20.10.R1

Platforms All

collect-stats *boolean*

Synopsis Collect accounting statistics
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* **collect-stats** *boolean*
Tree [collect-stats](#)
Default false
Introduced 20.10.R1
Platforms All

cpu-protection

Synopsis Enter the **cpu-protection** context
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* **cpu-protection**
Tree [cpu-protection](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis Monitor MAC for CPU protection
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* **cpu-protection** **mac-monitoring**
Tree [mac-monitoring](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis CPM protection policy
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* **cpu-protection** **policy-id** *reference*
Tree [policy-id](#)
Reference **configure** [system](#) [security](#) [cpu-protection](#) **policy** *number*
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service ipipe <i>string</i> sap <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 160
Introduced	20.10.R1
Platforms	All

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	configure service ipipe <i>string</i> sap <i>string</i> dist-cpu-protection <i>reference</i>
Tree	dist-cpu-protection
Reference	configure system security dist-cpu-protection <i>policy</i> <i>string</i>
Introduced	20.10.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress
Tree	egress
Introduced	20.10.R1
Platforms	All

agg-rate

Synopsis	Enter the agg-rate context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress agg-rate
Tree	agg-rate
Introduced	20.10.R1
Platforms	All

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	configure service ipipe <i>string</i> sap <i>string</i> egress agg-rate adaptation-rule <i>keyword</i>
Tree	adaptation-rule
Default	closest
Options	max, min, closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	configure service ipipe <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	configure service ipipe <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	20.10.R1
Platforms	All

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	configure service ipipe <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i>

Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	20.10.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress filter
Tree	filter
Introduced	20.10.R1
Platforms	All

ip reference

Synopsis	MAC filter ID
Context	configure service ipipe <i>string</i> sap <i>string</i> egress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	20.10.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter identifier
Context	configure service ipipe <i>string</i> sap <i>string</i> egress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	20.10.R1
Platforms	All

qos

Synopsis	Enter the qos context
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Context	configure service ipipe <i>string sap string egress qos</i>
Tree	qos
Introduced	20.10.R1
Platforms	All

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service ipipe <i>string sap string egress qos policer-control-policy</i>
Tree	policer-control-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure service ipipe <i>string sap string egress qos policer-control-policy overrides</i>
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the root context
Context	configure service ipipe <i>string sap string egress qos policer-control-policy overrides root</i>
Tree	root
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number | keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service ipipe <i>string sap string egress qos policer-control-policy overrides root</i> max-rate (<i>number keyword</i>)
Tree	max-rate
Range	1 to 6400000000

Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [[priority-level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] number

Synopsis	Priority level
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (number | keyword)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name reference

Synopsis	Policer control policy name
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

qinq-mark-top-only boolean

Synopsis	Mark top Q-tags
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i>

Tree	qinq-mark-top-only
Default	false
Introduced	20.10.R1
Platforms	All

sap-egress

Synopsis	Enter the sap-egress context
Context	configure service ipipe string sap string egress qos sap-egress
Tree	sap-egress
Introduced	20.10.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service ipipe string sap string egress qos sap-egress overrides
Tree	overrides
Introduced	20.10.R1
Platforms	All

hs-secondary-shaper *string*

Synopsis	HS Secondary Shaper
Context	configure service ipipe string sap string egress qos sap-egress overrides hs-secondary-shaper string
Tree	hs-secondary-shaper
String Length	1 to 32
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [[group-id](#)] *reference*

Synopsis	Enter the hs-wrr-group list instance
Context	configure service ipipe string sap string egress qos sap-egress overrides hs-wrr-group reference

Tree	hs-wrr-group
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

[group-id] *reference*

Synopsis	HS WRR group identifier
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i>
Tree	hs-wrr-group
Reference	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override of the WRR group
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis	Percent rate override applied to the HS WRR group
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Scheduling rate override applied to the HS WRR group
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i>
Tree	policer
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] *reference*

Synopsis	Policer unique ID
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i>
Tree	policer
Reference	configure qos sap-egress <i>string</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis	CBS
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Context	configure service ipipe <i>string sap string egress qos sap-egress overrides policer</i> <i>reference cbs (number keyword)</i>
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number | keyword*)

Synopsis	MBS
Context	configure service ipipe <i>string sap string egress qos sap-egress overrides policer</i> <i>reference mbs (number keyword)</i>
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service ipipe <i>string sap string egress qos sap-egress overrides policer</i> <i>reference packet-byte-offset number</i>
Tree	packet-byte-offset
Range	-64 to 31
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service ipipe <i>string sap string egress qos sap-egress overrides policer</i> <i>reference percent-rate</i>

Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i>
Tree	queue
Introduced	20.10.R1
Platforms	All

[queue-id] *reference*

Synopsis	Policer unique ID
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i>
Tree	queue
Reference	configure qos sap-egress <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Introduced	20.10.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Introduced	20.10.R1

Platforms All

pir *keyword*

Synopsis Constraint used when deriving the operational PIR value

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [adaptation-rule](#) [pir](#) *keyword*

Tree [pir](#)

Options max, min, closest

Introduced 20.10.R1

Platforms All

avg-frame-overhead *decimal-number*

Synopsis Average packet-to-frame encapsulation overhead

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [avg-frame-overhead](#) *decimal-number*

Tree [avg-frame-overhead](#)

Range 0.00 to 100.00

Introduced 20.10.R1

Platforms All

burst-limit (*number* | *keyword*)

Synopsis Explicit shaping burst size for the queue

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [burst-limit](#) (*number* | *keyword*)

Tree [burst-limit](#)

Range 1 to 14000000

Units bytes

Options auto

Introduced 20.10.R1

Platforms All

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> drop-tail
Tree	drop-tail
Introduced	20.10.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> drop-tail low
Tree	low
Introduced	20.10.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100

Options	auto
Introduced	20.10.R1
Platforms	All

hs-class-weight *number*

Synopsis	Class weight override for the queue
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the hs-wred-queue context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> hs-wred-queue
Tree	hs-wred-queue
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy applied to the HSQ queue group queue
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> hs-wred-queue policy <i>reference</i>
Tree	policy
Reference	configure qos slope-policy <i>string</i>
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
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Context	configure service ipipe <i>string sap string egress qos sap-egress overrides queue reference</i> hs-wrr-weight <i>number</i>
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service ipipe <i>string sap string egress qos sap-egress overrides queue reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
Context	configure service ipipe <i>string sap string egress qos sap-egress overrides queue reference</i> monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure service ipipe <i>string sap string egress qos sap-egress overrides queue reference</i> monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.

When configured to **false**, fast queue polling is not enabled.

Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference parent
Tree	parent
Introduced	20.10.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00

Introduced 20.10.R1
Platforms All

rate

Synopsis Enter the **rate** context
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference **rate**
Tree [rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 20.10.R1
Platforms All

cir (*number* | *keyword*)

Synopsis CIR rate
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [rate](#) **cir** (*number* | *keyword*)
Tree [cir](#)
Range 0 to 6400000000
Units kilobps
Options max
Introduced 20.10.R1
Platforms All

pir (*number* | *keyword*)

Synopsis PIR rate
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [rate](#) **pir** (*number* | *keyword*)
Tree [pir](#)
Range 1 to 6400000000
Units kilobps
Options max
Introduced 20.10.R1
Platforms All

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>string</i>
Introduced	20.10.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	20.10.R1
Platforms	All

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>string</i>
Introduced	20.10.R1
Platforms	All

instance *number*

Synopsis	Instance of port queue group
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	20.10.R1

Platforms All

scheduler-policy

Synopsis Enter the **scheduler-policy** context
 Context **configure** service *ipipe string sap string egress qos scheduler-policy*
 Tree [scheduler-policy](#)
 Introduced 20.10.R1
 Platforms All

overrides

Synopsis Enter the **overrides** context
 Context **configure** service *ipipe string sap string egress qos scheduler-policy overrides*
 Tree [overrides](#)
 Introduced 20.10.R1
 Platforms All

scheduler [[scheduler-name](#)] *string*

Synopsis Enter the **scheduler** list instance
 Context **configure** service *ipipe string sap string egress qos scheduler-policy overrides scheduler string*
 Tree [scheduler](#)
 Introduced 20.10.R1
 Platforms All

[[scheduler-name](#)] *string*

Synopsis Scheduler name
 Context **configure** service *ipipe string sap string egress qos scheduler-policy overrides scheduler string*
 Tree [scheduler](#)
 Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can

be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> parent
Tree	parent
Introduced	20.10.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i>

Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate
Tree	rate
Introduced	20.10.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1

Platforms All

policy-name *reference*

Synopsis Scheduler policy name
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos](#) [scheduler-policy](#) *string*
Introduced 20.10.R1
Platforms All

endpoint *reference*

Synopsis Endpoint name
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [endpoint](#) *reference*
Tree [endpoint](#)
Reference **configure** [service](#) [ipipe](#) *string* [endpoint](#) *string*
Introduced 20.10.R1
Platforms All

ingress

Synopsis Enter the **ingress** context
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#)
Tree [ingress](#)
Introduced 20.10.R1
Platforms All

filter

Synopsis Enter the **filter** context
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [filter](#)
Tree [filter](#)
Introduced 20.10.R1

Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure** [service ipipe](#) *string* [sap](#) *string* [ingress filter ip](#) *reference*
Tree [ip](#)
Reference **configure** [filter ip-filter](#) *string*
Introduced 20.10.R1
Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [service ipipe](#) *string* [sap](#) *string* [ingress filter ipv6](#) *reference*
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter](#) *string*
Introduced 20.10.R1
Platforms All

qos

Synopsis Enter the **qos** context
Context **configure** [service ipipe](#) *string* [sap](#) *string* [ingress qos](#)
Tree [qos](#)
Introduced 20.10.R1
Platforms All

match-qinq-dot1p keyword

Synopsis Ingress match QinQ Dot1p
Context **configure** [service ipipe](#) *string* [sap](#) *string* [ingress qos match-qinq-dot1p](#) *keyword*
Tree [match-qinq-dot1p](#)
Options top, bottom
Introduced 20.10.R1

Platforms All

policer-control-policy

Synopsis Enter the **policer-control-policy** context
 Context **configure service ipipe string sap string ingress qos policer-control-policy**
 Tree [policer-control-policy](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis Enable the **overrides** context
 Context **configure service ipipe string sap string ingress qos policer-control-policy overrides**
 Tree [overrides](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis Enter the **root** context
 Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root**
 Tree [root](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit
 Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root max-rate** (*number* | *keyword*)
 Tree [max-rate](#)
 Range 1 to 6400000000
 Options max
 Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context

Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds**

Tree [priority-mbs-thresholds](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space

Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (*number* | *keyword*)**

Tree [min-thresh-separation](#)

Range 0 to 16777216

Units bytes

Options auto

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [*priority-level*] *number*

Synopsis Enter the **priority** list instance

Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number***

Tree [priority](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[*priority-level*] *number*

Synopsis Priority level

Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number***

Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

sap-ingress

Synopsis	Enter the sap-ingress context
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress
Tree	sap-ingress
Introduced	20.10.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service ipipe string sap string ingress qos sap-ingress fp-redirect-group
Tree	fp-redirect-group
Introduced	20.10.R1
Platforms	All

group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	configure service ipipe string sap string ingress qos sap-ingress fp-redirect-group group-name reference
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group string
Introduced	20.10.R1
Platforms	All

instance *number*

Synopsis	Queue group instance
Context	configure service ipipe string sap string ingress qos sap-ingress fp-redirect-group instance number
Tree	instance
Range	1 to 65535
Introduced	20.10.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service ipipe string sap string ingress qos sap-ingress overrides
Tree	overrides
Introduced	20.10.R1
Platforms	All

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i>
Tree	policer
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] *reference*

Synopsis	Policer unique ID
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i>
Tree	policer
Reference	configure qos sap-ingress <i>string</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	MBS
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Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference mbs</i> (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference packet-byte-offset</i> <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference percent-rate</i>
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference percent-rate cir</i> <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis PIR percent rate
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)
reference [percent-rate](#) [pir](#) *decimal-number*
Tree [pir](#)
Range 0.01 to 100.00
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis Enter the **rate** context
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)
reference [rate](#)
Tree [rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis CIR rate
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)
reference [rate](#) [cir](#) (*number* | *keyword*)
Tree [cir](#)
Range 0 to 6400000000
Units kilobps
Options max
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference
Tree	queue
Introduced	20.10.R1
Platforms	All

[[queue-id](#)] *reference*

Synopsis	Policer unique ID
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference

Tree	queue
Reference	configure qos sap-ingress string queue number
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service ipipe string sap string ingress qos sap-ingress overrides queue reference adaptation-rule
Tree	adaptation-rule
Introduced	20.10.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service ipipe string sap string ingress qos sap-ingress overrides queue reference adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	20.10.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service ipipe string sap string ingress qos sap-ingress overrides queue reference adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	20.10.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail
Tree	drop-tail
Introduced	20.10.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low
Tree	low
Introduced	20.10.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100

Options	auto
Introduced	20.10.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service ipipe string sap string ingress qos sap-ingress overrides queue reference parent
Tree	parent
Introduced	20.10.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	configure service ipipe string sap string ingress qos sap-ingress overrides queue reference parent cir-weight number
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	configure service ipipe string sap string ingress qos sap-ingress overrides queue reference parent weight number
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service ipipe string sap string ingress qos sap-ingress overrides queue reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1

Platforms All

cir *decimal-number*

Synopsis CIR percent rate
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)
reference [percent-rate](#) [cir](#) *decimal-number*
Tree [cir](#)
Range 0.00 to 100.00
Introduced 20.10.R1
Platforms All

pir *decimal-number*

Synopsis PIR percent rate
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)
reference [percent-rate](#) [pir](#) *decimal-number*
Tree [pir](#)
Range 0.01 to 100.00
Introduced 20.10.R1
Platforms All

rate

Synopsis Enter the **rate** context
Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)
reference [rate](#)
Tree [rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 20.10.R1
Platforms All

cir (*number* | *keyword*)

Synopsis CIR rate

Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	20.10.R1
Platforms	All

queuing-type *keyword*

Synopsis	Queuing type
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress queuing-type <i>keyword</i>
Tree	queuing-type

Options	shared, multipoint-shared
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	20.10.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	All

scheduler [[scheduler-name](#)] *string*

Synopsis	Enter the scheduler list instance
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Introduced	20.10.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler

Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service ipipe <i>string sap string ingress qos scheduler-policy overrides scheduler string parent</i>
Tree	parent
Introduced	20.10.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service ipipe <i>string sap string ingress qos scheduler-policy overrides scheduler string parent cir-weight number</i>
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate
Tree	rate
Introduced	20.10.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir

Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	All

lag

Synopsis	Enter the lag context
Context	configure service ipipe <i>string</i> sap <i>string</i> lag
Tree	lag
Introduced	20.10.R1
Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	configure service ipipe <i>string</i> sap <i>string</i> lag link-map-profile <i>number</i>
Tree	link-map-profile
Description	<p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p>
Range	1 to 64

Introduced 20.10.R1
Platforms All

per-link-hash

Synopsis Enter the **per-link-hash** context
Context **configure service ipipe string sap string lag per-link-hash**
Tree [per-link-hash](#)
Introduced 20.10.R1
Platforms All

class number

Synopsis Class used on LAG egress using weighted per-link-hash
Context **configure service ipipe string sap string lag per-link-hash class number**
Tree [class](#)
Range 1 to 3
Default 1
Introduced 20.10.R1
Platforms All

weight number

Synopsis Weight used on LAG egress using weighted per-link-hash
Context **configure service ipipe string sap string lag per-link-hash weight number**
Tree [weight](#)
Range 1 to 1024
Default 1
Introduced 20.10.R1
Platforms All

mac string

Synopsis MAC address of the Ipipe Ethernet SAP
Context **configure service ipipe string sap string mac string**

Tree	mac
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	All

mac-refresh *number*

Synopsis	MAC refresh interval
Context	configure service ipipe <i>string</i> sap <i>string</i> mac-refresh <i>number</i>
Tree	mac-refresh
Range	0 to 65535
Default	14400
Introduced	20.10.R1
Platforms	All

multi-service-site *reference*

Synopsis	Multi service site name
Context	configure service ipipe <i>string</i> sap <i>string</i> multi-service-site <i>reference</i>
Tree	multi-service-site
Reference	configure service customer <i>string</i> multi-service-site <i>string</i>
Introduced	20.10.R1
Platforms	All

transit-policy

Synopsis	Enable the transit-policy context
Context	configure service ipipe <i>string</i> sap <i>string</i> transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	configure <i>service ipipe string sap string transit-policy prefix reference</i>
Tree	<i>prefix</i>
Reference	configure <i>application-assurance group number partition number transit-prefix-policy number</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-broadcast-mac *boolean*

Synopsis	Allow broadcast MAC on SAP
Context	configure <i>service ipipe string sap string use-broadcast-mac boolean</i>
Tree	<i>use-broadcast-mac</i>
Default	false
Introduced	20.10.R1
Platforms	All

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure <i>service ipipe string service-id number</i>
Tree	<i>service-id</i>
Range	1 to 2147483647
Introduced	20.10.R1
Platforms	All

service-mtu *number*

Synopsis MTU size

Context **configure** *service ipipe string service-mtu number*

Tree *service-mtu*

Description This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type.

The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

Range 1 to 9194

Introduced 20.10.R1

Platforms All

spoke-sdp [*sdp-bind-id*] *string*

Synopsis Enter the **spoke-sdp** list instance

Context **configure** *service ipipe string spoke-sdp string*

Tree [spoke-sdp](#)
Introduced 20.10.R1
Platforms All

[sdp-bind-id] *string*

Synopsis SDP binding ID
Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string*
Tree [spoke-sdp](#)
String Length 3 to 16
Notes This element is part of a list key.
Introduced 20.10.R1
Platforms All

aarp

Synopsis Enable the **aarp** context
Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [aarp](#)
Tree [aarp](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis AARP instance ID
Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [aarp](#) *id reference*
Tree [id](#)
Reference **configure** [application-assurance](#) [aarp](#) *number*
Notes This element is mandatory.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Role of the spoke SDP referenced by the AARP
Context	configure service ipipe <i>string</i> spoke-sdp <i>string</i> aarp type <i>keyword</i>
Tree	type
Options	subscriber-side-shunt, network-side-shunt
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	configure service ipipe <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

app-profile *reference*

Synopsis	Application profile name for this SDP
Context	configure service ipipe <i>string</i> spoke-sdp <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth (*number* | *keyword*)

Synopsis	Bandwidth that is reserved for this SDP binding
----------	---

Context	configure service ipipe <i>string spoke-sdp string bandwidth</i> (<i>number keyword</i>)
Tree	bandwidth
Range	0 to 100000000
Default	0
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure service ipipe <i>string spoke-sdp string bfd</i>
Tree	bfd
Introduced	21.2.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service ipipe <i>string spoke-sdp string bfd bfd-liveness</i>
Tree	bfd-liveness
Introduced	21.2.R1
Platforms	All

encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	configure service ipipe <i>string spoke-sdp string bfd bfd-liveness encap keyword</i>
Tree	encap
Default	ipv4
Options	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	configure service ipipe <i>string spoke-sdp string bfd bfd-template reference</i>
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context.
Reference	configure bfd bfd-template <i>string</i>
Introduced	21.2.R1
Platforms	All

ce-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the CE device
Context	configure service ipipe <i>string spoke-sdp string ce-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ce-address
Introduced	20.10.R1
Platforms	All

control-word *boolean*

Synopsis	Use control word as part of packet encapsulation
Context	configure service ipipe <i>string spoke-sdp string control-word boolean</i>
Tree	control-word
Default	false
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service ipipe <i>string spoke-sdp string description string</i>
Tree	description

String Length 1 to 80

Introduced 20.10.R1

Platforms All

egress

Synopsis Enter the **egress** context

Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress](#)

Tree [egress](#)

Introduced 20.10.R1

Platforms All

filter

Synopsis Enter the **filter** context

Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [filter](#)

Tree [filter](#)

Introduced 20.10.R1

Platforms All

ip reference

Synopsis IPv4 filter policy name

Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [filter ip](#) *reference*

Tree [ip](#)

Reference **configure** [filter ip-filter](#) *string*

Introduced 20.10.R1

Platforms All

ipv6 reference

Synopsis IPv6 filter policy name

Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [filter ipv6](#) *reference*

Tree [ipv6](#)

Reference **configure** [filter ipv6-filter](#) *string*

Introduced 20.10.R1
Platforms All

qos

Synopsis Enter the **qos** context
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos](#)
Tree [qos](#)
Introduced 20.10.R1
Platforms All

network

Synopsis Enter the **network** context
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network](#)
Tree [network](#)
Introduced 20.10.R1
Platforms All

policy-name *reference*

Synopsis Network policy ID
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos network](#) *string*
Introduced 20.10.R1
Platforms All

port-redirect-group

Synopsis Enter the **port-redirect-group** context
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network port-redirect-group](#)
Tree [port-redirect-group](#)
Introduced 20.10.R1

Platforms All

group-name *reference*

Synopsis Name of the egress port queue group

Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network port-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos queue-group-templates](#) [egress queue-group](#) *string*

Introduced 20.10.R1

Platforms All

instance *number*

Synopsis Queue-group instance ID

Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network port-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 20.10.R1

Platforms All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Egress MPLS VC label to send packets to the far end

Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [vc-label](#) *number*

Tree [vc-label](#)

Range 16 to 1048575

Introduced 20.10.R1

Platforms All

endpoint

Synopsis	Enter the endpoint context
Context	configure service ipipe string spoke-sdp string endpoint
Tree	endpoint
Introduced	20.10.R1
Platforms	All

name *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Endpoint name to which SDP bind is attached
Context	configure service ipipe string spoke-sdp string endpoint name reference
Tree	name
Reference	configure service ipipe string endpoint string
Introduced	20.10.R1
Platforms	All

precedence (*number* | *keyword*)

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	configure service ipipe string spoke-sdp string endpoint precedence (<i>number</i> <i>keyword</i>)
Tree	precedence
Range	1 to 4
Default	4
Options	primary
Introduced	20.10.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	configure service ipipe string spoke-sdp string entropy-label

Tree	entropy-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	20.10.R1
Platforms	All

hash-label

Synopsis	Enable the hash-label context
Context	configure service ipipe <i>string</i> spoke-sdp <i>string</i> hash-label
Tree	hash-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	20.10.R1
Platforms	All

signal-capability

Synopsis	Enable the signaling of the hash label between PE nodes
Context	configure service ipipe <i>string</i> spoke-sdp <i>string</i> hash-label signal-capability
Tree	signal-capability
Introduced	20.10.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure service ipipe <i>string</i> spoke-sdp <i>string</i> ingress
Tree	ingress
Introduced	20.10.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service ipipe <i>string</i> spoke-sdp <i>string</i> ingress filter
Tree	filter

Introduced 20.10.R1
Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [ingress filter ip](#) *reference*
Tree [ip](#)
Reference **configure** [filter ip-filter](#) *string*
Introduced 20.10.R1
Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [ingress filter ipv6](#) *reference*
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter](#) *string*
Introduced 20.10.R1
Platforms All

qos

Synopsis Enter the **qos** context
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [ingress qos](#)
Tree [qos](#)
Introduced 20.10.R1
Platforms All

network

Synopsis Enter the **network** context
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [ingress qos network](#)
Tree [network](#)
Introduced 20.10.R1

Platforms All

fp-redirect-group

Synopsis Enter the **fp-redirect-group** context
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [ingress qos network fp-redirect-group](#)
Tree [fp-redirect-group](#)
Introduced 20.10.R1
Platforms All

group-name *reference*

Synopsis Name of the forwarding plane queue group template
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [ingress qos network fp-redirect-group](#)
[group-name](#) *reference*
Tree [group-name](#)
Reference **configure** [qos queue-group-templates](#) [ingress queue-group](#) *string*
Introduced 20.10.R1
Platforms All

instance *number*

Synopsis Instance of the forwarding-plane ingress Queue Group for this SDP binding
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [ingress qos network fp-redirect-group](#)
[instance](#) *number*
Tree [instance](#)
Range 1 to 65535
Introduced 20.10.R1
Platforms All

policy-name *reference*

Synopsis Network policy ID
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [ingress qos network policy-name](#)
reference
Tree [policy-name](#)

Reference	configure qos network string
Introduced	20.10.R1
Platforms	All

vc-label number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure service ipipe string spoke-sdp string ingress vc-label number
Tree	vc-label
Range	1 to 1048575
Introduced	20.10.R1
Platforms	All

transit-policy

Synopsis	Enable the transit-policy context
Context	configure service ipipe string spoke-sdp string transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	configure service ipipe string spoke-sdp string transit-policy prefix reference
Tree	prefix
Reference	configure application-assurance group number partition number transit-prefix-policy number
Notes	This element is mandatory.

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-switching *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Use PW switching signaling for spoke SDPs in service
Context **configure** *service ipipe string vc-switching boolean*
Tree [vc-switching](#)
Default false
Introduced 20.10.R1
Platforms All

vpn-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPN identifier for the service
Context **configure** *service ipipe string vpn-id number*
Tree [vpn-id](#)
Range 1 to 2147483647
Introduced 20.10.R1
Platforms All

mac-list [*name*] *string*

Synopsis Enter the **mac-list** list instance
Context **configure** *service mac-list string*
Tree [mac-list](#)
Description Commands in this context specify the MAC addresses to be included in a MAC list to be used with the Auto-Learn MAC Protect (ALMP) functionality. The list is used to exclude certain MAC addresses from protection, for example, on SAPs or spoke SDPs

configured with ALMP where certain MAC addresses (such as VRRP virtual MAC addresses) must be able to move to other objects.

Introduced 20.5.R1
Platforms All

[name] *string*

Synopsis MAC list name
Context **configure service mac-list** *string*
Tree [mac-list](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 20.5.R1
Platforms All

description *string*

Synopsis Text description
Context **configure service mac-list** *string description* *string*
Tree [description](#)
String Length 1 to 80
Introduced 20.5.R1
Platforms All

mac [[address](#)] *string*

Synopsis Enter the **mac** list instance
Context **configure service mac-list** *string mac* *string*
Tree [mac](#)
Introduced 20.5.R1
Platforms All

[address] *string*

Synopsis MAC address

Context	configure service mac-list string mac string
Tree	mac
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

mask string

Synopsis	Mask for the MAC address
Context	configure service mac-list string mac string mask string
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	20.5.R1
Platforms	All

md-auto-id

Synopsis	Enter the md-auto-id context
Context	configure service md-auto-id
Tree	md-auto-id
Introduced	16.0.R1
Platforms	All

customer-id-range

Synopsis	Enable the customer-id-range context
Context	configure service md-auto-id customer-id-range
Tree	customer-id-range
Introduced	16.0.R1
Platforms	All

end number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
Context	configure service md-auto-id customer-id-range end number
Tree	end
Range	2 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	configure service md-auto-id customer-id-range start number
Tree	start
Range	2 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pw-template-id-range

Synopsis	Enable the pw-template-id-range context
Context	configure service md-auto-id pw-template-id-range
Tree	pw-template-id-range
Introduced	16.0.R1
Platforms	All

end number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the PW template ID range
Context	configure service md-auto-id pw-template-id-range <i>end number</i>
Tree	end
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the PW template ID range
Context	configure service md-auto-id pw-template-id-range <i>start number</i>
Tree	start
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

service-id-range

Synopsis	Enable the service-id-range context
Context	configure service md-auto-id service-id-range
Tree	service-id-range
Introduced	16.0.R1
Platforms	All

end number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the service ID range
Context	configure service md-auto-id service-id-range end number
Tree	end
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the service ID range
Context	configure service md-auto-id service-id-range start number
Tree	start
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mrp

Synopsis	Enter the mrp context
Context	configure service mrp
Tree	mrp
Introduced	20.10.R1
Platforms	All

policy [*policy-name*] *string*

Synopsis	Enter the policy list instance
Context	configure service mrp policy string
Tree	policy
Introduced	20.10.R1
Platforms	All

[policy-name] *string*

Synopsis	Specify the policy name associated with the MRP
Context	configure service mrp policy string
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

default-action *keyword*

Synopsis	Action for packets not matching any MRP policy entries
Context	configure service mrp policy string default-action keyword
Tree	default-action
Default	allow
Options	block, allow
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service mrp policy string description string
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure service mrp policy <i>string</i> entry <i>number</i>
Tree	entry
Introduced	20.10.R1
Platforms	All

[entry-id] *number*

Synopsis	Specify an id for the MRP policy entry
Context	configure service mrp policy <i>string</i> entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

action *keyword*

Synopsis	Action applied for matching packets
Context	configure service mrp policy <i>string</i> entry <i>number</i> action <i>keyword</i>
Tree	action
Options	block, allow, end-station
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service mrp policy <i>string</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure service mrp policy string entry number match
Tree	match
Introduced	20.10.R1
Platforms	All

isid [**value**] *number*

Synopsis	Enter the isid list instance
Context	configure service mrp policy string entry number match isid number
Tree	isid
Introduced	20.10.R1
Platforms	All

[**value**] *number*

Synopsis	Lowest service instance ID to match the entry
Context	configure service mrp policy string entry number match isid number
Tree	isid
Range	0 to 16777215
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

higher-value *number*

Synopsis	Highest service instance ID to match the entry
Context	configure service mrp policy string entry number match isid number higher-value number
Tree	higher-value
Range	0 to 16777215
Introduced	20.10.R1
Platforms	All

scope *keyword*

Synopsis	Specify the scope of the mrp-policy definition
Context	configure service mrp policy <i>string</i> scope <i>keyword</i>
Tree	scope
Default	template
Options	exclusive, template
Introduced	20.10.R1
Platforms	All

nat

Synopsis	Enter the nat context
Context	configure service nat
Tree	nat
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

classifier [*name*] *string*

Synopsis	Enter the classifier list instance
Context	configure service nat classifier <i>string</i>
Tree	classifier
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	NAT classifier name
Context	configure service nat classifier <i>string</i>
Tree	classifier
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default

Synopsis Enter the **default** context
Context **configure service nat classifier string default**
Tree **default**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis Enter the **action** context
Context **configure service nat classifier string default action**
Tree **action**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-nat

Synopsis Enable the **destination-nat** context
Context **configure service nat classifier string default action destination-nat**
Tree **destination-nat**
Notes The following elements are part of a choice: (**destination-nat**, **dnat**, and **dnat-ip-address**) or **forward**.
Introduced 21.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis Substitute destination IP address of matching packets
Context **configure service nat classifier string default action destination-nat ip-address string**
Tree **ip-address**
Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forward



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Forward mode of operation
Context **configure service nat classifier** *string* default action forward
Tree forward
Notes The following elements are part of a choice: (**destination-nat**, **dnat**, and **dnat-ip-address**) or **forward**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-ip-address *string*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Default destination IP address for matching entries with dNAT action
Context **configure service nat classifier** *string* default dnat-ip-address *string*
Tree dnat-ip-address
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure service nat classifier** *string* description *string*
Tree description
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the entry list instance
Context	configure service nat classifier <i>string entry number</i>
Tree	entry
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	Classifier rule entry ID
Context	configure service nat classifier <i>string entry number</i>
Tree	entry
Range	1 to 1000
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the action context
Context	configure service nat classifier <i>string entry number action</i>
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-nat

Synopsis	Enable the destination-nat context
Context	configure service nat classifier <i>string entry number action destination-nat</i>
Tree	destination-nat
Notes	The following elements are part of a choice: (destination-nat , dnat , and dnat-ip-address) or forward .
Introduced	21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis Replacement destination IP address for packets
Context **configure service nat classifier** *string* *entry number* **action destination-nat ip-address** *string*
Tree [ip-address](#)
Introduced 21.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forward



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Forward mode of operation
Context **configure service nat classifier** *string* *entry number* **action forward**
Tree [forward](#)
Notes The following elements are part of a choice: (**destination-nat**, **dnat**, and **dnat-ip-address**) or **forward**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure service nat classifier** *string* *entry number* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis Enter the **match** context

Context	configure service nat classifier <i>string entry number match</i>
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port-range

Synopsis	Enter the dst-port-range context
Context	configure service nat classifier <i>string entry number match dst-port-range</i>
Tree	dst-port-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Upper bound of the port range
Context	configure service nat classifier <i>string entry number match dst-port-range end number</i>
Tree	end
Range	0 1 to 65535
Default	65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Lower bound of the port range
Context	configure service nat classifier <i>string entry number match dst-port-range start number</i>
Tree	start
Range	0 1 to 65535
Default	0

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

foreign-ip-address *string*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Foreign IP address as the match criterion
Context **configure** [service nat classifier](#) *string* [entry number match foreign-ip-address](#) *string*
Tree [foreign-ip-address](#)
Introduced 19.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis IP protocol to match
Context **configure** [service nat classifier](#) *string* [entry number match protocol](#) *keyword*
Tree [protocol](#)
Default udp
Options tcp, udp
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic-script

Synopsis Enter the **deterministic-script** context
Context **configure** [service nat deterministic-script](#)
Tree [deterministic-script](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

location string

Synopsis	Remote location where Python script is exported
Context	configure service nat deterministic-script location string
Tree	location
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

firewall-policy [name] string

Synopsis	Enter the firewall-policy list instance
Context	configure service nat firewall-policy string
Tree	firewall-policy
Description	Commands in this context configure the attributes of the firewall policy, for use in contexts where basic protection from outside attack vectors is required. Firewall policies cannot be deleted if they are in use.
Max. Instances	2048
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	Firewall policy name
Context	configure service nat firewall-policy string
Tree	firewall-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

alg

Synopsis	Enter the alg context
Context	configure service nat firewall-policy string alg

Tree	alg
Description	Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ftp boolean

Synopsis	Use FTP ALG for the policy
Context	configure service nat firewall-policy string alg ftp boolean
Tree	ftp
Default	true
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtsp boolean

Synopsis	Use RTSP ALG for the policy
Context	configure service nat firewall-policy string alg rtsp boolean
Tree	rtsp
Description	When configured to true , Real-Time Streaming Protocol (RTSP) ALG is used for the policy.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip boolean

Synopsis	Use SIP ALG for the policy
Context	configure service nat firewall-policy string alg sip boolean
Tree	sip
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service nat firewall-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

domain

Synopsis	Enter the domain context
Context	configure service nat firewall-policy <i>string</i> domain
Tree	domain
Description	Commands in this context configure the attributes of the domain for the firewall policy. All associated traffic must be part of the prefixes specified by this domain.
Notes	The following elements are part of a choice: domain or I2-outside .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Firewall domain name
Context	configure service nat firewall-policy <i>string</i> domain name <i>string</i>
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router or VPRN service name
Context	configure service nat firewall-policy <i>string</i> domain router-instance <i>string</i>
Tree	router-instance
Description	This command specifies the router instance or VPRN service for this domain. All associated traffic must be part of the prefixes specified by this domain.

Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filtering *keyword*

Synopsis Filtering method for inbound traffic for the policy
Context **configure service nat firewall-policy string filtering keyword**
Tree [filtering](#)
Default endpoint-independent
Options endpoint-independent, address-and-port-dependent
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2-outside

Synopsis Use Layer 2 outside service address location
Context **configure service nat firewall-policy string I2-outside**
Tree [I2-outside](#)
Description This command specifies Layer 2 outside service address location for the NAT policy instead of Layer 3 outside service.
Notes The following elements are part of a choice: **domain** or **I2-outside**.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-limits

Synopsis Enter the **port-limits** context
Context **configure service nat firewall-policy string port-limits**
Tree [port-limits](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forwarding *number*

Synopsis Maximum number of port forwarding entries

Context	configure service nat firewall-policy <i>string</i> port-limits forwarding <i>number</i>
Tree	forwarding
Range	1 to 64
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-sessions

Synopsis	Enter the priority-sessions context
Context	configure service nat firewall-policy <i>string</i> priority-sessions
Tree	priority-sessions
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

fc

Synopsis	Enter the fc context
Context	configure service nat firewall-policy <i>string</i> priority-sessions fc
Tree	fc
Description	Commands in this context specify which Forwarding Class (FC) options have prioritized sessions.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

af boolean

Synopsis	Prioritize traffic from AF forwarding classes
Context	configure service nat firewall-policy <i>string</i> priority-sessions fc af <i>boolean</i>
Tree	af
Description	When configured to true , traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to false , AF traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

be *boolean*

Synopsis	Prioritize traffic from BE forwarding classes
Context	configure service nat firewall-policy <i>string</i> priority-sessions fc be <i>boolean</i>
Tree	be
Description	When configured to true , traffic from Best Effort (BE) FC sessions is prioritized. When configured to false , BE traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ef *boolean*

Synopsis	Prioritize traffic from EF forwarding classes
Context	configure service nat firewall-policy <i>string</i> priority-sessions fc ef <i>boolean</i>
Tree	ef
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

h1 *boolean*

Synopsis	Prioritize traffic from H1 forwarding classes
Context	configure service nat firewall-policy <i>string</i> priority-sessions fc h1 <i>boolean</i>
Tree	h1
Description	When configured to true , traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

h2 *boolean*

Synopsis	Prioritize traffic from H2 forwarding classes
Context	configure service nat firewall-policy <i>string</i> priority-sessions fc h2 <i>boolean</i>
Tree	h2

Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

I1 *boolean*

Synopsis	Prioritize traffic from L1 forwarding classes
Context	configure service nat firewall-policy string priority-sessions fc I1 boolean
Tree	I1
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2 *boolean*

Synopsis	Prioritize traffic from L2 forwarding classes
Context	configure service nat firewall-policy string priority-sessions fc I2 boolean
Tree	I2
Description	When configured to true , traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nc *boolean*

Synopsis	Prioritize traffic from NC forwarding classes
Context	configure service nat firewall-policy string priority-sessions fc nc boolean
Tree	nc
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the session-limits context
Context	configure service nat firewall-policy string session-limits
Tree	session-limits
Description	Commands in this context configure session-limit attributes for the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis	Maximum number of sessions per subscriber
Context	configure service nat firewall-policy string session-limits max number
Tree	max
Range	1 to 65535
Default	65535
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved number

Synopsis	Number of sessions reserved for prioritized sessions
Context	configure service nat firewall-policy string session-limits reserved number
Tree	reserved
Description	This command configures the number of sessions per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure service nat firewall-policy string session-limits watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis High watermark percentage
Context **configure service nat firewall-policy string session-limits watermarks high number**
Tree [high](#)
Description This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range 0 to 100
Units percent
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis Low watermark percentage
Context **configure service nat firewall-policy string session-limits watermarks low number**
Tree [low](#)
Description This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range 0 to 100
Units percent
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis Enter the **tcp** context
Context **configure service nat firewall-policy string tcp**
Tree [tcp](#)

Description	Commands in this context configure the transmission control protocol (TCP) attributes of the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mss-adjust *number*

Synopsis	TCP MSS adjustment value
Context	configure service nat firewall-policy <i>string tcp mss-adjust</i> <i>number</i>
Tree	mss-adjust
Description	This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher.
Range	160 to 10240
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeouts

Synopsis	Enter the timeouts context
Context	configure service nat firewall-policy <i>string timeouts</i>
Tree	timeouts
Description	Commands in this context configure the attributes of session idle timeouts for the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6-query *number*

Synopsis	Timeout applied to an ICMPv6 Query session
Context	configure service nat firewall-policy <i>string timeouts icmp6-query</i> <i>number</i>
Tree	icmp6-query
Range	60 to 240
Default	60
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip number

Synopsis	SIP inactive media timeout
Context	configure service nat firewall-policy string timeouts sip number
Tree	sip
Range	10 to 7200
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the tcp context
Context	configure service nat firewall-policy string timeouts tcp
Tree	tcp
Description	Commands in this context configure TCP timeout attributes.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

established number

Synopsis	Idle timeout for TCP session in established state
Context	configure service nat firewall-policy string timeouts tcp established number
Tree	established
Range	60 to 86400
Default	7440
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

rst number

Synopsis	Suspend time for TCP connection ports closed by RST
Context	configure service nat firewall-policy string timeouts tcp rst number

Tree	rst
Description	This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations.
Range	0 to 240
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

syn number

Synopsis	TCP session timeout when synchronizing initial sequence
Context	configure service nat firewall-policy <i>string</i> timeouts tcp syn number
Tree	syn
Range	6 to 86400
Default	15
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-wait number

Synopsis	Timeout applied to a TCP session in the time-wait state
Context	configure service nat firewall-policy <i>string</i> timeouts tcp time-wait number
Tree	time-wait
Range	0 to 240
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

transitory number

Synopsis	Idle timeout for TCP session in transitory state
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Context	configure service nat firewall-policy string timeouts tcp transitory number
Tree	transitory
Range	60 to 86400
Default	240
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	configure service nat firewall-policy string timeouts udp
Tree	udp
Description	Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns number

Synopsis	Timeout applied to UDP session with destination port 53
Context	configure service nat firewall-policy string timeouts udp dns number
Tree	dns
Range	15 to 86400
Default	15
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	UDP mapping timeout applied to new sessions
Context	configure service nat firewall-policy string timeouts udp initial number
Tree	initial
Range	10 to 300

Default	15
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

normal *number*

Synopsis	UDP mapping timeout
Context	configure service nat firewall-policy <i>string</i> timeouts udp normal <i>number</i>
Tree	normal
Range	60 to 86400
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

unknown-protocol *number*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Timeout for flows with an unknown protocol
Context	configure service nat firewall-policy <i>string</i> timeouts unknown-protocol <i>number</i>
Tree	unknown-protocol
Range	60 to 86400
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	configure service nat firewall-policy <i>string</i> udp
Tree	udp

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

inbound-refresh *boolean*

Synopsis	Extend UDP session timeout on inbound traffic
Context	configure service nat firewall-policy <i>string</i> udp inbound-refresh <i>boolean</i>
Tree	inbound-refresh
Description	When configured to true , this command extends the UDP session timeout on inbound traffic. When configured to false , the UDP session timeout is not extended.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

unknown-protocols

Synopsis	Enter the unknown-protocols context
Context	configure service nat firewall-policy <i>string</i> unknown-protocols
Tree	unknown-protocols
Description	Commands in this context configure the treatment of flows of unknown Layer 4 protocols that cannot be natively handled by the system.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Allow all protocols to create unknown flows
Context	configure service nat firewall-policy <i>string</i> unknown-protocols all
Tree	all
Description	This command specifies that all protocols are permitted to create unknown flows. Protocol or IPv6 extension header values that are explicitly supported by SR OS will not be treated as unknown protocols.
Notes	The following elements are part of a choice: all or protocol .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol *number*

Synopsis	IANA number of protocol allowed to create unknown flow
Context	configure service nat firewall-policy <i>string</i> unknown-protocols protocol <i>number</i>
Tree	protocol
Description	This command specifies the Internet Assigned Numbers Authority (IANA) number of a protocol that is permitted to create unknown flows. Protocol or IPv6 extension header values that are explicitly supported by SR OS can be configured but will not be treated as unknown protocols.
Range	0 to 255
Max. Instances	8
Notes	The following elements are part of a choice: all or protocol .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

map-t

Synopsis	Enter the map-t context
Context	configure service nat map-t
Tree	map-t
Introduced	16.0.R4
Platforms	VSR

domain [[name](#)] *string*

Synopsis	Enter the domain list instance
Context	configure service nat map-t domain <i>string</i>
Tree	domain
Max. Instances	63
Introduced	16.0.R4
Platforms	VSR

[name] *string*

Synopsis	MAP domain name
Context	configure service nat map-t domain <i>string</i>
Tree	domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of the MAP domain
Context	configure service nat map-t domain <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	VSR

description *string*

Synopsis	Text description
Context	configure service nat map-t domain <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	VSR

dmr-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The Default Mapping Rule prefix
Context	configure service nat map-t domain <i>string</i> dmr-prefix <i>string</i>

Tree [dmr-prefix](#)
Introduced 16.0.R4
Platforms VSR

ip-fragmentation

Synopsis Enter the **ip-fragmentation** context
Context **configure** [service nat map-t domain string ip-fragmentation](#)
Tree [ip-fragmentation](#)
Introduced 16.0.R4
Platforms VSR

v6-frag-header *boolean*

Synopsis Enable insertion of fragmentation header in IPv6 packet
Context **configure** [service nat map-t domain string ip-fragmentation v6-frag-header boolean](#)
Tree [v6-frag-header](#)
Default false
Introduced 16.0.R4
Platforms VSR

mapping-rule [[rule-name](#)] *string*

Synopsis Enter the **mapping-rule** list instance
Context **configure** [service nat map-t domain string mapping-rule string](#)
Tree [mapping-rule](#)
Max. Instances 16383
Introduced 16.0.R4
Platforms VSR

[[rule-name](#)] *string*

Synopsis The name that identifies this mapping rule
Context **configure** [service nat map-t domain string mapping-rule string](#)
Tree [mapping-rule](#)

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of the MAP rule
Context	configure service nat map-t domain <i>string mapping-rule string admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	VSR

description *string*

Synopsis	Text description
Context	configure service nat map-t domain <i>string mapping-rule string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	VSR

ea-length *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The length of the EA bits field in the End-user IPv6 prefix part of the IPv6 Map Address
Context	configure service nat map-t domain <i>string mapping-rule string ea-length number</i>
Tree	ea-length
Range	0 to 48
Default	0
Introduced	16.0.R4

Platforms VSR

ipv4-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis The IPv4 prefix
Context **configure** [service nat map-t domain string mapping-rule string ipv4-prefix string](#)
Tree [ipv4-prefix](#)
Introduced 16.0.R4
Platforms VSR

psid-offset *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis The offset of the Port Set ID (PSID) within a 16 bits wide port space
Context **configure** [service nat map-t domain string mapping-rule string psid-offset number](#)
Tree [psid-offset](#)
Range 0 to 16
Default 6
Introduced 16.0.R4
Platforms VSR

rule-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis The IPv6 prefix
Context **configure** [service nat map-t domain string mapping-rule string rule-prefix string](#)
Tree [rule-prefix](#)
Introduced 16.0.R4

Platforms VSR

mtu number

Synopsis Configure the MTU
Context **configure service nat map-t domain string mtu number**
Tree [mtu](#)
Range 160 to 8686
Default 8686
Introduced 16.0.R4
Platforms VSR

tcp-mss-adjust number

Synopsis The value to adjust the TCP Maximum Segment Size (MSS) option
Context **configure service nat map-t domain string tcp-mss-adjust number**
Tree [tcp-mss-adjust](#)
Range 0 | 160 to 8626
Default 0
Introduced 16.0.R4
Platforms VSR

nat-policy [name] string

Synopsis Enter the **nat-policy** list instance
Context **configure service nat nat-policy string**
Tree [nat-policy](#)
Max. Instances 4096
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis NAT policy name
Context **configure service nat nat-policy string**

Tree	nat-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

alg

Synopsis	Enter the alg context
Context	configure service nat nat-policy string alg
Tree	alg
Description	Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ftp *boolean*

Synopsis	Use FTP ALG for the policy
Context	configure service nat nat-policy string alg ftp boolean
Tree	ftp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pptp *boolean*

Synopsis	Use PPTP ALG for the policy
Context	configure service nat nat-policy string alg pptp boolean
Tree	pptp
Description	When configured to true , the policy uses Point-to-Point Tunneling Protocol (PPTP) ALG. PPTP sessions can only be initiated from NAT inside. GRE traffic is allowed through NAT only if the corresponding mapping exists. There can be seven calls (GRE tunnels) per control session.

When configured to **false**, PPTP ALG is not used.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtsp boolean

Synopsis	Use RTSP ALG for the policy
Context	configure service nat nat-policy string alg rtsp boolean
Tree	rtsp
Description	When configured to true , Real-Time Streaming Protocol (RTSP) ALG is used for the policy.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip boolean

Synopsis	Use SIP ALG for the policy
Context	configure service nat nat-policy string alg sip boolean
Tree	sip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-limit number

Synopsis	Maximum number of port blocks per subscriber
Context	configure service nat nat-policy string block-limit number
Tree	block-limit
Range	1 to 40
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service nat nat-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat

Synopsis	Enter the dnat context
Context	configure service nat nat-policy <i>string</i> dnat
Tree	dnat
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

classifier *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT classifier
Context	configure service nat nat-policy <i>string</i> dnat classifier <i>reference</i>
Tree	classifier
Description	When configured within the NAT policy, this command references a NAT classifier that activates DNAT functionality. The configuration uses a filter-like approach to identify the traffic that is subjected to DNAT. It is required for translation of the destination IP address.
Reference	configure service nat classifier <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis	Enable the dnat-only context
Context	configure service nat nat-policy <i>string</i> dnat-only

Tree	dnat-only
Description	Commands in this context configure the attributes of DNAT-only. When DNAT-only is configured, no source or port NAT (SNAPT) is performed. Only the destination IP address (going from inside to outside) is translated; the source IP address and port are not translated.
Notes	The following elements are part of a choice: dnat-only , l2-outside , or pool .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group
Context	configure service nat nat-policy string dnat-only nat-group reference
Tree	nat-group
Description	This command configures the NAT group in which DNAT translation takes place for the outside routing context.
Reference	configure isa nat-group number
Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Router name or VPRN service name
Context	configure service nat nat-policy string dnat-only router-instance string
Tree	router-instance
Notes	This element is mandatory.

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN GW group used for NAT
Context	configure service nat nat-policy string dnats-only wlan-gw-group reference
Tree	wlan-gw-group
Description	This command configures the NAT WLAN Gateway (GW) group in which DNAT translation takes place for the outside routing context.
Reference	configure isa wlan-gw-group number
Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

filtering *keyword*

Synopsis	Filtering method for inbound traffic for the policy
Context	configure service nat nat-policy string filtering keyword
Tree	filtering
Default	endpoint-independent
Options	endpoint-independent, address-and-port-dependent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-log-policy

Synopsis	Enter the flow-log-policy context
Context	configure service nat nat-policy string flow-log-policy

Tree	flow-log-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipfix *reference*

Synopsis	IPFIX export policy
Context	configure service nat nat-policy <i>string</i> flow-log-policy ipfix <i>reference</i>
Tree	ipfix
Description	This command specifies an IP flow information export policy for the flow-log policy.
Reference	configure service ipfix export-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syslog *reference*

Synopsis	Syslog export policy name
Context	configure service nat nat-policy <i>string</i> flow-log-policy syslog <i>reference</i>
Tree	syslog
Description	This command configures a syslog export policy with a set of transport parameters used to transmit NAT flow records in syslog format to an external collector node. The policy name is referenced from the NAT policy applied to an inside routing context.
Reference	configure service nat syslog export-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-outside

Synopsis	Use Layer 2 outside service address location
Context	configure service nat nat-policy <i>string</i> l2-outside
Tree	l2-outside
Description	This command specifies Layer 2 outside service address location for the NAT policy instead of Layer 3 outside service.
Notes	The following elements are part of a choice: dnat-only , l2-outside , or pool .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool

Synopsis Enter the **pool** context
Context **configure service nat nat-policy string pool**
Tree **pool**
Notes The following elements are part of a choice: **dnat-only**, **l2-outside**, or **pool**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis NAT pool name
Context **configure service nat nat-policy string pool name string**
Tree **name**
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Router or VPRN service name
Context **configure service nat nat-policy string pool router-instance string**
Tree **router-instance**
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-forwarding-range-end *number*

Synopsis	End of the port forwarding range
Context	configure service nat nat-policy <i>string</i> port-forwarding-range-end <i>number</i>
Tree	port-forwarding-range-end
Description	<p>This command specifies the end of the port range available for port forwarding. The start of the range is always equal to one.</p> <p>The number of ports that can be configured is half of the available block => $64512 / 2 = 32256$. In combination with the configured value for port-forwarding-range-end, the formulas are:</p> <p>max port-reservation blocks = $65535 - \text{port-forwarding-range-end}$</p> <p>max port-reservation ports = $(65535 - \text{port-forwarding-range-end}) / 2$</p> <p>If port-reservation is already configured, the following applies for the maximum port-forwarding-range-end:</p> <p>max port-forwarding-range-end = $65535 - \text{port-reservation blocks}$</p> <p>max port-forwarding-range-end = $65535 - (\text{port-reservation ports} * 2)$</p>
Range	1023 to 65535
Default	1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-limits

Synopsis	Enter the port-limits context
Context	configure service nat nat-policy <i>string</i> port-limits
Tree	port-limits
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forwarding *number*

Synopsis	Maximum number of port forwarding entries
Context	configure service nat nat-policy <i>string</i> port-limits forwarding <i>number</i>
Tree	forwarding
Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved *number*

Synopsis	Number of ports reserved for prioritized sessions
Context	configure service nat nat-policy <i>string port-limits reserved number</i>
Tree	reserved
Description	This command configures the number of ports per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure service nat nat-policy <i>string port-limits watermarks</i>
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	configure service nat nat-policy <i>string port-limits watermarks high number</i>
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
Context	configure service nat nat-policy string port-limits watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-sessions

Synopsis	Enter the priority-sessions context
Context	configure service nat nat-policy string priority-sessions
Tree	priority-sessions
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fc

Synopsis	Enter the fc context
Context	configure service nat nat-policy string priority-sessions fc
Tree	fc
Description	Commands in this context specify which Forwarding Class (FC) options have prioritized sessions.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

af boolean

Synopsis	Prioritize traffic from AF forwarding classes
Context	configure service nat nat-policy string priority-sessions fc af boolean
Tree	af

Description	When configured to true , traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to false , AF traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

be *boolean*

Synopsis	Prioritize traffic from BE forwarding classes
Context	configure service nat nat-policy <i>string</i> priority-sessions fc be <i>boolean</i>
Tree	be
Description	When configured to true , traffic from Best Effort (BE) FC sessions is prioritized. When configured to false , BE traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ef *boolean*

Synopsis	Prioritize traffic from EF forwarding classes
Context	configure service nat nat-policy <i>string</i> priority-sessions fc ef <i>boolean</i>
Tree	ef
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

h1 *boolean*

Synopsis	Prioritize traffic from H1 forwarding classes
Context	configure service nat nat-policy <i>string</i> priority-sessions fc h1 <i>boolean</i>
Tree	h1
Description	When configured to true , traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized.
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

h2 *boolean*

Synopsis Prioritize traffic from H2 forwarding classes
Context **configure service nat nat-policy** *string* **priority-sessions fc h2** *boolean*
Tree [h2](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l1 *boolean*

Synopsis Prioritize traffic from L1 forwarding classes
Context **configure service nat nat-policy** *string* **priority-sessions fc l1** *boolean*
Tree [l1](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2 *boolean*

Synopsis Prioritize traffic from L2 forwarding classes
Context **configure service nat nat-policy** *string* **priority-sessions fc l2** *boolean*
Tree [l2](#)
Description When configured to **true**, traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized.
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nc *boolean*

Synopsis Prioritize traffic from NC forwarding classes
Context **configure service nat nat-policy** *string* **priority-sessions fc nc** *boolean*

Tree	nc
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the session-limits context
Context	configure service nat nat-policy string session-limits
Tree	session-limits
Description	Commands in this context configure session-limit attributes for the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis	Maximum number of sessions per subscriber
Context	configure service nat nat-policy string session-limits max number
Tree	max
Range	1 to 65535
Default	65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved number

Synopsis	Number of sessions reserved for prioritized sessions
Context	configure service nat nat-policy string session-limits reserved number
Tree	reserved
Description	This command configures the number of sessions per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure service nat nat-policy string session-limits watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark percentage
Context	configure service nat nat-policy string session-limits watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
Context	configure service nat nat-policy string session-limits watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the tcp context
Context	configure service nat nat-policy string tcp
Tree	tcp
Description	Commands in this context configure the transmission control protocol (TCP) attributes of the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mss-adjust number

Synopsis	TCP MSS adjustment value
Context	configure service nat nat-policy string tcp mss-adjust number
Tree	mss-adjust
Description	This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher.
Range	160 to 10240
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reset-unknown boolean

Synopsis	Generate TCP reset for packets from unknown flows
Context	configure service nat nat-policy string tcp reset-unknown boolean
Tree	reset-unknown
Description	When configured to true , TCP packets are dropped and a TCP reset is generated if the NAT inside receives a TCP packet without the SYN flag set for an unknown flow. When configured to false , no TCP reset is generated.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeouts

Synopsis	Enter the timeouts context
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Context	configure service nat nat-policy string timeouts
Tree	timeouts
Description	Commands in this context configure the attributes of session idle timeouts for the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-query number

Synopsis	Timeout applied to an ICMP Query session
Context	configure service nat nat-policy string timeouts icmp-query number
Tree	icmp-query
Range	60 to 240
Default	60
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip number

Synopsis	SIP inactive media timeout
Context	configure service nat nat-policy string timeouts sip number
Tree	sip
Range	10 to 7200
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-retention number

Synopsis	IP address hold time after host and port blocks expire
Context	configure service nat nat-policy string timeouts subscriber-retention number
Tree	subscriber-retention

Description	This command configures the time to keep a NAT subscriber and its associated IP address after all hosts and associated port blocks expire. If a NAT subscriber host appears before the retention timeout elapses, it is given the same outside IP address.
Range	0 to 1440
Default	0
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the tcp context
Context	configure service nat nat-policy string timeouts tcp
Tree	tcp
Description	Commands in this context configure TCP timeout attributes.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

established *number*

Synopsis	Idle timeout for TCP session in established state
Context	configure service nat nat-policy string timeouts tcp established number
Tree	established
Range	60 to 86400
Default	7440
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rst *number*

Synopsis	Suspend time for TCP connection ports closed by RST
Context	configure service nat nat-policy string timeouts tcp rst number
Tree	rst

Description	This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations.
Range	0 to 240
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syn number

Synopsis	TCP session timeout when synchronizing initial sequence
Context	configure service nat nat-policy <i>string</i> timeouts tcp syn number
Tree	syn
Range	6 to 86400
Default	15
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-wait number

Synopsis	Timeout applied to a TCP session in the time-wait state
Context	configure service nat nat-policy <i>string</i> timeouts tcp time-wait number
Tree	time-wait
Range	0 to 240
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transitory number

Synopsis	Idle timeout for TCP session in transitory state
Context	configure service nat nat-policy <i>string</i> timeouts tcp transitory number

Tree	transitory
Range	60 to 86400
Default	240
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	configure service nat nat-policy string timeouts udp
Tree	udp
Description	Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns number

Synopsis	Timeout applied to UDP session with destination port 53
Context	configure service nat nat-policy string timeouts udp dns number
Tree	dns
Range	15 to 86400
Default	15
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	UDP mapping timeout applied to new sessions
Context	configure service nat nat-policy string timeouts udp initial number
Tree	initial
Range	10 to 300
Default	15

Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

normal *number*

Synopsis	UDP mapping timeout
Context	configure service nat nat-policy <i>string</i> timeouts udp normal <i>number</i>
Tree	normal
Range	60 to 86400
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	configure service nat nat-policy <i>string</i> udp
Tree	udp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inbound-refresh *boolean*

Synopsis	Extend UDP session timeout on inbound traffic
Context	configure service nat nat-policy <i>string</i> udp inbound-refresh <i>boolean</i>
Tree	inbound-refresh
Description	When configured to true , this command extends the UDP session timeout on inbound traffic. When configured to false , the UDP session timeout is not extended.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pcp-server-policy [[name](#)] *string*

Synopsis	Enter the pcp-server-policy list instance
Context	configure service nat pcp-server-policy <i>string</i>
Tree	pcp-server-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	PCP server policy name
Context	configure service nat pcp-server-policy <i>string</i>
Tree	pcp-server-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service nat pcp-server-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lifetime

Synopsis	Enter the lifetime context
Context	configure service nat pcp-server-policy <i>string</i> lifetime
Tree	lifetime
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

maximum number

Synopsis	Maximum lifetime of explicit mappings made by the PCP servers
Context	configure service nat pcp-server-policy <i>string lifetime maximum number</i>
Tree	maximum
Range	61 to 86400
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

minimum number

Synopsis	Minimum lifetime of explicit mappings made by the PCP servers
Context	configure service nat pcp-server-policy <i>string lifetime minimum number</i>
Tree	minimum
Range	60 to 86399
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-description-size number

Synopsis	Maximum length of mapping descriptions made by the PCP servers
Context	configure service nat pcp-server-policy <i>string max-description-size number</i>
Tree	max-description-size
Range	1 to 64
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opcode

Synopsis	Enter the opcode context
Context	configure service nat pcp-server-policy <i>string opcode</i>
Tree	opcode
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

announce *boolean*

Synopsis Process the announce PCP requests
Context **configure** [service nat pcp-server-policy](#) *string opcode announce boolean*
Tree [announce](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

get *boolean*

Synopsis Process the get PCP requests
Context **configure** [service nat pcp-server-policy](#) *string opcode get boolean*
Tree [get](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map *boolean*

Synopsis Process the map PCP requests
Context **configure** [service nat pcp-server-policy](#) *string opcode map boolean*
Tree [map](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

option

Synopsis Enter the **option** context
Context **configure** [service nat pcp-server-policy](#) *string option*
Tree [option](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *boolean*

Synopsis Text description
Context **configure** [service nat pcp-server-policy](#) *string option description* *boolean*
Tree [description](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next *boolean*

Synopsis Process the PCP requests that contain the next option
Context **configure** [service nat pcp-server-policy](#) *string option next* *boolean*
Tree [next](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation *boolean*

Synopsis Process the PCP requests that contain the prefer failure option
Context **configure** [service nat pcp-server-policy](#) *string option port-reservation* *boolean*
Tree [port-reservation](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-set *boolean*

Synopsis Support the PORT_SET option in PCP MAP requests
Context **configure** [service nat pcp-server-policy](#) *string option port-set* *boolean*
Tree [port-set](#)

Description	When configured to true , the PCP MAP option optimizes PCP performance for applications that require multiple sets of port forwards. A range of consecutive port forwards can be requested by the PCP client with a single PCP request. When configured to false , the default behavior is applied, where a plain MAP option is used to allocate a single port in a single request.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefer-failure *boolean*

Synopsis	Process the PCP requests that contain the port reservation option
Context	configure service nat pcp-server-policy <i>string</i> option prefer-failure <i>boolean</i>
Tree	prefer-failure
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

third-party *boolean*

Synopsis	Process the PCP requests that contain the third party option
Context	configure service nat pcp-server-policy <i>string</i> option third-party <i>boolean</i>
Tree	third-party
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reuse-external-ip-address *boolean*

Synopsis	Reuse external IP address for NAT subscriber
Context	configure service nat pcp-server-policy <i>string</i> reuse-external-ip-address <i>boolean</i>
Tree	reuse-external-ip-address
Description	When configured to true , the system reuses the external IP address assigned to a subscriber when the requested well-known port or external IP mapping is not available. When configured to false , a request for a well-known port is allocated as requested on a different external IP address if the port is already allocated to another subscriber sharing

the same external IP address. The existing external IP address is initially allocated to the subscriber as a result of the initial traffic flow.

This configuration flag can be set dynamically but the flag affects only PCP port forwards that are created after the flag has been set.

Default	false
Introduced	19.10.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

version

Synopsis	Enter the version context
Context	configure service nat pcp-server-policy <i>string</i> version
Tree	version
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

maximum *number*

Synopsis	Maximum protocol version supported by the PCP servers
Context	configure service nat pcp-server-policy <i>string</i> version maximum <i>number</i>
Tree	maximum
Range	1 to 255
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

minimum *number*

Synopsis	Minimum protocol version supported by the PCP servers
Context	configure service nat pcp-server-policy <i>string</i> version minimum <i>number</i>
Tree	minimum
Range	1 to 255
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-list [*name*] *string*

Synopsis	Enter the prefix-list list instance
Context	configure service nat prefix-list <i>string</i>
Tree	prefix-list
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	NAT prefix list name
Context	configure service nat prefix-list <i>string</i>
Tree	prefix-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application *keyword*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Prefix list for the application
Context	configure service nat prefix-list <i>string application</i> <i>keyword</i>
Tree	application
Default	l2-aware-dest-to-policy
Options	l2-aware-dest-to-policy, dnat-only-subscribers
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [ip-prefix] *string*

Synopsis	Enter the prefix list instance
Context	configure service nat prefix-list <i>string prefix string</i>
Tree	prefix
Max. Instances	1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-prefix] *string*

Synopsis	NAT prefix
Context	configure service nat prefix-list <i>string prefix string</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT policy for LSN
Context	configure service nat prefix-list <i>string prefix string nat-policy reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syslog

Synopsis	Enter the syslog context
Context	configure service nat syslog
Tree	syslog
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-policy [name] string

Synopsis	Enter the export-policy list instance
Context	configure service nat syslog export-policy string
Tree	export-policy
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	Syslog export policy name
Context	configure service nat syslog export-policy string
Tree	export-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collector router-instance string ip-address string

Synopsis	Enter the collector list instance
Context	configure service nat syslog export-policy string collector router-instance string ip-address string
Tree	collector
Max. Instances	2
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis Router instance

Context **configure** [service](#) [nat](#) [syslog](#) [export-policy](#) *string* [collector](#) [router-instance](#) *string* [ip-address](#) *string*

Tree [collector](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis IPv4 address of the external collector node

Context **configure** [service](#) [nat](#) [syslog](#) [export-policy](#) *string* [collector](#) [router-instance](#) *string* [ip-address](#) *string*

Tree [collector](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the collector node

Context **configure** [service](#) [nat](#) [syslog](#) [export-policy](#) *string* [collector](#) [router-instance](#) *string* [ip-address](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-port *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination port
Context	configure service nat syslog export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> destination-port <i>number</i>
Tree	destination-port
Range	1 to 65535
Default	514
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-source-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 source address
Context	configure service nat syslog export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> ipv4-source-address <i>string</i>
Tree	ipv4-source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service nat syslog export-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

facility *keyword*

Synopsis	Facility number in the PRI part of the NAT SYSLOG messages
Context	configure service nat syslog export-policy <i>string</i> facility <i>keyword</i>
Tree	facility
Default	local0
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include

Synopsis	Enter the include context
Context	configure service nat syslog export-policy <i>string</i> include
Tree	include
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-ip *boolean*

Synopsis	Include the translated destination IP address
Context	configure service nat syslog export-policy <i>string</i> include destination-ip <i>boolean</i>
Tree	destination-ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

foreign-ip *boolean*

Synopsis	Include the original destination IPv4 address
Context	configure service nat syslog export-policy <i>string</i> include foreign-ip <i>boolean</i>
Tree	foreign-ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

foreign-port *boolean*

Synopsis	Include the original destination port
Context	configure service nat syslog export-policy <i>string</i> include foreign-port <i>boolean</i>
Tree	foreign-port
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy-name *boolean*

Synopsis	Include the NAT policy name in the flow log
Context	configure service nat syslog export-policy <i>string</i> include nat-policy-name <i>boolean</i>
Tree	nat-policy-name
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sub-id *boolean*

Synopsis	Subscriber ID in subscriber aware NAT
Context	configure service nat syslog export-policy <i>string</i> include sub-id <i>boolean</i>
Tree	sub-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log-prefix *string*

Synopsis	Optional prefix text in the MSG part of the NAT syslog messages
Context	configure service nat syslog export-policy <i>string</i> log-prefix <i>string</i>
Tree	log-prefix
String Length	1 to 32
Default	TMNX
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-tx-delay *number*

Synopsis Maximum time a syslog message delays in the output buffer to aggregate multiple events

Context **configure** [service nat syslog export-policy](#) *string max-tx-delay number*

Tree [max-tx-delay](#)

Range 0 to 100

Default 3

Units deciseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis Maximum transmission unit

Context **configure** [service nat syslog export-policy](#) *string mtu number*

Tree [mtu](#)

Range 512 to 9000

Default 1500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis Frame limit

Context **configure** [service nat syslog export-policy](#) *string rate-limit number*

Tree [rate-limit](#)

Range 10 to 2147483647

Units packets per second

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity-level *keyword*

Synopsis	Severity level in the PRI part of the syslog messages
Context	configure service nat syslog export-policy <i>string severity-level keyword</i>
Tree	severity-level
Default	info
Options	emergency, alert, critical, error, warning, notice, info, debug
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-nat-policy [[name](#)] *string*

Synopsis	Enter the up-nat-policy list instance
Context	configure service nat up-nat-policy <i>string</i>
Tree	up-nat-policy
Max. Instances	32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[name](#)] *string*

Synopsis	UP NAT policy name
Context	configure service nat up-nat-policy <i>string</i>
Tree	up-nat-policy
Description	This command specifies the UP NAT policy name. The name default has a special meaning representing the default UP NAT policy template. The system uses the default template when the BNG CPF does not receive a more specific name when the subscriber is instantiated.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

alg

Synopsis	Enter the alg context
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Context	configure service nat up-nat-policy <i>string alg</i>
Tree	alg
Description	Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ftp boolean

Synopsis	Use FTP ALG for the policy
Context	configure service nat up-nat-policy <i>string alg ftp boolean</i>
Tree	ftp
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pptp boolean

Synopsis	Use PPTP ALG for the policy
Context	configure service nat up-nat-policy <i>string alg pptp boolean</i>
Tree	pptp
Description	<p>When configured to true, the policy uses Point-to-Point Tunneling Protocol (PPTP) ALG.</p> <p>PPTP sessions can only be initiated from NAT inside.</p> <p>GRE traffic is allowed through NAT only if the corresponding mapping exists.</p> <p>There can be seven calls (GRE tunnels) per control session.</p> <p>When configured to false, PPTP ALG is not used.</p>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtsp boolean

Synopsis	Use RTSP ALG for the policy
Context	configure service nat up-nat-policy <i>string alg rtsp boolean</i>
Tree	rtsp

Description	When configured to true , Real-Time Streaming Protocol (RTSP) ALG is used for the policy.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip *boolean*

Synopsis	Use SIP ALG for the policy
Context	configure service nat up-nat-policy <i>string alg sip boolean</i>
Tree	sip
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis	Enable the default-host context
Context	configure service nat up-nat-policy <i>string default-host</i>
Tree	default-host
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	configure service nat up-nat-policy <i>string default-host inside-router-instance string</i>
Tree	inside-router-instance

Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address of the default DMZ host
Context	configure service nat up-nat-policy <i>string</i> default-host ip-address <i>string</i>
Tree	ip-address
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	configure service nat up-nat-policy <i>string</i> default-host rate-limit <i>number</i>
Tree	rate-limit
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host. Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service nat up-nat-policy <i>string</i> description <i>string</i>
Tree	description

String Length 1 to 80
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filtering *keyword*

Synopsis Filtering method for inbound traffic for the policy
Context **configure service nat up-nat-policy** *string filtering keyword*
Tree [filtering](#)
Default endpoint-independent
Options endpoint-independent, address-and-port-dependent
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-log-policy

Synopsis Enter the **flow-log-policy** context
Context **configure service nat up-nat-policy** *string flow-log-policy*
Tree [flow-log-policy](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipfix *reference*

Synopsis IPFIX export policy
Context **configure service nat up-nat-policy** *string flow-log-policy ipfix reference*
Tree [ipfix](#)
Description This command specifies an IP flow information export policy for the flow-log policy.
Reference **configure service ipfix export-policy** *string*
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-echo-reply *boolean*

Synopsis Enable replies to ICMP Echo Request messages

Context	configure service nat up-nat-policy <i>string icmp-echo-reply boolean</i>
Tree	icmp-echo-reply
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-limits

Synopsis	Enter the port-limits context
Context	configure service nat up-nat-policy <i>string port-limits</i>
Tree	port-limits
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved number

Synopsis	Number of ports reserved for prioritized sessions
Context	configure service nat up-nat-policy <i>string port-limits reserved number</i>
Tree	reserved
Description	This command configures the number of ports per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure service nat up-nat-policy <i>string port-limits watermarks</i>
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark percentage
Context	configure service nat up-nat-policy <i>string</i> port-limits watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
Context	configure service nat up-nat-policy <i>string</i> port-limits watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-sessions

Synopsis	Enter the priority-sessions context
Context	configure service nat up-nat-policy <i>string</i> priority-sessions
Tree	priority-sessions
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fc

Synopsis	Enter the fc context
Context	configure service nat up-nat-policy string priority-sessions fc
Tree	fc
Description	Commands in this context specify which Forwarding Class (FC) options have prioritized sessions.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

af *boolean*

Synopsis	Prioritize traffic from AF forwarding classes
Context	configure service nat up-nat-policy string priority-sessions fc af <i>boolean</i>
Tree	af
Description	When configured to true , traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to false , AF traffic is not prioritized.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

be *boolean*

Synopsis	Prioritize traffic from BE forwarding classes
Context	configure service nat up-nat-policy string priority-sessions fc be <i>boolean</i>
Tree	be
Description	When configured to true , traffic from Best Effort (BE) FC sessions is prioritized. When configured to false , BE traffic is not prioritized.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ef *boolean*

Synopsis	Prioritize traffic from EF forwarding classes
Context	configure service nat up-nat-policy string priority-sessions fc ef <i>boolean</i>

Tree	ef
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

h1 *boolean*

Synopsis	Prioritize traffic from H1 forwarding classes
Context	configure service nat up-nat-policy <i>string</i> priority-sessions fc h1 <i>boolean</i>
Tree	h1
Description	When configured to true , traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

h2 *boolean*

Synopsis	Prioritize traffic from H2 forwarding classes
Context	configure service nat up-nat-policy <i>string</i> priority-sessions fc h2 <i>boolean</i>
Tree	h2
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l1 *boolean*

Synopsis	Prioritize traffic from L1 forwarding classes
Context	configure service nat up-nat-policy <i>string</i> priority-sessions fc l1 <i>boolean</i>
Tree	l1
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2 boolean

Synopsis	Prioritize traffic from L2 forwarding classes
Context	configure service nat up-nat-policy <i>string</i> priority-sessions fc l2 boolean
Tree	l2
Description	When configured to true , traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nc boolean

Synopsis	Prioritize traffic from NC forwarding classes
Context	configure service nat up-nat-policy <i>string</i> priority-sessions fc nc boolean
Tree	nc
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the session-limits context
Context	configure service nat up-nat-policy <i>string</i> session-limits
Tree	session-limits
Description	Commands in this context configure session-limit attributes for the policy.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis	Maximum number of sessions per subscriber
Context	configure service nat up-nat-policy <i>string</i> session-limits max number
Tree	max
Range	1 to 65535
Default	65535

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved *number*

Synopsis Number of sessions reserved for prioritized sessions
Context **configure service nat up-nat-policy** *string session-limits reserved number*
Tree [reserved](#)
Description This command configures the number of sessions per block that are reserved for prioritized sessions.
Range 1 to 65534
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis Enable the **watermarks** context
Context **configure service nat up-nat-policy** *string session-limits watermarks*
Tree [watermarks](#)
Description This command configures watermarks for NAT resources.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis High watermark percentage
Context **configure service nat up-nat-policy** *string session-limits watermarks high number*
Tree [high](#)
Description This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range 0 to 100
Units percent
Notes This element is mandatory.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
Context	configure service nat up-nat-policy string session-limits watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the tcp context
Context	configure service nat up-nat-policy string tcp
Tree	tcp
Description	Commands in this context configure the transmission control protocol (TCP) attributes of the policy.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mss-adjust number

Synopsis	TCP MSS adjustment value
Context	configure service nat up-nat-policy string tcp mss-adjust number
Tree	mss-adjust
Description	This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher.
Range	160 to 10240
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reset-unknown *boolean*

Synopsis	Generate TCP reset for packets from unknown flows
Context	configure service nat up-nat-policy <i>string tcp reset-unknown boolean</i>
Tree	reset-unknown
Description	When configured to true , TCP packets are dropped and a TCP reset is generated if the NAT inside receives a TCP packet without the SYN flag set for an unknown flow. When configured to false , no TCP reset is generated.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeouts

Synopsis	Enter the timeouts context
Context	configure service nat up-nat-policy <i>string timeouts</i>
Tree	timeouts
Description	Commands in this context configure the attributes of session idle timeouts for the policy.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-query *number*

Synopsis	Timeout applied to an ICMP Query session
Context	configure service nat up-nat-policy <i>string timeouts icmp-query number</i>
Tree	icmp-query
Range	60 to 240
Default	60
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip *number*

Synopsis	SIP inactive media timeout
Context	configure service nat up-nat-policy <i>string timeouts sip number</i>

Tree	sip
Range	10 to 7200
Default	120
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-retention *number*

Synopsis	IP address hold time after host and port blocks expire
Context	configure service nat up-nat-policy <i>string</i> timeouts subscriber-retention <i>number</i>
Tree	subscriber-retention
Description	This command configures the time to keep a NAT subscriber and its associated IP address after all hosts and associated port blocks expire. If a NAT subscriber host appears before the retention timeout elapses, it is given the same outside IP address.
Range	0 to 1440
Default	0
Units	minutes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the tcp context
Context	configure service nat up-nat-policy <i>string</i> timeouts tcp
Tree	tcp
Description	Commands in this context configure TCP timeout attributes.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

established *number*

Synopsis	Idle timeout for TCP session in established state
Context	configure service nat up-nat-policy <i>string</i> timeouts tcp established <i>number</i>
Tree	established

Range	60 to 86400
Default	7440
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rst number

Synopsis	Suspend time for TCP connection ports closed by RST
Context	configure service nat up-nat-policy <i>string</i> timeouts tcp rst number
Tree	rst
Description	This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations.
Range	0 to 240
Default	0
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syn number

Synopsis	TCP session timeout when synchronizing initial sequence
Context	configure service nat up-nat-policy <i>string</i> timeouts tcp syn number
Tree	syn
Range	6 to 86400
Default	15
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-wait number

Synopsis	Timeout applied to a TCP session in the time-wait state
Context	configure service nat up-nat-policy <i>string</i> timeouts tcp time-wait number

Tree	time-wait
Range	0 to 240
Default	0
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transitory *number*

Synopsis	Idle timeout for TCP session in transitory state
Context	configure service nat up-nat-policy <i>string</i> timeouts tcp transitory <i>number</i>
Tree	transitory
Range	60 to 86400
Default	240
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	configure service nat up-nat-policy <i>string</i> timeouts udp
Tree	udp
Description	Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns *number*

Synopsis	Timeout applied to UDP session with destination port 53
Context	configure service nat up-nat-policy <i>string</i> timeouts udp dns <i>number</i>
Tree	dns
Range	15 to 86400
Default	15

Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	UDP mapping timeout applied to new sessions
Context	configure service nat up-nat-policy <i>string</i> timeouts udp initial number
Tree	initial
Range	10 to 300
Default	15
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

normal number

Synopsis	UDP mapping timeout
Context	configure service nat up-nat-policy <i>string</i> timeouts udp normal number
Tree	normal
Range	60 to 86400
Default	300
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	configure service nat up-nat-policy <i>string</i> udp
Tree	udp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inbound-refresh *boolean*

Synopsis	Extend UDP session timeout on inbound traffic
Context	configure service nat up-nat-policy <i>string udp inbound-refresh boolean</i>
Tree	inbound-refresh
Description	When configured to true , this command extends the UDP session timeout on inbound traffic. When configured to false , the UDP session timeout is not extended.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

oper-group [*name*] *string*

Synopsis	Enter the oper-group list instance
Context	configure service oper-group <i>string</i>
Tree	oper-group
Max. Instances	32768
Introduced	16.0.R1
Platforms	All

[*name*] *string*

Synopsis	Operational group name
Context	configure service oper-group <i>string</i>
Tree	oper-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service oper-group <i>string bfd-liveness</i>

Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

dest-ip *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for BFD
Context	configure service oper-group <i>string</i> bfd-liveness dest-ip <i>string</i>
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

interface-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source interface name
Context	configure service oper-group <i>string</i> bfd-liveness interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context used for route lookup
Context	configure service oper-group <i>string</i> bfd-liveness router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the hold-time context
Context	configure service oper-group <i>string</i> hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

down *number*

Synopsis	Oper group hold down time
Context	configure service oper-group <i>string</i> hold-time down <i>number</i>
Tree	down
Range	1 to 3600
Units	seconds
Introduced	16.0.R3
Platforms	All

up *number*

Synopsis	Oper group hold up time
Context	configure service oper-group <i>string</i> hold-time up <i>number</i>
Tree	up
Range	0 to 3600
Default	4
Units	seconds
Introduced	16.0.R3
Platforms	All

pbb

Synopsis	Enter the pbb context
Context	configure service pbb
Tree	pbb
Introduced	16.0.R1
Platforms	All

mac [name] string

Synopsis	Enter the mac list instance
Context	configure service pbb mac string
Tree	mac
Introduced	16.0.R1
Platforms	All

[name] string

Synopsis	MAC name for the MAC address
Context	configure service pbb mac string
Tree	mac
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address string

Synopsis	IEEE address assigned to the MAC name
Context	configure service pbb mac string address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mac-notification

Synopsis	Enter the mac-notification context
Context	configure service pbb mac-notification
Tree	mac-notification
Introduced	16.0.R1
Platforms	All

count *number*

Synopsis	MAC notification messages count
Context	configure service pbb mac-notification count <i>number</i>
Tree	count
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval for MAC-notification messages
Context	configure service pbb mac-notification interval <i>number</i>
Tree	interval
Range	1 to 100
Default	1
Units	deciseconds
Introduced	16.0.R1
Platforms	All

source-bmac

Synopsis	Enter the source-bmac context
Context	configure service pbb source-bmac
Tree	source-bmac
Introduced	16.0.R1

Platforms All

address string

Synopsis Source B-VPLS MAC address to use with PBB
Context **configure service pbb source-bmac address string**
Tree [address](#)
Introduced 16.0.R1
Platforms All

evpn-etree-leaf-address string

Synopsis Source Backbone VPLS MAC address to use with Provider Backbone Bridging (PBB)
Context **configure service pbb source-bmac evpn-etree-leaf-address string**
Tree [evpn-etree-leaf-address](#)
Introduced 16.0.R1
Platforms All

proxy-arp-nd

Synopsis Enter the **proxy-arp-nd** context
Context **configure service proxy-arp-nd**
Tree [proxy-arp-nd](#)
Introduced 16.0.R1
Platforms All

mac-list

Synopsis Enter the **mac-list** context
Context **configure service proxy-arp-nd mac-list**
Tree [mac-list](#)
Introduced 16.0.R1
Platforms All

list [[list-name](#)] *string*

Synopsis	Enter the list list instance
Context	configure service proxy-arp-nd mac-list list <i>string</i>
Tree	list
Introduced	16.0.R1
Platforms	All

[list-name] *string*

Synopsis	Specify name for mac list
Context	configure service proxy-arp-nd mac-list list <i>string</i>
Tree	list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac [[address](#)] *string*

Synopsis	Add a list entry for mac
Context	configure service proxy-arp-nd mac-list list <i>string mac</i> <i>string</i>
Tree	mac
Max. Instances	10
Introduced	16.0.R1
Platforms	All

[address] *string*

Synopsis	MAC address to be added to the list
Context	configure service proxy-arp-nd mac-list list <i>string mac</i> <i>string</i>
Tree	mac
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

pw-template [[pw-template-name](#)] *string*

Synopsis	Enter the pw-template list instance
Context	configure service pw-template <i>string</i>
Tree	pw-template
Max. Instances	2048
Introduced	16.0.R1
Platforms	All

[pw-template-name] *string*

Synopsis	SDP template name
Context	configure service pw-template <i>string</i>
Tree	pw-template
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *number*

Synopsis	Accounting policy
Context	configure service pw-template <i>string</i> accounting-policy <i>number</i>
Tree	accounting-policy
Range	1 to 99
Introduced	16.0.R1
Platforms	All

allow-fragmentation *boolean*

Synopsis	Allow packets to be sent without setting DF bit
Context	configure service pw-template <i>string</i> allow-fragmentation <i>boolean</i>
Tree	allow-fragmentation
Default	false

Introduced 16.0.R1
Platforms All

auto-gre-sdp *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Use a GRE tunnel to automatically create an SDP
Context **configure** [service](#) [pw-template](#) *string* [auto-gre-sdp](#) *boolean*
Tree [auto-gre-sdp](#)
Default false
Introduced 16.0.R1
Platforms All

block-on-peer-fault *boolean*

Synopsis Enable block traffic on peer fault
Context **configure** [service](#) [pw-template](#) *string* [block-on-peer-fault](#) *boolean*
Tree [block-on-peer-fault](#)
Default false
Introduced 16.0.R1
Platforms All

collect-stats *boolean*

Synopsis Collect statistics
Context **configure** [service](#) [pw-template](#) *string* [collect-stats](#) *boolean*
Tree [collect-stats](#)
Default false
Introduced 16.0.R1
Platforms All

control-word *boolean*

Synopsis	Enable/Disable the use of ControlWord
Context	configure service pw-template <i>string</i> control-word <i>boolean</i>
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure service pw-template <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service pw-template <i>string</i> egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *string*

Synopsis	IPv4 filter policy name
Context	configure service pw-template <i>string</i> egress filter ip <i>string</i>
Tree	ip
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

ipv6 string

Synopsis	IPv6 filter policy name
Context	configure service pw-template string egress filter ipv6 string
Tree	ipv6
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

mac string

Synopsis	MAC filter policy name
Context	configure service pw-template string egress filter mac string
Tree	mac
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

mfib-allowed-mda-destinations

Synopsis	Enter the mfib-allowed-mda-destinations context
Context	configure service pw-template string egress mfib-allowed-mda-destinations
Tree	mfib-allowed-mda-destinations
Introduced	16.0.R1
Platforms	All

mda [mda-id] string

Synopsis	Add a list entry for mda
Context	configure service pw-template string egress mfib-allowed-mda-destinations mda string
Tree	mda
Introduced	16.0.R1
Platforms	All

[mda-id] string

Synopsis	MFIB allowed MDA destination
Context	configure service pw-template string egress mfib-allowed-mda-destinations mda string
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service pw-template string egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure service pw-template string egress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

policy-name string

Synopsis	Network policy ID
Context	configure service pw-template string egress qos network policy-name string
Tree	policy-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service pw-template <i>string</i> egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *string*

Synopsis	Name of the egress port queue group template
Context	configure service pw-template <i>string</i> egress qos network port-redirect-group group-name <i>string</i>
Tree	group-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance for FP ingress queue group
Context	configure service pw-template <i>string</i> egress qos network port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

encryption-keygroup

Synopsis	Enter the encryption-keygroup context
Context	configure service pw-template <i>string</i> encryption-keygroup
Tree	encryption-keygroup
Introduced	19.10.R1
Platforms	VSR

inbound number

Synopsis	Keygroup identifier in the inbound direction
Context	configure service pw-template string encryption-keygroup inbound number
Tree	inbound
Range	1 to 127
Introduced	19.10.R1
Platforms	VSR

outbound number

Synopsis	Keygroup identifier in the outbound direction
Context	configure service pw-template string encryption-keygroup outbound number
Tree	outbound
Range	1 to 127
Introduced	19.10.R1
Platforms	VSR

entropy-label

Synopsis	Enable the use of an entropy label
Context	configure service pw-template string entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the fdb context
Context	configure service pw-template string fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Enable automatic update of MAC protect list
Context	configure service pw-template <i>string</i> fdb auto-learn-mac-protect <i>boolean</i>
Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect-exclude-list *string*

Synopsis	Name of the MAC protect exclusion list
Context	configure service pw-template <i>string</i> fdb auto-learn-mac-protect-exclude-list <i>string</i>
Tree	auto-learn-mac-protect-exclude-list
Description	<p>This command configures the name of a MAC protect exclusion list.</p> <p>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.</p> <p>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.</p>
String Length	1 to 32
Introduced	20.5.R1
Platforms	All

discard-unknown-source *boolean*

Synopsis	Discard frames with unknown source
Context	configure service pw-template <i>string</i> fdb discard-unknown-source <i>boolean</i>
Tree	discard-unknown-source
Default	false
Introduced	16.0.R1
Platforms	All

limit-mac-move *keyword*

Synopsis	MAC move limit
Context	configure service pw-template <i>string</i> fdb limit-mac-move <i>keyword</i>

Tree	limit-mac-move
Default	blockable
Options	blockable, non-blockable
Introduced	16.0.R1
Platforms	All

mac-learning

Synopsis	Enter the mac-learning context
Context	configure service pw-template <i>string</i> fdb mac-learning
Tree	mac-learning
Introduced	16.0.R1
Platforms	All

aging *boolean*

Synopsis	Enable aging of MAC addresses
Context	configure service pw-template <i>string</i> fdb mac-learning aging <i>boolean</i>
Tree	aging
Default	true
Introduced	16.0.R1
Platforms	All

learning *boolean*

Synopsis	Enable learning of new MAC addresses
Context	configure service pw-template <i>string</i> fdb mac-learning learning <i>boolean</i>
Tree	learning
Default	true
Introduced	16.0.R1
Platforms	All

mac-pinning *boolean*

Synopsis	Enable MAC address pinning on this spoke SDP
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Context	configure service pw-template <i>string</i> fdb mac-pinning <i>boolean</i>
Tree	mac-pinning
Default	false
Introduced	16.0.R1
Platforms	All

maximum-mac-addresses *number*

Synopsis	Maximum number of MAC entries in the FDB
Context	configure service pw-template <i>string</i> fdb maximum-mac-addresses <i>number</i>
Tree	maximum-mac-addresses
Range	1 to 511999
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action for protected source MAC restriction
Context	configure service pw-template <i>string</i> fdb protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

force-vc-forwarding *keyword*

Synopsis	VC forwarding action
Context	configure service pw-template <i>string</i> force-vc-forwarding <i>keyword</i>
Tree	force-vc-forwarding
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

hash-label

Synopsis	Enable the hash-label context
Context	configure service pw-template <i>string</i> hash-label
Tree	hash-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	16.0.R1
Platforms	All

signal-capability

Synopsis	Hash label capability that is signaled to the remote PE
Context	configure service pw-template <i>string</i> hash-label signal-capability
Tree	signal-capability
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service pw-template <i>string</i> igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	configure service pw-template <i>string</i> igmp-snooping fast-leave <i>boolean</i>
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *string*

Synopsis	Import policy that filters IGMP packets
Context	configure service pw-template <i>string</i> igmp-snooping import-policy <i>string</i>
Tree	import-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum multicast groups
Context	configure service pw-template <i>string</i> igmp-snooping maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service pw-template <i>string</i> igmp-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service pw-template <i>string</i> igmp-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50

Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service pw-template <i>string</i> igmp-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service pw-template <i>string</i> igmp-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	configure service pw-template <i>string</i> igmp-snooping send-queries <i>boolean</i>
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	All

version *keyword*

Synopsis	IGMP version
Context	configure service pw-template <i>string</i> igmp-snooping version <i>keyword</i>
Tree	version
Default	3
Options	1, 2, 3
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure service pw-template <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service pw-template <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *string*

Synopsis	IPv4 filter policy name
Context	configure service pw-template <i>string</i> ingress filter ip <i>string</i>
Tree	ip
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

ipv6 string

Synopsis	IPv6 filter policy name
Context	configure service pw-template string ingress filter ipv6 string
Tree	ipv6
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

mac string

Synopsis	MAC filter policy name
Context	configure service pw-template string ingress filter mac string
Tree	mac
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service pw-template string ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure service pw-template string ingress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service pw-template <i>string</i> ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *string*

Synopsis	Name of the forwarding plane queue group template
Context	configure service pw-template <i>string</i> ingress qos network fp-redirect-group group-name <i>string</i>
Tree	group-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance for FP ingress queue group
Context	configure service pw-template <i>string</i> ingress qos network fp-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *string*

Synopsis	Network policy ID
Context	configure service pw-template <i>string</i> ingress qos network policy-name <i>string</i>
Tree	policy-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

l2pt

Synopsis	Enter the l2pt context
Context	configure service pw-template string l2pt
Tree	l2pt
Introduced	16.0.R1
Platforms	All

termination

Synopsis	Enable the termination context
Context	configure service pw-template string l2pt termination
Tree	termination
Introduced	16.0.R1
Platforms	All

protocols

Synopsis	Enter the protocols context
Context	configure service pw-template string l2pt termination protocols
Tree	protocols
Introduced	16.0.R1
Platforms	All

cdp boolean

Synopsis	Enable Cisco discovery protocol
Context	configure service pw-template string l2pt termination protocols cdp boolean
Tree	cdp
Default	false
Introduced	16.0.R1
Platforms	All

ntp boolean

Synopsis	Enable dynamic trunking protocol
Context	configure service pw-template <i>string</i> l2pt termination protocols ntp <i>boolean</i>
Tree	ntp
Default	false
Introduced	16.0.R1
Platforms	All

pagp boolean

Synopsis	Enable port aggregation protocol
Context	configure service pw-template <i>string</i> l2pt termination protocols pagp <i>boolean</i>
Tree	pagp
Default	false
Introduced	16.0.R1
Platforms	All

stp boolean

Synopsis	Enable all spanning tree protocols
Context	configure service pw-template <i>string</i> l2pt termination protocols stp <i>boolean</i>
Tree	stp
Default	true
Introduced	16.0.R1
Platforms	All

udd boolean

Synopsis	Enable unidirectional link detection
Context	configure service pw-template <i>string</i> l2pt termination protocols udd <i>boolean</i>
Tree	udd
Default	false
Introduced	16.0.R1
Platforms	All

vtp *boolean*

Synopsis	Enable virtual trunk protocol
Context	configure service pw-template <i>string</i> l2pt termination protocols vtp <i>boolean</i>
Tree	vtp
Default	false
Introduced	16.0.R1
Platforms	All

provisioned-sdp *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Provisioned SDP type
Context	configure service pw-template <i>string</i> provisioned-sdp <i>keyword</i>
Tree	provisioned-sdp
Options	use, prefer
Introduced	16.0.R1
Platforms	All

pw-template-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PW Template Id
Context	configure service pw-template <i>string</i> pw-template-id <i>number</i>
Tree	pw-template-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

sdp-exclude [group-name] *reference*

Synopsis	Add a list entry for sdp-exclude
Context	configure service pw-template string sdp-exclude reference
Tree	sdp-exclude
Introduced	16.0.R1
Platforms	All

[group-name] *reference*

Synopsis	SDP group name
Context	configure service pw-template string sdp-exclude reference
Tree	sdp-exclude
Reference	configure service sdp-group group-name string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sdp-include [group-name] *reference*

Synopsis	Add a list entry for sdp-include
Context	configure service pw-template string sdp-include reference
Tree	sdp-include
Introduced	16.0.R1
Platforms	All

[group-name] *reference*

Synopsis	SDP group name
Context	configure service pw-template string sdp-include reference
Tree	sdp-include
Reference	configure service sdp-group group-name string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

split-horizon-group

Synopsis	Enter the split-horizon-group context
Context	configure service pw-template string split-horizon-group
Tree	split-horizon-group
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service pw-template string split-horizon-group description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the fdb context
Context	configure service pw-template string split-horizon-group fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

saps

Synopsis	Enter the saps context
Context	configure service pw-template string split-horizon-group fdb saps
Tree	saps
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Enable automatic update of MAC protect list
Context	configure service pw-template <i>string</i> split-horizon-group fdb saps auto-learn-mac-protect <i>boolean</i>
Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R1
Platforms	All

discard-unprotected-dest-mac *boolean*

Synopsis	Enable/disable unprotected dest MAC restriction
Context	configure service pw-template <i>string</i> split-horizon-group fdb saps discard-unprotected-dest-mac <i>boolean</i>
Tree	discard-unprotected-dest-mac
Default	false
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action for protected source MAC restriction
Context	configure service pw-template <i>string</i> split-horizon-group fdb saps protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Options	sap-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

name *string*

Synopsis	Split horizon group name to which the SDP belongs
Context	configure service pw-template <i>string</i> split-horizon-group name <i>string</i>
Tree	name
String Length	1 to 32
Introduced	16.0.R1

Platforms All

stp

Synopsis Enter the **stp** context
Context **configure** [service pw-template](#) *string* **stp**
Tree [stp](#)
Introduced 16.0.R4
Platforms All

admin-state *keyword*

Synopsis Administrative state of STP
Context **configure** [service pw-template](#) *string* **stp** **admin-state** *keyword*
Tree [admin-state](#)
Options enable, disable
Introduced 16.0.R4
Platforms All

auto-edge *boolean*

Synopsis Enable automatic detection of edge port characteristics
Context **configure** [service pw-template](#) *string* **stp** **auto-edge** *boolean*
Tree [auto-edge](#)
Default true
Introduced 16.0.R4
Platforms All

edge-port *boolean*

Synopsis Designate SAP or SDP as an edge port
Context **configure** [service pw-template](#) *string* **stp** **edge-port** *boolean*
Tree [edge-port](#)
Default false
Introduced 16.0.R4

Platforms All

link-type *keyword*

Synopsis Configure STP link-type
Context **configure** [service pw-template](#) *string* **stp link-type** *keyword*
Tree [link-type](#)
Default pt-pt
Options pt-pt, shared
Introduced 16.0.R4
Platforms All

path-cost *number*

Synopsis Configure path-cost
Context **configure** [service pw-template](#) *string* **stp path-cost** *number*
Tree [path-cost](#)
Range 1 to 200000000
Default 10
Introduced 16.0.R4
Platforms All

priority *number*

Synopsis Configure STP priority
Context **configure** [service pw-template](#) *string* **stp priority** *number*
Tree [priority](#)
Range 0 to 255
Default 128
Introduced 16.0.R4
Platforms All

root-guard *boolean*

Synopsis Enable/disable STP root-guard

Context	configure service pw-template <i>string stp root-guard boolean</i>
Tree	root-guard
Default	false
Introduced	16.0.R4
Platforms	All

vc-type *keyword*

Synopsis	Virtual circuit type associated with the SDP bind
Context	configure service pw-template <i>string vc-type keyword</i>
Tree	vc-type
Default	ether
Options	ether, vlan
Introduced	16.0.R1
Platforms	All

vlan-vc-tag *number*

Synopsis	VLAN VC tag
Context	configure service pw-template <i>string vlan-vc-tag number</i>
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	16.0.R1
Platforms	All

sdp [**sdp-id**] *number*

Synopsis	Enter the sdp list instance
Context	configure service sdp <i>number</i>
Tree	sdp
Introduced	16.0.R1
Platforms	All

[sdp-id] number

Synopsis	Service Distribution Point (SDP) identifier
Context	configure service sdp number
Tree	sdp
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy reference

Synopsis	Accounting policy associated with an SDP
Context	configure service sdp number accounting-policy reference
Tree	accounting-policy
Description	This command associates an accounting policy with an SDP. When unconfigured, there is no accounting policy applied to the SDP.
Reference	configure log accounting-policy number
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the SDP
Context	configure service sdp number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

adv-mtu-override boolean

Synopsis	Override the advertised VC-type MTU using the SDP ID
Context	configure service sdp number adv-mtu-override boolean
Tree	adv-mtu-override

Default	false
Introduced	16.0.R1
Platforms	All

allow-fragmentation *boolean*

Synopsis	Allow packets to be sent without setting DF bit
Context	configure service sdp number allow-fragmentation <i>boolean</i>
Tree	allow-fragmentation
Default	false
Introduced	16.0.R1
Platforms	All

bgp-tunnel *boolean*

Synopsis	Allow use of BGP route tunnels to reach far-end nodes
Context	configure service sdp number bgp-tunnel <i>boolean</i>
Tree	bgp-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

booking-factor *number*

Synopsis	Percentage of SDP max available bandwidth for VLL CAC
Context	configure service sdp number booking-factor <i>number</i>
Tree	booking-factor
Range	0 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

class-forwarding

Synopsis	Enable the class-forwarding context
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Context	configure service sdp number class-forwarding
Tree	class-forwarding
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of class-based forwarding
Context	configure service sdp number class-forwarding admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

default-lsp *reference*

Synopsis	Default LSP for class-based forwarding on the SDP
Context	configure service sdp number class-forwarding default-lsp reference
Tree	default-lsp
Reference	configure service sdp number lsp string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

enforce-diffserv-lsp-fc *boolean*

Synopsis	Enable RSVP validation of FC support by the LSP
Context	configure service sdp number class-forwarding enforce-diffserv-lsp-fc boolean
Tree	enforce-diffserv-lsp-fc
Default	false
Introduced	16.0.R1
Platforms	All

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure service sdp number class-forwarding fc keyword
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class to LSP mapping
Context	configure service sdp number class-forwarding fc keyword
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

lsp *reference*

Synopsis	LSP name used to forward service packets
Context	configure service sdp number class-forwarding fc keyword lsp reference
Tree	lsp
Reference	configure service sdp number lsp string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

multicast-lsp *reference*

Synopsis	LSP to forward all multicast traffic
Context	configure service sdp number class-forwarding multicast-lsp reference
Tree	multicast-lsp
Reference	configure service sdp number lsp string
Introduced	16.0.R1

Platforms All

collect-stats *boolean*

Synopsis Collect accounting statistics for this SDP
Context **configure service sdp number collect-stats boolean**
Tree [collect-stats](#)
Default false
Introduced 16.0.R1
Platforms All

delivery-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Delivery type used by the SDP
Context **configure service sdp number delivery-type keyword**
Tree [delivery-type](#)
Options gre, mpls, l2tpv3, gre-eth-bridged
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure service sdp number description string**
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

far-end

Synopsis Enter the **far-end** context

Context	configure service sdp number far-end
Tree	far-end
Introduced	16.0.R1
Platforms	All

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the far end destination router
Context	configure service sdp number far-end ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	ip-address
Introduced	16.0.R3
Platforms	All

keep-alive

Synopsis	Enter the keep-alive context
Context	configure service sdp number keep-alive
Tree	keep-alive
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of keepalive mechanism for the SDP
Context	configure service sdp number keep-alive admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

hello-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time period between SDP keepalive messages
Context	configure service sdp <i>number</i> keep-alive hello-time <i>number</i>
Tree	hello-time
Range	1 to 3600
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

hold-down-time *number*

Synopsis	Minimum time the SDP remains in the down state
Context	configure service sdp <i>number</i> keep-alive hold-down-time <i>number</i>
Tree	hold-down-time
Range	0 to 3600
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

maximum-drop-count *number*

Synopsis	Maximum failed request attempts when SDP is down
Context	configure service sdp <i>number</i> keep-alive maximum-drop-count <i>number</i>
Tree	maximum-drop-count
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	All

message-length *number*

Synopsis	Length of the keepalive request messages transmitted
Context	configure service sdp number keep-alive message-length number
Tree	message-length
Range	40 to 9198
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time SDP waits before tearing down the session
Context	configure service sdp number keep-alive timeout number
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

ldp *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable LDP-signaled LSPs
Context	configure service sdp number ldp boolean
Tree	ldp
Default	false
Introduced	16.0.R1
Platforms	All

local-end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local end address of tunnel defined by the SDP
Context	configure service sdp number local-end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-end
Introduced	16.0.R1
Platforms	All

lsp [*lsp-name*] *string*

Synopsis	Add a list entry for lsp
Context	configure service sdp number lsp string
Tree	lsp
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[lsp-name] *string*

Synopsis	LSP name to associate with the SDP
Context	configure service sdp number lsp string
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Metric used in tunnel table manager for decision making
Context	configure service sdp number metric number
Tree	metric

Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mixed-lsp-mode

Synopsis	Enable the mixed-lsp-mode context
Context	configure service sdp number mixed-lsp-mode
Tree	mixed-lsp-mode
Introduced	16.0.R1
Platforms	All

revert-time (*number* | *keyword*)

Synopsis	Delay before SDP can revert to higher priority LSP type
Context	configure service sdp number mixed-lsp-mode revert-time (<i>number</i> <i>keyword</i>)
Tree	revert-time
Range	1 to 600
Default	immediate
Units	seconds
Options	never, immediate
Introduced	16.0.R1
Platforms	All

network-domain *reference*

Synopsis	Network domain name associated with the SDP
Context	configure service sdp number network-domain reference
Tree	network-domain
Reference	configure router string network-domains network-domain string
Introduced	16.0.R1
Platforms	All

path-mtu *number*

Synopsis	Maximum Transmission Unit (MTU) the SDP can transmit
Context	configure service sdp <i>number</i> path-mtu <i>number</i>
Tree	path-mtu
Range	576 to 9782
Units	bytes
Introduced	16.0.R1
Platforms	All

pbb-etype *string*

Synopsis	Ethertype used for PBB
Context	configure service sdp <i>number</i> pbb-etype <i>string</i>
Tree	pbb-etype
String Length	5 to 6
Default	0x88E7
Introduced	16.0.R1
Platforms	All

pw-port

Synopsis	Enter the pw-port context
Context	configure service sdp <i>number</i> pw-port
Tree	pw-port
Introduced	16.0.R4
Platforms	All

binding-port *string*

Synopsis	Binding port
Context	configure service sdp <i>number</i> pw-port binding-port <i>string</i>
Tree	binding-port
Introduced	16.0.R4
Platforms	All

sdp-group [*group-name*] *reference*

Synopsis	Add a list entry for sdp-group
Context	configure service sdp <i>number</i> sdp-group <i>reference</i>
Tree	sdp-group
Introduced	16.0.R1
Platforms	All

[*group-name*] *reference*

Synopsis	SDP administrative group name
Context	configure service sdp <i>number</i> sdp-group <i>reference</i>
Tree	sdp-group
Reference	configure service sdp-group <i>group-name</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

signaling *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signaling protocol used to obtain pseudowire labels
Context	configure service sdp <i>number</i> signaling <i>keyword</i>
Tree	signaling
Description	This command specifies the signaling protocol used to obtain the ingress and egress pseudowire labels in frames transmitted and received on the SDP. The signaling value can only be changed while the administrative status of the SDP is down. Additionally, the signaling can only be changed on an SDP if the SDP is not in use by BGP-AD or BGP-VPLS. BGP signaling can only be enabled if the SDP does not already have pseudowires signaled over it. Also, BGP signaling is not supported with mixed mode LSP SDPs.

Note: If the **tldp** option is selected as the mechanism for exchanging service labels over an MPLS or GRE SDP and the T-LDP session is automatically established, an explicit T-LDP session that is subsequently configured takes precedence over the automatic T-LDP session. However, if the explicit, manually-configured session is then removed, the system does not revert to the automatic session and the automatic session is

also deleted. To address this, recreate the T-LDP session by using the **admin-state** command to administratively disable and then enable the SDP.

Options	off, tldp, bgp
Introduced	16.0.R1
Platforms	All

source-bmac-lsb

Synopsis	Enter the source-bmac-lsb context
Context	configure service sdp number source-bmac-lsb
Tree	source-bmac-lsb
Introduced	16.0.R1
Platforms	All

control-pw-vc-id *number*

Synopsis	VC ID of the control pseudowire
Context	configure service sdp number source-bmac-lsb control-pw-vc-id <i>number</i>
Tree	control-pw-vc-id
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

value *string*

Synopsis	16 least significant bits of virtual backbone MAC
Context	configure service sdp number source-bmac-lsb value <i>string</i>
Tree	value
Introduced	16.0.R1
Platforms	All

sr-isis *boolean*

Synopsis	Enable Segment Routing for IS-IS
Context	configure service sdp number sr-isis <i>boolean</i>
Tree	sr-isis

Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf boolean

Synopsis	Enable an MPLS SDP of LSP type OSPF Segment Routing
Context	configure service sdp number sr-ospf boolean
Tree	sr-ospf
Default	false
Introduced	16.0.R1
Platforms	All

tunnel-far-end (ipv4-address-no-zone | ipv6-address-no-zone)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System address of the far-end router for the SDP
Context	configure service sdp number tunnel-far-end (ipv4-address-no-zone ipv6-address-no-zone)
Tree	tunnel-far-end
Introduced	16.0.R1
Platforms	All

vlan-vc-etype string

Synopsis	VLAN VC Ethertype
Context	configure service sdp number vlan-vc-etype string
Tree	vlan-vc-etype
String Length	5 to 6
Default	0x8100
Introduced	16.0.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Allow weighted load-balancing on an SDP
Context	configure service sdp number weighted-ecmp <i>boolean</i>
Tree	weighted-ecmp
Default	false
Introduced	16.0.R1
Platforms	All

sdp-group

Synopsis	Enter the sdp-group context
Context	configure service sdp-group
Tree	sdp-group
Introduced	16.0.R1
Platforms	All

group-name [[group-name](#)] *string*

Synopsis	Enter the group-name list instance
Context	configure service sdp-group group-name <i>string</i>
Tree	group-name
Introduced	16.0.R1
Platforms	All

[[group-name](#)] *string*

Synopsis	SDP administrative group name
Context	configure service sdp-group group-name <i>string</i>
Tree	group-name
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

value *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Unique group value associated with the SDP admin group
Context	configure service sdp-group group-name string value number
Tree	value
Range	0 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

system

Synopsis	Enter the system context
Context	configure service system
Tree	system
Introduced	16.0.R1
Platforms	All

bgp

Synopsis	Enter the bgp context
Context	configure service system bgp
Tree	bgp
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the evpn context
Context	configure service system bgp evpn
Tree	evpn
Introduced	16.0.R1

Platforms All

ad-per-es-route

Synopsis Enter the **ad-per-es-route** context

Context **configure service system bgp evpn ad-per-es-route**

Tree [ad-per-es-route](#)

Introduced 16.0.R1

Platforms All

extended-evi-range *boolean*

Synopsis Reserve extended RD comm-values for AD per-ES routes

Context **configure service system bgp evpn ad-per-es-route extended-evi-range boolean**

Tree [extended-evi-range](#)

Description When configured to **true**, the system reserves the Route Distinguisher (RD) comm-values 1 to 65535 out of the type 1 RD that is used for AD per-ES routes. If **ad-per-es-route route-target-type** is also configured to **evi-route-target-set**, the system can pack the maximum number of EVI route targets in the AD per-ES routes

When configured to **false**, this command only reserves comm-values 1 to 512.

Default false

Introduced 21.10.R1

Platforms All

route-distinguisher-ip-address *string*

Synopsis IP address for route distinguisher for EVPN AD-ES routes

Context **configure service system bgp evpn ad-per-es-route route-distinguisher-ip-address string**

Tree [route-distinguisher-ip-address](#)

Introduced 16.0.R1

Platforms All

route-target-type *keyword*

Synopsis Method for the AD per-ES routes advertisement

Context	configure service system bgp evpn ad-per-es-route route-target-type <i>keyword</i>
Tree	route-target-type
Default	evi-route-target
Options	evi-route-target, evi-route-target-set
Introduced	16.0.R1
Platforms	All

ethernet-segment [[ethernet-segment-name](#)] *string*

Synopsis	Enter the ethernet-segment list instance
Context	configure service system bgp evpn ethernet-segment <i>string</i>
Tree	ethernet-segment
Max. Instances	4095
Introduced	16.0.R1
Platforms	All

[ethernet-segment-name] *string*

Synopsis	Specify name for Ethernet segment
Context	configure service system bgp evpn ethernet-segment <i>string</i>
Tree	ethernet-segment
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ac-df-capability *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AC-influenced DF election capability
Context	configure service system bgp evpn ethernet-segment <i>string</i> ac-df-capability <i>keyword</i>
Tree	ac-df-capability

Description	<p>This command configures the Attachment Circuit-influenced (AC-influenced) designated forwarder (DF) election capability (AC-DF) into the DF election for the Ethernet Segment (ES).</p> <p>AC-DF supports EVPN Auto-Discovery per EVI/ES (AD per EVI/ES) routes for a specific PE, to ensure the PE is included in the candidate DF election list.</p> <p>When AC-DF is excluded on a specific ES, the presence or absence of the AD per EVI/ES routes from the ES peers does not modify the candidate DF election list for the ES. Excluding the AC-DF is recommended in ESs that use an operational group monitored by the access LAG to signal the standby LACP or to power-off.</p>
Default	include
Options	include, exclude
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Ethernet segment instance
Context	configure service system bgp evpn ethernet-segment <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

association

Synopsis	Enter the association context
Context	configure service system bgp evpn ethernet-segment <i>string</i> association
Tree	association
Introduced	16.0.R1
Platforms	All

lag [[lag-name](#)] *reference*

Synopsis	Enter the lag list instance
Context	configure service system bgp evpn ethernet-segment <i>string</i> association lag <i>reference</i>
Tree	lag

Max. Instances	1
Notes	The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop .
Introduced	16.0.R1
Platforms	All

[lag-name] *reference*

Synopsis	LAG multi-homed with the Ethernet segment entry
Context	configure service system bgp evpn ethernet-segment <i>string</i> association lag <i>reference</i>
Tree	lag
Reference	configure lag <i>string</i>
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

virtual-ranges

Synopsis	Enter the virtual-ranges context
Context	configure service system bgp evpn ethernet-segment <i>string</i> association lag <i>reference</i> virtual-ranges
Tree	virtual-ranges
Introduced	16.0.R4
Platforms	All

dot1q

Synopsis	Enter the dot1q context
Context	configure service system bgp evpn ethernet-segment <i>string</i> association lag <i>reference</i> virtual-ranges dot1q
Tree	dot1q
Introduced	16.0.R4
Platforms	All

q-tag [**start**] (*number* | *keyword*)

Synopsis	Enter the q-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>string association lag reference virtual-ranges dot1q q-tag</i> (<i>number</i> <i>keyword</i>)
Tree	q-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[start] (*number* | *keyword*)

Synopsis	Lower bound of the q-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>string association lag reference virtual-ranges dot1q q-tag</i> (<i>number</i> <i>keyword</i>)
Tree	q-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end (*number* | *keyword*)

Synopsis	Upper bound of the q-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>string association lag reference virtual-ranges dot1q q-tag</i> (<i>number</i> <i>keyword</i>) end (<i>number</i> <i>keyword</i>)
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

qinq

Synopsis	Enter the qinq context
Context	configure service system bgp evpn ethernet-segment <i>string association lag reference virtual-ranges qinq</i>
Tree	qinq
Introduced	16.0.R4
Platforms	All

s-tag [*start*] (*number* | *keyword*)

Synopsis	Enter the s-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>string association lag reference virtual-ranges qinq s-tag (number keyword)</i>
Tree	s-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[*start*] (*number* | *keyword*)

Synopsis	Lower bound of the s-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>string association lag reference virtual-ranges qinq s-tag (number keyword)</i>
Tree	s-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end (*number* | *keyword*)

Synopsis	Upper bound of the s-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>string association lag reference virtual-ranges qinq s-tag (number keyword) end (number keyword)</i>

Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

s-tag-c-tag [[s-tag](#)] (*number* | *keyword*) [c-tag-start](#) (*number* | *keyword*)

Synopsis	Enter the s-tag-c-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>string</i> association lag reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>)
Tree	s-tag-c-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[s-tag] (*number* | *keyword*)

Synopsis	Starting value of the qinq s-tag range associated with a virtual ethernet segment
Context	configure service system bgp evpn ethernet-segment <i>string</i> association lag reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>)
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

c-tag-start (*number* | *keyword*)

Synopsis	Starting value of the qinq c-tag range
Context	configure service system bgp evpn ethernet-segment <i>string</i> association lag reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>)
Tree	s-tag-c-tag

Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

c-tag-end (*number* | *keyword*)

Synopsis	End value of the qinq c-tag range
Context	configure service system bgp evpn ethernet-segment <i>string</i> association lag reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) c-tag-end (<i>number</i> <i>keyword</i>)
Tree	c-tag-end
Range	0 to 4094
Options	tag-*, null
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

network-interconnect-vxlan [**network-interconnect-vxlan-id**] *number*

Synopsis	Enter the network-interconnect-vxlan list instance
Context	configure service system bgp evpn ethernet-segment <i>string</i> association network-interconnect-vxlan <i>number</i>
Tree	network-interconnect-vxlan
Max. Instances	1
Notes	The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop .
Introduced	16.0.R1
Platforms	All

[network-interconnect-vxlan-id] *number*

Synopsis	VXLAN instance ID associated with the virtual ES
Context	configure service system bgp evpn ethernet-segment <i>string</i> association network-interconnect-vxlan <i>number</i>

Tree	network-interconnect-vxlan
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

virtual-ranges

Synopsis	Enter the virtual-ranges context
Context	configure service system bgp evpn ethernet-segment <i>string</i> association network-interconnect-vxlan <i>number</i> virtual-ranges
Tree	virtual-ranges
Introduced	16.0.R4
Platforms	All

service-id [[start](#)] *number*

Synopsis	Enter the service-id list instance
Context	configure service system bgp evpn ethernet-segment <i>string</i> association network-interconnect-vxlan <i>number</i> virtual-ranges service-id <i>number</i>
Tree	service-id
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[[start](#)] *number*

Synopsis	Lower bound of the service ID range
Context	configure service system bgp evpn ethernet-segment <i>string</i> association network-interconnect-vxlan <i>number</i> virtual-ranges service-id <i>number</i>
Tree	service-id
Range	1 to 2147483647
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end number

Synopsis	Upper bound of the service ID range
Context	configure service system bgp evpn ethernet-segment <i>string association network-interconnect-vxlan number virtual-ranges service-id number end number</i>
Tree	end
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

port [port-id] reference

Synopsis	Enter the port list instance
Context	configure service system bgp evpn ethernet-segment <i>string association port reference</i>
Tree	port
Max. Instances	1
Notes	The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop .
Introduced	16.0.R1
Platforms	All

[port-id] reference

Synopsis	Port multi-homed with this Ethernet segment entry
Context	configure service system bgp evpn ethernet-segment <i>string association port reference</i>
Tree	port
Reference	configure port <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

virtual-ranges

Synopsis	Enter the virtual-ranges context
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Context	configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges</i>
Tree	virtual-ranges
Introduced	16.0.R4
Platforms	All

dot1q

Synopsis	Enter the dot1q context
Context	configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges dot1q</i>
Tree	dot1q
Introduced	16.0.R4
Platforms	All

q-tag [[start](#)] (*number | keyword*)

Synopsis	Enter the q-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges dot1q q-tag</i> (<i>number keyword</i>)
Tree	q-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[\[start\]](#) (*number | keyword*)

Synopsis	Lower bound of the q-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges dot1q q-tag</i> (<i>number keyword</i>)
Tree	q-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4

Platforms All

end (*number* | *keyword*)

Synopsis Upper bound of the q-tag VLAN ID range

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [association](#) [port](#) *reference* [virtual-ranges](#) [dot1q](#) [q-tag](#) (*number* | *keyword*) **end** (*number* | *keyword*)

Tree [end](#)

Range 0 to 4094

Options tag-*

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

qinq

Synopsis Enter the **qinq** context

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [association](#) [port](#) *reference* [virtual-ranges](#) [qinq](#)

Tree [qinq](#)

Introduced 16.0.R4

Platforms All

s-tag [[start](#)] (*number* | *keyword*)

Synopsis Enter the **s-tag** list instance

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [association](#) [port](#) *reference* [virtual-ranges](#) [qinq](#) [s-tag](#) (*number* | *keyword*)

Tree [s-tag](#)

Max. Instances 8

Introduced 16.0.R4

Platforms All

[start] (*number* | *keyword*)

Synopsis	Lower bound of the s-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq s-tag</i> (<i>number</i> <i>keyword</i>)
Tree	s-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end (*number* | *keyword*)

Synopsis	Upper bound of the s-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq s-tag</i> (<i>number</i> <i>keyword</i>) end (<i>number</i> <i>keyword</i>)
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

s-tag-c-tag [**s-tag**] (*number* | *keyword*) **c-tag-start** (*number* | *keyword*)

Synopsis	Enter the s-tag-c-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq s-tag-c-tag</i> (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>)
Tree	s-tag-c-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[s-tag] (*number | keyword*)

Synopsis	Starting value of the qinq s-tag range associated with a virtual ethernet segment
Context	configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq s-tag-c-tag (number keyword) c-tag-start (number keyword)</i>
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

c-tag-start (*number | keyword*)

Synopsis	Starting value of the qinq c-tag range
Context	configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq s-tag-c-tag (number keyword) c-tag-start (number keyword)</i>
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

c-tag-end (*number | keyword*)

Synopsis	End value of the qinq c-tag range
Context	configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq s-tag-c-tag (number keyword) c-tag-start (number keyword) c-tag-end (number keyword)</i>
Tree	c-tag-end
Range	0 to 4094
Options	tag-*, null
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

pw-port [*pw-port-id*] *reference*

Synopsis	Enter the pw-port list instance
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port <i>reference</i>
Tree	pw-port
Max. Instances	1
Notes	The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop .
Introduced	16.0.R4
Platforms	All

[pw-port-id] *reference*

Synopsis	Pw-port multi-homed with this Ethernet segment entry
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port <i>reference</i>
Tree	pw-port
Reference	configure pw-port <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

pw-port-headend *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Control state of PW SAPs on PW port using EVPN
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port <i>reference</i> pw-port-headend <i>boolean</i>
Tree	pw-port-headend
Description	When configured to true , this command allows EVPN and its multi-homing procedures to control the state of the PW SAPs on the PW port. When configured to false , this command disallows EVPN and its multi-homing procedures to control the state of the PW SAPs on the PW port.

Default	false
Introduced	22.2.R1
Platforms	All

virtual-ranges

Synopsis	Enter the virtual-ranges context
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port <i>reference</i> virtual-ranges
Tree	virtual-ranges
Introduced	16.0.R4
Platforms	All

dot1q

Synopsis	Enter the dot1q context
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port <i>reference</i> virtual-ranges dot1q
Tree	dot1q
Introduced	16.0.R4
Platforms	All

q-tag [[start](#)] (*number* | *keyword*)

Synopsis	Enter the q-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port <i>reference</i> virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>)
Tree	q-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[\[start\]](#) (*number* | *keyword*)

Synopsis	Lower bound of the q-tag VLAN ID range
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Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>)
Tree	q-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end (*number* | *keyword*)

Synopsis	Upper bound of the q-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>) end (<i>number</i> <i>keyword</i>)
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

qinq

Synopsis	Enter the qinq context
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges qinq
Tree	qinq
Introduced	16.0.R4
Platforms	All

s-tag [[start](#)] (*number* | *keyword*)

Synopsis	Enter the s-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges qinq s-tag (<i>number</i> <i>keyword</i>)
Tree	s-tag

Max. Instances	8
Introduced	16.0.R4
Platforms	All

[start] (*number* | *keyword*)

Synopsis	Lower bound of the s-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges qinq s-tag (<i>number</i> <i>keyword</i>)
Tree	s-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end (*number* | *keyword*)

Synopsis	Upper bound of the s-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges qinq s-tag (<i>number</i> <i>keyword</i>) end (<i>number</i> <i>keyword</i>)
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

s-tag-c-tag [[s-tag](#)] (*number* | *keyword*) [c-tag-start](#) (*number* | *keyword*)

Synopsis	Enter the s-tag-c-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>)
Tree	s-tag-c-tag

Max. Instances	8
Introduced	16.0.R4
Platforms	All

[s-tag] (*number | keyword*)

Synopsis	Starting value of the qinq s-tag range associated with a virtual ethernet segment
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges qinq s-tag-c-tag (<i>number keyword</i>) c-tag-start (<i>number keyword</i>)
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

c-tag-start (*number | keyword*)

Synopsis	Starting value of the qinq c-tag range
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges qinq s-tag-c-tag (<i>number keyword</i>) c-tag-start (<i>number keyword</i>)
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

c-tag-end (*number | keyword*)

Synopsis	End value of the qinq c-tag range
Context	configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges qinq s-tag-c-tag (<i>number keyword</i>) c-tag-start (<i>number keyword</i>) c-tag-end (<i>number keyword</i>)

Tree	c-tag-end
Range	0 to 4094
Options	tag-*, null
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

sdp [[sdp-id](#)] *reference*

Synopsis	Enter the sdp list instance
Context	configure service system bgp evpn ethernet-segment <i>string</i> association sdp <i>reference</i>
Tree	sdp
Max. Instances	1
Notes	The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop .
Introduced	16.0.R1
Platforms	All

[sdp-id] *reference*

Synopsis	Sdp multi-homed with this Ethernet segment entry
Context	configure service system bgp evpn ethernet-segment <i>string</i> association sdp <i>reference</i>
Tree	sdp
Reference	configure service sdp <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

virtual-ranges

Synopsis	Enter the virtual-ranges context
Context	configure service system bgp evpn ethernet-segment <i>string</i> association sdp <i>reference</i> virtual-ranges
Tree	virtual-ranges

Introduced 16.0.R4
Platforms All

vc-id [*start*] *number*

Synopsis Enter the **vc-id** list instance
Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [association](#) [sdp](#) *reference*
[virtual-ranges](#) **vc-id** *number*
Tree [vc-id](#)
Max. Instances 8
Introduced 16.0.R4
Platforms All

[start] *number*

Synopsis Lower bound of the VC-ID range
Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [association](#) [sdp](#) *reference*
[virtual-ranges](#) **vc-id** *number*
Tree [vc-id](#)
Range 1 to 4294967295
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

end *number*

Synopsis Upper bound of the VC-ID range
Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [association](#) [sdp](#) *reference*
[virtual-ranges](#) **vc-id** *number* **end** *number*
Tree [end](#)
Range 1 to 4294967295
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

vprn-next-hop [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the vprn-next-hop list instance
Context	configure service system bgp evpn ethernet-segment <i>string</i> association vprn-next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	vprn-next-hop
Description	Commands in this list instance are used to associate an IPv4 or IPv6 address to an Ethernet segment. A virtual Ethernet segment using this VPRN next-hop association represents a Layer 3 Ethernet segment as described in <i>draft-sajassi-bess-evpn-ip-aliasing</i> . This IP address must be installed in the route table of the VPRN service identified by the EVI so that the Auto-Discovery per-ES or EVI routes for the ES are advertised. Only one VPRN next hop is supported per Ethernet segment.
Max. Instances	1
Notes	The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop .
Introduced	22.10.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	VPRN next-hop address
Context	configure service system bgp evpn ethernet-segment <i>string</i> association vprn-next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	vprn-next-hop
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

virtual-ranges

Synopsis	Enter the virtual-ranges context
Context	configure service system bgp evpn ethernet-segment <i>string</i> association vprn-next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) virtual-ranges
Tree	virtual-ranges
Introduced	22.10.R1
Platforms	All

evi [**start**] *number*

Synopsis	Add a list entry for evi
Context	configure service system bgp evpn ethernet-segment <i>string</i> association vprn-next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) virtual-ranges evi <i>number</i>
Tree	evi
Max. Instances	1
Introduced	22.10.R1
Platforms	All

[**start**] *number*

Synopsis	EVI range start information
Context	configure service system bgp evpn ethernet-segment <i>string</i> association vprn-next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) virtual-ranges evi <i>number</i>
Tree	evi
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

auto-esi *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	EVPN Ethernet segment auto-ESI type
Context	configure service system bgp evpn ethernet-segment <i>string</i> auto-esi <i>keyword</i>
Tree	auto-esi
Description	This command configures the auto-ESI type to use in the Ethernet segment (ES).When type-1 is configured, a manual ESI cannot be configured and the ESI is automatically derived in accordance with the RFC 7432 ESI type 1 definition.When configured to none , a manual ESI must be configured.
Default	none
Options	none, type-1

Introduced 21.5.R1
Platforms All

df-election

Synopsis Enter the **df-election** context
Context **configure service system bgp evpn ethernet-segment** *string* **df-election**
Tree [df-election](#)
Introduced 16.0.R1
Platforms All

es-activation-timer *number*

Synopsis Activation timer per Ethernet segment
Context **configure service system bgp evpn ethernet-segment** *string* **df-election es-activation-timer** *number*
Tree [es-activation-timer](#)
Range 0 to 100
Units seconds
Introduced 16.0.R1
Platforms All

manual

Synopsis Enter the **manual** context
Context **configure service system bgp evpn ethernet-segment** *string* **df-election manual**
Tree [manual](#)
Introduced 16.0.R1
Platforms All

evi [*start*] *number*

Synopsis Enter the **evi** list instance
Context **configure service system bgp evpn ethernet-segment** *string* **df-election manual evi** *number*
Tree [evi](#)

Introduced 16.0.R1
Platforms All

[start] *number*

Synopsis Lower bound of EVI range for which the PE is primary
Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [df-election](#) [manual](#) [evi](#)
number
Tree [evi](#)
Range 1 to 16777215
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

end *number*

Synopsis Upper bound of EVI range for which the PE is primary
Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [df-election](#) [manual](#) [evi](#)
number **end** *number*
Tree [end](#)
Range 1 to 16777215
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

isid [[start](#)] *number*

Synopsis Enter the **isid** list instance
Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [df-election](#) [manual](#) [isid](#)
number
Tree [isid](#)
Introduced 16.0.R1
Platforms All

[start] *number*

Synopsis	Lower bound of ISID range for which the PE is primary
Context	configure service system bgp evpn ethernet-segment string df-election manual isid <i>number</i>
Tree	isid
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of ISID range for which the PE is primary
Context	configure service system bgp evpn ethernet-segment string df-election manual isid <i>number</i> <i>end number</i>
Tree	end
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

preference

Synopsis	Enable the preference context
Context	configure service system bgp evpn ethernet-segment string df-election manual preference
Tree	preference
Introduced	16.0.R1
Platforms	All

mode *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Method used to elect the DF
Context	configure service system bgp evpn ethernet-segment <i>string</i> df-election manual preference mode <i>keyword</i>
Tree	mode
Default	revertive
Options	revertive, non-revertive
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Preference that is used to elect the designated forwarder
Context	configure service system bgp evpn ethernet-segment <i>string</i> df-election manual preference value <i>number</i>
Tree	value
Range	0 to 65535
Default	32767
Introduced	16.0.R1
Platforms	All

service-carving-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Mode of service carving enabled per EVPN associated with this Ethernet segment entry
Context	configure service system bgp evpn ethernet-segment <i>string</i> df-election service-carving-mode <i>keyword</i>
Tree	service-carving-mode
Default	auto
Options	auto, manual, off
Introduced	16.0.R1
Platforms	All

esi string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ethernet segment identifier
Context	configure service system bgp evpn ethernet-segment string esi string
Tree	esi
Introduced	16.0.R1
Platforms	All

multi-homing-mode keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multi-homing mode of the Ethernet segment
Context	configure service system bgp evpn ethernet-segment string multi-homing-mode keyword
Tree	multi-homing-mode
Default	none
Options	none, single-active, single-active-no-esi-label, all-active
Introduced	16.0.R1
Platforms	All

oper-group reference

Synopsis	Operational group ID
Context	configure service system bgp evpn ethernet-segment string oper-group reference
Tree	oper-group
Reference	configure service oper-group string
Introduced	19.10.R1
Platforms	All

orig-ip (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Originating IP address advertised in the ES route
Context	configure service system bgp evpn ethernet-segment <i>string orig-ip (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	orig-ip
Introduced	16.0.R4
Platforms	All

pbb

Synopsis	Enter the pbb context
Context	configure service system bgp evpn ethernet-segment <i>string pbb</i>
Tree	pbb
Introduced	16.0.R1
Platforms	All

es-bmac-table-size *number*

Synopsis	Size of virtual backbone mac table for this ethernet segment
Context	configure service system bgp evpn ethernet-segment <i>string pbb es-bmac-table-size number</i>
Tree	es-bmac-table-size
Range	1 to 511999
Default	8
Introduced	16.0.R1
Platforms	All

source-bmac-lsb *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Least significant bytes of the B-MAC for packet source
Context	configure service system bgp evpn ethernet-segment <i>string pbb source-bmac-lsb string</i>
Tree	source-bmac-lsb
Introduced	16.0.R1
Platforms	All

route-next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Next-hop IP address for ES and AD per ES routes
Context	configure service system bgp evpn ethernet-segment <i>string route-next-hop (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	route-next-hop
Introduced	16.0.R4
Platforms	All

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ethernet Segment type
Context	configure service system bgp evpn ethernet-segment <i>string type keyword</i>
Tree	type
Default	none
Options	none, virtual
Introduced	16.0.R1
Platforms	All

etree-leaf-label *boolean*

Synopsis	Enable E-Tree leaf label for PE
Context	configure service system bgp evpn etree-leaf-label <i>boolean</i>

Tree	etree-leaf-label
Description	<p>When configured to true, this command enables EVPN Ethernet-Tree (E-Tree) VPLS services on the router (not B-VPLS), allocates an E-Tree leaf label for the Provider Edge (PE) device, and configures the ILM entry. This command ensures that in-flight traffic can perform an ILM entry lookup at any time, and avoids discards when administratively enabling or disabling services, or reduces the timing window so that it does not occur during normal operation or configuration. The value for the E-Tree leaf label is set via the etree-leaf-label-value command.</p> <p>When configured to false, PE leaf labels are not supported. The bgp-evpn mpls admin-state command in the configure service epipe context cannot be administratively enabled if this command is set to false.</p>
Default	false
Introduced	16.0.R1
Platforms	All

etree-leaf-label-value (*number* | *keyword*)

Synopsis	Global E-tree leaf label for PE in EVPN E-Tree services
Context	configure service system bgp evpn etree-leaf-label-value (<i>number</i> <i>keyword</i>)
Tree	etree-leaf-label-value
Range	32 to 524526
Default	dynamic
Options	dynamic
Introduced	21.7.R1
Platforms	All

ip-prefix-routes

Synopsis	Enter the ip-prefix-routes context
Context	configure service system bgp evpn ip-prefix-routes
Tree	ip-prefix-routes
Introduced	21.2.R1
Platforms	All

d-path-length-ignore *boolean*

Synopsis	Ignore D-PATH length for BGP path selection of EVPN-IFF
Context	configure service system bgp evpn ip-prefix-routes d-path-length-ignore <i>boolean</i>

Tree	d-path-length-ignore
Default	false
Introduced	21.10.R1
Platforms	All

iff-attribute-uniform-propagation *boolean*

Synopsis	Enable uniform propagation of BGP attributes
Context	configure service system bgp evpn ip-prefix-routes iff-attribute-uniform-propagation <i>boolean</i>
Tree	iff-attribute-uniform-propagation
Description	<p>When configured to true, this command enables the uniform propagation of BGP attributes for EVPN-IFF (Interfaceful) routes. EVPN-IFF is used in R-VPLS services with bgp-evpn ip-route-advertisement. When enabled, the received EVPN-IFF routes for the R-VPLS can be propagated with the original BGP path attributes into EVPN-IFL, IPVPN, EVPN-IFF (in other R-VPLS services) or BGP IP routes advertised for the attached VPRN. The command also enables the attribute propagation in the opposite direction, for example, from EVPN-IFL/IPVPN/IP/EVPN-IFF routes into EVPN-IFF routes.</p> <p>The propagation follows the uniform mode defined in draft-ietf-bess-evpn-ipvpn-interworking.</p> <p>When configured to false, this command re-originates the BGP Path Attributes when propagating EVPN-IFF routes into other Inter-Subnet Forwarding families.</p>
Default	false
Introduced	21.2.R1
Platforms	All

iff-bgp-path-selection *boolean*

Synopsis	Enable BGP path selection for EVPN-IFF routes
Context	configure service system bgp evpn ip-prefix-routes iff-bgp-path-selection <i>boolean</i>
Tree	iff-bgp-path-selection
Description	<p>When configured to true, this command enables the EVPN-IFF routes to be ordered and selected in a similar manner as IPVPN or EVPN-IFL routes, that is, based on the regular BGP path selection process.</p> <p>When configured to false, this command makes the system order EVPN-IFF routes based on their {RVPLS Iindex, RD, Ethernet Tag}. For example, if two EVPN-IFF routes are received for the same prefix on the same R-VPLS and with different RDs (Route Distinguishers), the route with the lowest RD is selected.</p>
Default	false

Introduced	21.2.R1
Platforms	All

multicast-leave-sync-propagation *number*

Synopsis	Multicast leave group synchronization delay
Context	configure service system bgp evpn multicast-leave-sync-propagation <i>number</i>
Tree	multicast-leave-sync-propagation
Description	<p>This command configures the additional amount of time that the system waits before removing a multicast state that was synchronized in an Ethernet Segment via Multicast Join or Leave Synch routes. This value represents a delta corresponding to the time it takes for a BGP advertisement to propagate to ES peers.</p> <p>The node triggering the route computes the maximum response time as the product of the locally configured values, Last Member Query Count and Last Member Query Interval, and adds the delta value to the maximum response time. The query count value is configured in the configure services vrpn igmp robust-count command. The query interval value is taken from the configure service vpls sap igmp-snooping last-member-query-interval or the configure service vpls spoke-sdp igmp-snooping last-member-query-interval configuration, depending on the Ethernet Segment.</p> <p>Increasing the maximum response time by this value can help minimize the churn of removing and recreating the state on the node.</p> <p>This value should be configured consistently in all ES peers.</p>
Range	0 to 300
Default	5
Units	seconds
Introduced	20.7.R1
Platforms	All

route-distinguisher *string*

Synopsis	Route distinguisher for ES routes
Context	configure service system bgp evpn route-distinguisher <i>string</i>
Tree	route-distinguisher
Introduced	16.0.R1
Platforms	All

bgp-auto-rd-range

Synopsis	Enter the bgp-auto-rd-range context
Context	configure service system bgp-auto-rd-range
Tree	bgp-auto-rd-range
Introduced	16.0.R1
Platforms	All

community-value

Synopsis	Enter the community-value context
Context	configure service system bgp-auto-rd-range community-value
Tree	community-value
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of BGP route distinguisher community range
Context	configure service system bgp-auto-rd-range community-value <i>end number</i>
Tree	end
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of BGP route distinguisher community range
Context	configure service system bgp-auto-rd-range community-value <i>start number</i>
Tree	start
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	IP address used for selecting the route distinguisher
Context	configure service system bgp-auto-rd-range ip-address <i>string</i>
Tree	ip-address
Introduced	16.0.R1
Platforms	All

extended-default-qinq-sap-lookup *boolean*

Synopsis	Control the forwarding of the packets
Context	configure service system extended-default-qinq-sap-lookup <i>boolean</i>
Tree	extended-default-qinq-sap-lookup
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

fdb

Synopsis	Enter the fdb context
Context	configure service system fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

table-size *number*

Synopsis	Maximum FDB entries in the system
Context	configure service system fdb table-size <i>number</i>
Tree	table-size
Range	4095 to 2047999
Introduced	16.0.R1
Platforms	All

gre-eth-bridged

Synopsis	Enter the gre-eth-bridged context
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Context	configure service system gre-eth-bridged
Tree	gre-eth-bridged
Introduced	16.0.R1
Platforms	All

tunnel-termination [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the tunnel-termination list instance
Context	configure service system gre-eth-bridged tunnel-termination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	tunnel-termination
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Tunnel end-point IP address in the SR OS node
Context	configure service system gre-eth-bridged tunnel-termination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	tunnel-termination
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fpe-id reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	FPE ID
Context	configure service system gre-eth-bridged tunnel-termination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) fpe-id reference
Tree	fpe-id
Reference	configure fwd-path-ext fpe <i>number</i>
Notes	This element is mandatory.

Introduced 16.0.R1
Platforms All

pw-port-list

Synopsis Enter the **pw-port-list** context
Context **configure** [service](#) [system](#) [pw-port-list](#)
Tree [pw-port-list](#)
Introduced 16.0.R6
Platforms VSR

port [[port-id](#)] *string*

Synopsis Add a list entry for **port**
Context **configure** [service](#) [system](#) [pw-port-list](#) [port](#) *string*
Tree [port](#)
Introduced 16.0.R6
Platforms VSR

[port-id] *string*

Synopsis Port ID
Context **configure** [service](#) [system](#) [pw-port-list](#) [port](#) *string*
Tree [port](#)
Notes This element is part of a list key.
Introduced 16.0.R6
Platforms VSR

vpn-gre-source-ip *string*

Synopsis VPN GRE source ip-address
Context **configure** [service](#) [system](#) [vpn-gre-source-ip](#) *string*
Tree [vpn-gre-source-ip](#)
Introduced 16.0.R4
Platforms All

vxlan

Synopsis	Enter the vxlan context
Context	configure service system vxlan
Tree	vxlan
Introduced	16.0.R1
Platforms	All

assisted-replication

Synopsis	Enter the assisted-replication context
Context	configure service system vxlan assisted-replication
Tree	assisted-replication
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	IP address for assisted replication in the router
Context	configure service system vxlan assisted-replication ip-address <i>string</i>
Tree	ip-address
Introduced	16.0.R1
Platforms	All

tunnel-termination [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the tunnel-termination list instance
Context	configure service system vxlan tunnel-termination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	tunnel-termination
Introduced	16.0.R1
Platforms	All

[**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Non-system IP address that terminates the VXLAN
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Context	configure service system vxlan tunnel-termination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	tunnel-termination
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fpe-id reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	FPE id for this entry
Context	configure service system vxlan tunnel-termination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fpe-id reference
Tree	fpe-id
Reference	configure fwd-path-ext fpe <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

template

Synopsis	Enter the template context
Context	configure service template
Tree	template
Introduced	16.0.R1
Platforms	All

epipe-sap-template [[name](#)] *string*

Synopsis	Enter the epipe-sap-template list instance
Context	configure service template epipe-sap-template <i>string</i>
Tree	epipe-sap-template
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis SAP template name
Context **configure service template epipe-sap-template** *string*
Tree [epipe-sap-template](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis Enter the **egress** context
Context **configure service template epipe-sap-template** *string* **egress**
Tree [egress](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis Enter the **filter** context
Context **configure service template epipe-sap-template** *string* **egress filter** **filter**
Tree [filter](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis IPv4 filter policy name
Context **configure service template epipe-sap-template** *string* **egress filter ip** *reference*
Tree [ip](#)
Reference **configure filter ip-filter** *string*
Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [service template epipe-sap-template](#) *string* [egress filter ipv6 reference](#)
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter](#) *string*
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac reference

Synopsis MAC filter policy name
Context **configure** [service template epipe-sap-template](#) *string* [egress filter mac reference](#)
Tree [mac](#)
Reference **configure** [filter mac-filter](#) *string*
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
Context **configure** [service template epipe-sap-template](#) *string* [egress qos](#)
Tree [qos](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name reference

Synopsis SAP egress QoS policy name to apply to the SAP
Context **configure** [service template epipe-sap-template](#) *string* [egress qos policy-name reference](#)
Tree [policy-name](#)
Reference **configure** [qos sap-egress](#) *string*
Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis Enter the **ingress** context
Context **configure** [service template](#) [epipe-sap-template](#) *string* **ingress**
Tree [ingress](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis Enter the **filter** context
Context **configure** [service template](#) [epipe-sap-template](#) *string* **ingress** **filter**
Tree [filter](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis IPv4 filter policy name
Context **configure** [service template](#) [epipe-sap-template](#) *string* **ingress** **filter** **ip** *reference*
Tree [ip](#)
Reference **configure** [filter](#) [ip-filter](#) *string*
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [service template](#) [epipe-sap-template](#) *string* **ingress** **filter** **ipv6** *reference*
Tree [ipv6](#)
Reference **configure** [filter](#) [ipv6-filter](#) *string*
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac reference

Synopsis	MAC filter policy name
Context	configure service template epipe-sap-template <i>string</i> ingress filter mac reference
Tree	mac
Reference	configure filter mac-filter <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure service template epipe-sap-template <i>string</i> ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name reference

Synopsis	SAP ingress QoS policy name to apply to the SAP
Context	configure service template epipe-sap-template <i>string</i> ingress qos policy-name reference
Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queuing-type keyword

Synopsis	Queuing type
Context	configure service template epipe-sap-template <i>string</i> ingress qos queuing-type keyword
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

upnp

Synopsis	Enter the upnp context
Context	configure service upnp
Tree	upnp
Description	Commands in this context configure Universal Plug 'n Play (UPnP) for the service.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy [name] string

Synopsis	Enter the policy list instance
Context	configure service upnp policy string
Tree	policy
Description	Commands in this context configure the attributes of the UPnP policy.
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	UPnP policy name
Context	configure service upnp policy string
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure service upnp policy string description string
Tree	description

String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mapping-limit *number*

Synopsis Maximum number of UPnP mappings per subscriber
Context **configure service upnp policy** *string mapping-limit number*
Tree [mapping-limit](#)
Range 1 to 256
Default 256
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*

Synopsis HTTP TCP port to which the UPnP IGD listens
Context **configure service upnp policy** *string port number*
Tree [port](#)
Range 1 to 65535
Default 5000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

strict-mode *boolean*

Synopsis Enable UPnP strict mode
Context **configure service upnp policy** *string strict-mode boolean*
Tree [strict-mode](#)
Description When configured to **true**, this command enables UPnP strict mode, in which the system only allows changes to an existing UPnP mapping if the request comes from the same UPnP client.
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vpls [[service-name](#)] *string*

Synopsis	Enter the vpls list instance
Context	configure service vpls <i>string</i>
Tree	vpls
Introduced	16.0.R1
Platforms	All

[service-name] *string*

Synopsis	Administrative service name
Context	configure service vpls <i>string</i>
Tree	vpls
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service
Context	configure service vpls <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bgp [[bgp-instance](#)] *number*

Synopsis	Enter the bgp list instance
Context	configure service vpls <i>string</i> bgp <i>number</i>
Tree	bgp
Introduced	16.0.R1
Platforms	All

[bgp-instance] number

Synopsis	BGP instance
Context	configure service vpls string bgp number
Tree	bgp
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adv-service-mtu number

Synopsis	Advertised service MTU value
Context	configure service vpls string bgp number adv-service-mtu number
Tree	adv-service-mtu
Description	This command configures the MTU signaled value used in the BGP for the service. When configured, the router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.
Range	0 to 9782
Introduced	22.2.R1
Platforms	All

pw-template-binding [pw-template-name] reference

Synopsis	Enter the pw-template-binding list instance
Context	configure service vpls string bgp number pw-template-binding reference
Tree	pw-template-binding
Max. Instances	100
Introduced	16.0.R1
Platforms	All

[pw-template-name] reference

Synopsis	Policy name
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Context	configure service vpls string bgp number pw-template-binding reference
Tree	pw-template-binding
Reference	configure service pw-template string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure service vpls string bgp number pw-template-binding reference bfd-liveness boolean
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template name for PW-Template binding
Context	configure service vpls string bgp number pw-template-binding reference bfd-template reference
Tree	bfd-template
Reference	configure bfd bfd-template string
Introduced	16.0.R1
Platforms	All

import-rt *string*

Synopsis	Import route-target communities
Context	configure service vpls string bgp number pw-template-binding reference import-rt string
Tree	import-rt
String Length	10 to 28
Max. Instances	5
Introduced	16.0.R1

Platforms All

monitor-oper-group *reference*

Synopsis Operational group to monitor

Context **configure** [service vpls string](#) [bgp number](#) [pw-template-binding reference](#) [monitor-oper-group reference](#)

Tree [monitor-oper-group](#)

Reference **configure** [service oper-group string](#)

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms All

oper-group *reference*

Synopsis Operational group

Context **configure** [service vpls string](#) [bgp number](#) [pw-template-binding reference](#) [oper-group reference](#)

Tree [oper-group](#)

Reference **configure** [service oper-group string](#)

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms All

split-horizon-group *string*

Synopsis Split horizon group

Context **configure** [service vpls string](#) [bgp number](#) [pw-template-binding reference](#) [split-horizon-group string](#)

Tree [split-horizon-group](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

route-distinguisher (*keyword | vpn-route-distinguisher*)

Synopsis	High-order 6 bytes that are used as string to compose VSI-ID for use in NLRI
Context	configure service vpls string bgp number route-distinguisher (<i>keyword vpn-route-distinguisher</i>)
Tree	route-distinguisher
Options	auto-rd
Introduced	16.0.R1
Platforms	All

route-target

Synopsis	Enter the route-target context
Context	configure service vpls string bgp number route-target
Tree	route-target
Introduced	16.0.R1
Platforms	All

export *string*

Synopsis	Extended community name for default import policy
Context	configure service vpls string bgp number route-target export <i>string</i>
Tree	export
String Length	10 to 28
Introduced	16.0.R1
Platforms	All

import *string*

Synopsis	Extended community name for default import policy
Context	configure service vpls string bgp number route-target import <i>string</i>
Tree	import
String Length	10 to 28
Introduced	16.0.R1
Platforms	All

vsi-export *reference*

Synopsis	VSI export policies
Context	configure service vpls <i>string</i> bgp <i>number</i> vsi-export <i>reference</i>
Tree	vsi-export
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

vsi-import *reference*

Synopsis	VSI import policies
Context	configure service vpls <i>string</i> bgp <i>number</i> vsi-import <i>reference</i>
Tree	vsi-import
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

bgp-ad

Synopsis	Enable the bgp-ad context
Context	configure service vpls <i>string</i> bgp-ad
Tree	bgp-ad
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP Auto-Discovery
Context	configure service vpls <i>string</i> bgp-ad admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

vpls-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VPLS identifier as a 8-byte route distinguisher
Context	configure service vpls <i>string</i> bgp-ad vpls-id <i>string</i>
Tree	vpls-id
Introduced	16.0.R1
Platforms	All

vsi-id-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VSI prefix value
Context	configure service vpls <i>string</i> bgp-ad vsi-id-prefix <i>string</i>
Tree	vsi-id-prefix
Introduced	16.0.R1
Platforms	All

bgp-evpn

Synopsis	Enable the bgp-evpn context
Context	configure service vpls <i>string</i> bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

accept-ivpls-evpn-flush *boolean*

Synopsis	Accept and process non-zero ethernet-tag MAC routes
Context	configure service vpls string bgp-evpn accept-ivpls-evpn-flush <i>boolean</i>
Tree	accept-ivpls-evpn-flush
Default	false
Introduced	16.0.R1
Platforms	All

evi *number*

Synopsis	EVPN ID
Context	configure service vpls string bgp-evpn evi <i>number</i>
Tree	evi
Description	<p>This command configures a 2-byte EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers.</p> <p>If not specified, the EVPN ID value is zero and no route distinguisher or route targets are auto-derived from it.</p> <p>If the EVI ID value is specified and no other route-distinguisher or route-target is configured in the service, the following rules apply:</p> <ul style="list-style-type: none">• the route distinguisher is derived from <system_ip>:evi• the route target is derived from <autonomous-system>:evi <p>If VSI import and export policies are configured, the route target must be configured in the policies and those values take precedence over the auto-derived route targets. If bgp-ad vpls-id and bgp-evpn evi are both configured on the same service, the VPLS ID auto-derived route target or route distinguisher takes precedence over the values auto-derived from the EVI. Use the show service id bgp command to display the operational route target for a service.</p>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

incl-mcast-orig-ip *string*

Synopsis	Originating IP address
Context	configure service vpls string bgp-evpn incl-mcast-orig-ip <i>string</i>
Tree	incl-mcast-orig-ip

Introduced 16.0.R1
Platforms All

isid-route-target

Synopsis Enter the **isid-route-target** context
Context **configure service vpls string bgp-evpn isid-route-target**
Tree [isid-route-target](#)
Introduced 16.0.R1
Platforms All

range [start] number

Synopsis Enter the **range** list instance
Context **configure service vpls string bgp-evpn isid-route-target range number**
Tree [range](#)
Max. Instances 8192
Introduced 16.0.R1
Platforms All

[start] number

Synopsis Lower bound of the ISID range
Context **configure service vpls string bgp-evpn isid-route-target range number**
Tree [range](#)
Range 1 to 16777215
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

end number

Synopsis Upper bound of the ISID range
Context **configure service vpls string bgp-evpn isid-route-target range number end number**

Tree	end
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

route-target *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Route for the ISID range
Context	configure service vpls string bgp-evpn isid-route-target range <i>number</i> route-target string
Tree	route-target
String Length	10 to 28
Introduced	16.0.R1
Platforms	All

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Method used to support the PBB-EVPN ISID-based route target advertisement
Context	configure service vpls string bgp-evpn isid-route-target range <i>number</i> type keyword
Tree	type
Default	auto
Options	auto, configured
Introduced	16.0.R1
Platforms	All

mac-duplication

Synopsis	Enter the mac-duplication context
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Context	configure service vpls string bgp-evpn mac-duplication
Tree	mac-duplication
Introduced	16.0.R1
Platforms	All

blackhole *boolean*

Synopsis	Enable black hole dup MAC configuration
Context	configure service vpls string bgp-evpn mac-duplication blackhole <i>boolean</i>
Tree	blackhole
Default	false
Introduced	16.0.R1
Platforms	All

detect

Synopsis	Enter the detect context
Context	configure service vpls string bgp-evpn mac-duplication detect
Tree	detect
Introduced	16.0.R1
Platforms	All

num-moves *number*

Synopsis	BGP EVPN MAC duplication detection number of moves
Context	configure service vpls string bgp-evpn mac-duplication detect num-moves <i>number</i>
Tree	num-moves
Range	3 to 10
Default	5
Introduced	16.0.R1
Platforms	All

window *number*

Synopsis	BGP EVPN MAC duplication detection window
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Context	configure service vpls string bgp-evpn mac-duplication detect window number
Tree	window
Range	1 to 15
Default	3
Units	minutes
Introduced	16.0.R1
Platforms	All

retry (*number* | *keyword*)

Synopsis	BGP EVPN MAC duplication retry
Context	configure service vpls string bgp-evpn mac-duplication retry (<i>number</i> <i>keyword</i>)
Tree	retry
Range	2 to 60
Default	9
Units	minutes
Options	never
Introduced	16.0.R1
Platforms	All

mpls [*bgp-instance*] *number*

Synopsis	Enter the mpls list instance
Context	configure service vpls string bgp-evpn mpls number
Tree	mpls
Introduced	16.0.R1
Platforms	All

[bgp-instance] *number*

Synopsis	BGP instance
Context	configure service vpls string bgp-evpn mpls number
Tree	mpls
Range	1 to 2
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP EVPN MPLS
Context	configure service vpls string bgp-evpn mpls number admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

auto-bind-tunnel

Synopsis	Enter the auto-bind-tunnel context
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel
Tree	auto-bind-tunnel
Introduced	16.0.R1
Platforms	All

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel allow-flex-algo-fallback <i>boolean</i>
Tree	allow-flex-algo-fallback
Description	<p>When configured to true, a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to false, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	20.10.R1
Platforms	All

ecmp *number*

Synopsis	Maximum ECMP routes information
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel ecmp <i>number</i>
Tree	ecmp
Range	1 to 32
Default	1
Introduced	19.10.R1
Platforms	All

enforce-strict-tunnel-tagging *boolean*

Synopsis	Enable/disable enforcement of strict tunnel tagging
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel enforce-strict-tunnel-tagging <i>boolean</i>
Tree	enforce-strict-tunnel-tagging
Default	false
Introduced	16.0.R4
Platforms	All

resolution *keyword*

Synopsis	Resolution method for tunnel selection
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution <i>keyword</i>
Tree	resolution
Default	none
Options	none, filter, any
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter
Tree	resolution-filter

Introduced	16.0.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter bgp boolean
Tree	bgp
Description	When configured to true , BGP searches the BGP LSP for the address of the BGP next hop. When configured to false , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.
Default	false
Introduced	16.0.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter ldp boolean
Tree	ldp
Description	When configured to true , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop. When configured to false , LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter mpls-fwd-policy boolean
Tree	mpls-fwd-policy

Description	When configured to true , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop. When configured to false , the MPLS forwarding policy is not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

rib-api *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter rib-api <i>boolean</i>
Tree	rib-api
Description	When configured to true , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service. When configured to false , the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter rsvp <i>boolean</i>
Tree	rsvp
Description	When configured to true , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID. When configured to false , the RSVP LSP is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

sr-isis boolean

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-isis boolean
Tree	sr-isis
Description	<p>When configured to true, BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.</p> <p>When configured to false, IS-IS tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf boolean

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-ospf boolean
Tree	sr-ospf
Description	<p>When configured to true, BGP uses an OSPF tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF instance.</p> <p>When configured to false, OSPF tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf3 boolean

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-ospf3 boolean
Tree	sr-ospf3
Description	When configured to true , BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance.

When configured to **false**, OSPF3 tunneling is not used for next-hop resolution.

Default	false
Introduced	19.10.R1
Platforms	All

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	When configured to true , this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route. When configured to false , SR policies are not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Description	When configured to true , BGP uses an SR-TE tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID. When configured to false , SR-TE tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter udp boolean
Tree	udp
Description	When configured to true , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop. When configured to false , MPLS over UDP tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Allow weighted load balancing
Context	configure service vpls string bgp-evpn mpls number auto-bind-tunnel weighted-ecmp boolean
Tree	weighted-ecmp
Description	When configured to true , this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP. When configured to false , this command disables weighted ECMP for next-hop tunnel selection.
Default	false
Introduced	22.7.R1
Platforms	All

control-word *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow use of the CW bit in the label message
Context	configure service vpls string bgp-evpn mpls number control-word boolean
Tree	control-word
Default	false

Introduced	16.0.R1
Platforms	All

default-route-tag *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	configure service vpls string bgp-evpn mpls number default-route-tag <i>string</i>
Tree	default-route-tag
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	16.0.R4
Platforms	All

dynamic-egress-label-limit *boolean*

Synopsis	Enables dynamic egress label limit
Context	configure service vpls string bgp-evpn mpls number dynamic-egress-label-limit <i>boolean</i>
Tree	dynamic-egress-label-limit
Description	<p>When configured to true, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p>

For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.

When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.

Default	false
Introduced	22.2.R1
Platforms	All

ecmp number

Synopsis	Maximum ECMP routes information
Context	configure service vpls string bgp-evpn mpls number ecmp number
Tree	ecmp
Range	1 to 32
Default	1
Introduced	16.0.R1
Platforms	All

entropy-label boolean

Synopsis	Allow use of entropy labels for spoke SDPs
Context	configure service vpls string bgp-evpn mpls number entropy-label boolean
Tree	entropy-label
Default	false
Introduced	16.0.R1
Platforms	All

evi-three-byte-auto-rt boolean



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	configure service vpls string bgp-evpn mpls number evi-three-byte-auto-rt boolean

Tree	evi-three-byte-auto-rt
Description	<p>When configured to true, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).</p> <p>Where:</p> <ul style="list-style-type: none"> • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI <p>When configured to false, route target derivation is not allowed.</p>
Default	false
Introduced	21.10.R1
Platforms	All

fdb

Synopsis	Enter the fdb context
Context	configure service vpls string bgp-evpn mpls number fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action keyword

Synopsis	Relearn request for a protected MAC is received action
Context	configure service vpls string bgp-evpn mpls number fdb protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Options	discard
Introduced	16.0.R1
Platforms	All

force-vc-forwarding *keyword*

Synopsis	VC forwarding action
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> force-vc-forwarding <i>keyword</i>
Tree	force-vc-forwarding
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

ingress-replication-bum-label *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use the same label as the one advertised for unicast traffic
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> ingress-replication-bum-label <i>boolean</i>
Tree	ingress-replication-bum-label
Default	false
Introduced	16.0.R1
Platforms	All

mh-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multihoming mode
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> mh-mode <i>keyword</i>
Tree	mh-mode
Description	This command configures each BGP-EVPN instance to behave as either network or access. You can only configure one network instance for the service. If the service has a provider tunnel enabled, it requires a network instance.
Default	network
Options	access, network

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

oper-group *reference*

Synopsis	Operational group ID
Context	configure service vpls string bgp-evpn mpls number oper-group reference
Tree	oper-group
Reference	configure service oper-group string
Introduced	19.10.R1
Platforms	All

route-next-hop

Synopsis	Enter the route-next-hop context
Context	configure service vpls string bgp-evpn mpls number route-next-hop
Tree	route-next-hop
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	19.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	configure service vpls string bgp-evpn mpls number route-next-hop ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	19.10.R1
Platforms	All

system-ipv4



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> route-next-hop system-ipv4
Tree	system-ipv4
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	19.10.R1
Platforms	All

system-ipv6



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> route-next-hop system-ipv6
Tree	system-ipv6
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	19.10.R1
Platforms	All

send-tunnel-encap

Synopsis	Enter the send-tunnel-encap context
Context	configure service vpls <i>string</i> bgp-evpn mpls <i>number</i> send-tunnel-encap
Tree	send-tunnel-encap
Introduced	16.0.R1
Platforms	All

mpls *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS encapsulation
Context	configure <i>service vpls string bgp-evpn mpls number send-tunnel-encap mpls boolean</i>
Tree	<i>mpls</i>
Default	true
Introduced	16.0.R1
Platforms	All

mpls-over-udp *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS over UDP encapsulation
Context	configure <i>service vpls string bgp-evpn mpls number send-tunnel-encap mpls-over-udp boolean</i>
Tree	<i>mpls-over-udp</i>
Default	false
Introduced	16.0.R1
Platforms	All

split-horizon-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Split horizon group
Context	configure <i>service vpls string bgp-evpn mpls number split-horizon-group reference</i>
Tree	<i>split-horizon-group</i>
Description	This command configures the value of split-horizon group for all BGP-EVPN segment routing v6 instances.
Reference	configure <i>service vpls string split-horizon-group string</i>

Introduced 16.0.R1
Platforms All

routes

Synopsis Enter the **routes** context
Context **configure service vpls string bgp-evpn routes**
Tree [routes](#)
Introduced 16.0.R1
Platforms All

incl-mcast

Synopsis Enter the **incl-mcast** context
Context **configure service vpls string bgp-evpn routes incl-mcast**
Tree [incl-mcast](#)
Introduced 16.0.R1
Platforms All

advertise-ingress-replication *boolean*

Synopsis BGP EVPN IMET-IR route advertisement
Context **configure service vpls string bgp-evpn routes incl-mcast advertise-ingress-replication boolean**
Tree [advertise-ingress-replication](#)
Default true
Introduced 16.0.R1
Platforms All

ip-prefix

Synopsis Enter the **ip-prefix** context
Context **configure service vpls string bgp-evpn routes ip-prefix**
Tree [ip-prefix](#)
Introduced 16.0.R1

Platforms All

advertise *boolean*

Synopsis Status for the IP prefix routes advertisement

Context **configure** *service vpls string bgp-evpn routes ip-prefix advertise boolean*

Tree [advertise](#)

Default false

Introduced 16.0.R1

Platforms All

domain-id *string*

Synopsis Domain ID of received BGP route before readvertisement

Context **configure** *service vpls string bgp-evpn routes ip-prefix domain-id string*

Tree [domain-id](#)

Description This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in *draft-ietf-bess-evpn-ipvpn-interworking*. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

```
Seg Len=1 / 65000:1:128
```

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

```
Seg Len=2 / 65000:2:70 / 65000:1:128
```

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

Introduced 21.10.R1

Platforms All

include-direct-interface-host *boolean*

Synopsis	Advertise the interface host address in EVPN
Context	configure service vpls string bgp-evpn routes ip-prefix include-direct-interface-host <i>boolean</i>
Tree	include-direct-interface-host
Default	false
Introduced	16.0.R1
Platforms	All

link-bandwidth

Synopsis	Enter the link-bandwidth context
Context	configure service vpls string bgp-evpn routes ip-prefix link-bandwidth
Tree	link-bandwidth
Introduced	22.7.R1
Platforms	All

advertise

Synopsis	Enable the advertise context
Context	configure service vpls string bgp-evpn routes ip-prefix link-bandwidth advertise
Tree	advertise
Introduced	22.7.R1
Platforms	All

max-dynamic-weight *number*

Synopsis	Maximum weight of the advertised evpn-iff route
Context	configure service vpls string bgp-evpn routes ip-prefix link-bandwidth advertise max-dynamic-weight <i>number</i>
Tree	max-dynamic-weight
Range	1 to 128
Default	128
Introduced	22.7.R1
Platforms	All

weight (*number* | *keyword*)

Synopsis	Weight of the advertised evpn-iff route
Context	configure service vpls <i>string</i> bgp-evpn routes ip-prefix link-bandwidth advertise weight (<i>number</i> <i>keyword</i>)
Tree	weight
Range	1 to 128
Default	dynamic
Options	dynamic
Introduced	22.7.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Enable weighted ECMP
Context	configure service vpls <i>string</i> bgp-evpn routes ip-prefix link-bandwidth weighted-ecmp <i>boolean</i>
Tree	weighted-ecmp
Default	false
Introduced	22.7.R1
Platforms	All

mac-ip

Synopsis	Enter the mac-ip context
Context	configure service vpls <i>string</i> bgp-evpn routes mac-ip
Tree	mac-ip
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Status for the BGP-EVPN MAC/IP routes advertisement
Context	configure service vpls <i>string</i> bgp-evpn routes mac-ip advertise <i>boolean</i>
Tree	advertise
Default	true

Introduced 16.0.R1
Platforms All

cfm-mac *boolean*

Synopsis Enable advertisement and withdrawal of MAC address
Context **configure** [service vpls string bgp-evpn routes mac-ip cfm-mac](#) *boolean*
Tree [cfm-mac](#)
Default false
Introduced 16.0.R1
Platforms All

unknown-mac *boolean*

Synopsis Enable advertisement of unknown MAC route in BGP
Context **configure** [service vpls string bgp-evpn routes mac-ip unknown-mac](#) *boolean*
Tree [unknown-mac](#)
Default false
Introduced 16.0.R1
Platforms All

sel-mcast

Synopsis Enter the **sel-mcast** context
Context **configure** [service vpls string bgp-evpn routes sel-mcast](#)
Tree [sel-mcast](#)
Introduced 19.10.R2
Platforms All

advertise *boolean*

Synopsis Advertise Selective Multicast Ethernet Tag routes
Context **configure** [service vpls string bgp-evpn routes sel-mcast advertise](#) *boolean*
Tree [advertise](#)
Default false

Introduced 19.10.R2
Platforms All

segment-routing-v6 [[bgp-instance](#)] *number*

Synopsis Enter the **segment-routing-v6** list instance
Context **configure** [service vpls string](#) [bgp-evpn segment-routing-v6 number](#)
Tree [segment-routing-v6](#)
Max. Instances 1
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[bgp-instance] *number*

Synopsis BGP instance
Context **configure** [service vpls string](#) [bgp-evpn segment-routing-v6 number](#)
Tree [segment-routing-v6](#)
Range 1 to 2
Notes This element is part of a list key.
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis Administrative state of segment routing over IPv6
Context **configure** [service vpls string](#) [bgp-evpn segment-routing-v6 number](#) **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-route-tag *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	configure service vpls string bgp-evpn segment-routing-v6 number default-route-tag string
Tree	default-route-tag
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none">• If a service is configured with both default-route-tag X and proxy-arp evpn-route-tag Y, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement.• If a given IP-prefix route is tagged in the route-table with tag A and the R-VPLS, in which the route is advertised, uses B as the default-route-tag, then EVPN keeps tag A when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ecmp *number*

Synopsis	Maximum ECMP value configured on the service
Context	configure service vpls string bgp-evpn segment-routing-v6 number ecmp number
Tree	ecmp
Range	1 to 32
Default	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

evi-three-byte-auto-rt *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	configure service vpls string bgp-evpn segment-routing-v6 number evi-three-byte-auto-rt boolean
Tree	evi-three-byte-auto-rt
Description	<p>When configured to true, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).</p> <p>Where:</p> <ul style="list-style-type: none"> • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI <p>When configured to false, route target derivation is not allowed.</p>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

fdb

Synopsis	Enter the fdb context
Context	configure service vpls string bgp-evpn segment-routing-v6 number fdb
Tree	fdb
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protected-src-mac-violation-action *keyword*

Synopsis	Relearn request for a protected MAC is received action
Context	configure service vpls string bgp-evpn segment-routing-v6 number fdb protected-src-mac-violation-action keyword

Tree	protected-src-mac-violation-action
Options	discard
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

force-vc-forwarding *keyword*

Synopsis	Datapath forwarding to force vlan-vc-type
Context	configure service vpls string bgp-evpn segment-routing-v6 number force-vc-forwarding <i>keyword</i>
Tree	force-vc-forwarding
Description	<p>This command allows the system to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag added in the customer frame before sending it to the EVPN destinations.</p> <p>This command may be used in conjunction with the sap ingress vlan-translation command. If so used, the configured translated VLAN ID is the VLAN ID sent to the EVPN destinations as opposed to the service-delimiting tag VLAN ID. If the ingress SAP/SDP binding is 'null'-encapsulated, the output VLAN ID and pbits is zero.</p>
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mh-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multihoming mode
Context	configure service vpls string bgp-evpn segment-routing-v6 number mh-mode <i>keyword</i>
Tree	mh-mode
Default	network
Options	access, network
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

oper-group *reference*

Synopsis	Operational group
Context	configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> oper-group reference
Tree	oper-group
Description	<p>This command adds the BGP EVPN SRv6 instance or an Ethernet Segment (ES) as a member of the operational group.</p> <p>When configured on a BGP EVPN instance, the operational group is up when it is either empty (meaning that the operational group has no members) or at least an EVPN destination is created under the EVPN instance added as member. When configured, no other SAP, SDP binding, or BGP EVPN instance can be added to the same operational group within the same or different service.</p> <p>The operational group will be down when it is applied on a BGP EVPN instance as well as:</p> <ul style="list-style-type: none">• the service is admin-state disable• the BGP EVPN MPLS and VXLAN are admin-state disable• all the EVPN destinations in the instance are removed <p>When configured on an ES, the state of the operational group depends on the state of the SAPs contained in the ES. The operational group transitions to up if at least one SAP in the ES is up. The operational group goes down when all the associated SAPs are operationally down. The ES operational group should be monitored on the LAG associated to the ES, along with single-active multi-homing, so that the NDF state can be signaled to the CE by LAG standby signaling.</p>
Reference	configure service oper-group <i>string</i>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

resolution *keyword*

Synopsis	Resolution options for routes
Context	configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> resolution keyword
Tree	resolution
Default	route-table
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-next-hop

Synopsis	Enter the route-next-hop context
Context	configure service vpls string bgp-evpn segment-routing-v6 number route-next-hop
Tree	route-next-hop
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	configure service vpls string bgp-evpn segment-routing-v6 number route-next-hop ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

system-ipv4



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	configure service vpls string bgp-evpn segment-routing-v6 number route-next-hop system-ipv4
Tree	system-ipv4
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

system-ipv6



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	configure service vpls string bgp-evpn segment-routing-v6 number route-next-hop system-ipv6
Tree	system-ipv6
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IPv6 address
Context	configure service vpls string bgp-evpn segment-routing-v6 number source-address string
Tree	source-address
Description	<p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the router "base" segment-routing segment-routing-v6 source-address context.</p> <p>A source IPv6 address must be configured in this context or in the base router context.</p> <p>The system does not check if the address entered is a valid local address.</p>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

split-horizon-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Split horizon group
Context	configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> split-horizon-group <i>reference</i>
Tree	split-horizon-group
Description	This command configures the value of split-horizon group for all BGP-EVPN segment routing v6 instances.
Reference	configure service vpls <i>string</i> split-horizon-group <i>string</i>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6

Synopsis	Enter the srv6 context
Context	configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6
Tree	srv6
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-locator *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6 default-locator <i>string</i>
Tree	default-locator
Description	This command specifies the locator that exists in the SRv6 service instance and is used as the default locator for the service.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

instance *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Segment Routing SRv6 instance
Context	configure service vpls string bgp-evpn segment-routing-v6 number srv6 instance reference
Tree	instance
Reference	configure service vpls string segment-routing-v6 number
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vxlan [[bgp-instance](#)] *number*

Synopsis	Enter the vxlan list instance
Context	configure service vpls string bgp-evpn vxlan number
Tree	vxlan
Introduced	16.0.R1
Platforms	All

[[bgp-instance](#)] *number*

Synopsis	BGP instance
Context	configure service vpls string bgp-evpn vxlan number
Tree	vxlan
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VXLAN auto-bindings creation
Context	configure service vpls string bgp-evpn vxlan number admin-state keyword
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

default-route-tag *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	configure service vpls string bgp-evpn vxlan number default-route-tag <i>string</i>
Tree	default-route-tag
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	16.0.R4
Platforms	All

ecmp *number*

Synopsis	Number of paths to reach a specified MAC address
Context	configure service vpls string bgp-evpn vxlan number ecmp <i>number</i>
Tree	ecmp
Range	1 to 32
Default	1

Introduced 19.5.R1
Platforms All

evi-three-byte-auto-rt *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Auto-derive the BGP EVPN route target

Context **configure** *service vpls string bgp-evpn vxlan number evi-three-byte-auto-rt boolean*

Tree *evi-three-byte-auto-rt*

Description When configured to **true**, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).
Where:

- Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken
- A=0 (for auto-derivation)
- Type=4 (EVI-based route-target)
- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

Default false

Introduced 21.10.R1

Platforms All

mh-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Multi-homing mode

Context **configure** *service vpls string bgp-evpn vxlan number mh-mode keyword*

Tree *mh-mode*

Default access

Options	access, network
Introduced	19.5.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group ID
Context	configure service vpls string bgp-evpn vxlan number oper-group reference
Tree	oper-group
Reference	configure service oper-group string
Introduced	19.10.R1
Platforms	All

routes

Synopsis	Enter the routes context
Context	configure service vpls string bgp-evpn vxlan number routes
Tree	routes
Introduced	19.5.R1
Platforms	All

auto-disc

Synopsis	Enter the auto-disc context
Context	configure service vpls string bgp-evpn vxlan number routes auto-disc
Tree	auto-disc
Introduced	19.5.R1
Platforms	All

advertise *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise routes on auto-discovery
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Context	configure service vpls string bgp-evpn vxlan number routes auto-disc advertise <i>boolean</i>
Tree	advertise
Default	false
Introduced	19.5.R1
Platforms	All

send-incl-mcast-ir-on-ndf *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow IMET-IR on NDF
Context	configure service vpls string bgp-evpn vxlan number send-incl-mcast-ir-on-ndf <i>boolean</i>
Tree	send-incl-mcast-ir-on-ndf
Default	true
Introduced	16.0.R1
Platforms	All

send-tunnel-encap *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send VXLAN value in encapsulation extended community
Context	configure service vpls string bgp-evpn vxlan number send-tunnel-encap <i>boolean</i>
Tree	send-tunnel-encap
Description	When configured to true , this command sends the VXLAN value in the encapsulation that is advertised with the EVPN routes for the service. The encapsulation is encoded in RFC5512-based tunnel encapsulation extended communities. When configured to false , no encapsulation extended community is sent.
Default	true
Introduced	16.0.R1
Platforms	All

vxlan-instance *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VXLAN instance
Context	configure service vpls string bgp-evpn vxlan number vxlan-instance reference
Tree	vxlan-instance
Reference	configure service vpls string vxlan instance number
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

bgp-mh-site [[site-name](#)] *string*

Synopsis	Enter the bgp-mh-site list instance
Context	configure service vpls string bgp-mh-site string
Tree	bgp-mh-site
Introduced	16.0.R1
Platforms	All

[[site-name](#)] *string*

Synopsis	Name for the specific site
Context	configure service vpls string bgp-mh-site string
Tree	bgp-mh-site
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

activation-timer *number*

Synopsis	Time that the local sites are in standby status, waiting for BGP updates
Context	configure service vpls string bgp-mh-site string activation-timer number

Tree	activation-timer
Range	0 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the VPLS BGP multi-homing site
Context	configure service vpls <i>string</i> bgp-mh-site <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	configure service vpls <i>string</i> bgp-mh-site <i>string</i> boot-timer <i>number</i>
Tree	boot-timer
Range	0 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

failed-threshold (*number* | *keyword*)

Synopsis	Threshold for the site to be declared down
Context	configure service vpls <i>string</i> bgp-mh-site <i>string</i> failed-threshold (<i>number</i> <i>keyword</i>)
Tree	failed-threshold
Range	1 to 1000
Default	all
Options	all
Introduced	16.0.R1

Platforms All

id number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Site ID
Context **configure service vpls string bgp-mh-site string id number**
Tree [id](#)
Range 1 to 65535
Introduced 16.0.R1
Platforms All

mesh-sdp-binds

Synopsis Specify if a mesh-sdp-binding is associated with this site
Context **configure service vpls string bgp-mh-site string mesh-sdp-binds**
Tree [mesh-sdp-binds](#)
Notes The following elements are part of a choice: **mesh-sdp-binds**, **sap**, **shg-name**, or **spoke-sdp**.
Introduced 16.0.R1
Platforms All

min-down-timer number

Synopsis Minimum downtime for BGP multi-homing site after transition from up to down
Context **configure service vpls string bgp-mh-site string min-down-timer number**
Tree [min-down-timer](#)
Range 0 to 100
Units seconds
Introduced 16.0.R1
Platforms All

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	configure service vpls string bgp-mh-site string monitor-oper-group reference
Tree	monitor-oper-group
Reference	configure service oper-group string
Introduced	16.0.R1
Platforms	All

sap *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to be associated with this site
Context	configure service vpls string bgp-mh-site string sap string
Tree	sap
String Length	1 to 45
Notes	The following elements are part of a choice: mesh-sdp-binds , sap , shg-name , or spoke-sdp .
Introduced	16.0.R1
Platforms	All

shg-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SHG name to be associated with the site
Context	configure service vpls string bgp-mh-site string shg-name string
Tree	shg-name
String Length	1 to 32
Notes	The following elements are part of a choice: mesh-sdp-binds , sap , shg-name , or spoke-sdp .
Introduced	16.0.R1

Platforms All

spoke-sdp *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis SDP to be associated with this site

Context **configure** [service vpls string](#) [bgp-mh-site string](#) [spoke-sdp string](#)

Tree [spoke-sdp](#)

String Length 3 to 16

Notes The following elements are part of a choice: **mesh-sdp-binds**, **sap**, **shg-name**, or **spoke-sdp**.

Introduced 16.0.R1

Platforms All

bgp-vpls

Synopsis Enable the **bgp-vpls** context

Context **configure** [service vpls string](#) [bgp-vpls](#)

Tree [bgp-vpls](#)

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the BGP-VPLS instance

Context **configure** [service vpls string](#) [bgp-vpls](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

maximum-ve-id *number*

Synopsis	Maximum vpls-edge id for BGP-VPLS
Context	configure service vpls <i>string</i> bgp-vpls maximum-ve-id <i>number</i>
Tree	maximum-ve-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

ve

Synopsis	Enter the ve context
Context	configure service vpls <i>string</i> bgp-vpls ve
Tree	ve
Introduced	16.0.R1
Platforms	All

id *number*

Synopsis	VPLS edge ID
Context	configure service vpls <i>string</i> bgp-vpls ve id <i>number</i>
Tree	id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

name *string*

Synopsis	VPLS Edge instance name
Context	configure service vpls <i>string</i> bgp-vpls ve name <i>string</i>
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

capture-sap [[sap-id](#)] *string*

Synopsis	Enter the capture-sap list instance
Context	configure service vpls <i>string</i> capture-sap <i>string</i>
Tree	capture-sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sap-id] *string*

Synopsis	SAP identifier
Context	configure service vpls <i>string</i> capture-sap <i>string</i>
Tree	capture-sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service vpls <i>string</i> capture-sap <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-dot1q-msaps *boolean*

Synopsis	Enable support for triggering managed SAP creation
Context	configure service vpls <i>string</i> capture-sap <i>string</i> allow-dot1q-msaps <i>boolean</i>
Tree	allow-dot1q-msaps
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis	SAP bandwidth
Context	configure service vpls <i>string</i> capture-sap <i>string</i> bandwidth <i>number</i>
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpu-protection

Synopsis	Enter the cpu-protection context
Context	configure service vpls <i>string</i> capture-sap <i>string</i> cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	configure service vpls <i>string</i> capture-sap <i>string</i> cpu-protection mac-monitoring
Tree	mac-monitoring
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

policy-id *reference*

Synopsis	CPM protection policy
Context	configure service vpls <i>string</i> capture-sap <i>string</i> cpu-protection policy-id <i>reference</i>
Tree	policy-id
Reference	configure system security cpu-protection policy <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure service vpls string capture-sap string description string
Tree	description
String Length	1 to 160
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp

Synopsis	Enter the dhcp context
Context	configure service vpls string capture-sap string dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	configure service vpls string capture-sap string dhcp python-policy reference
Tree	python-policy
Reference	configure python python-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database
Context	configure service vpls string capture-sap string dhcp user-db reference
Tree	user-db
Reference	configure subscriber-mgmt local-user-db string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service vpls <i>string</i> capture-sap <i>string</i> dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	configure service vpls <i>string</i> capture-sap <i>string</i> dhcp6 python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database
Context	configure service vpls <i>string</i> capture-sap <i>string</i> dhcp6 user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	configure service vpls <i>string</i> capture-sap <i>string</i> dist-cpu-protection <i>reference</i>
Tree	dist-cpu-protection
Reference	configure system security dist-cpu-protection policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis	Host lockout policy
Context	configure service vpls <i>string</i> capture-sap <i>string</i> host-lockout-policy <i>reference</i>
Tree	host-lockout-policy
Reference	configure subscriber-mgmt host-lockout-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure service vpls <i>string</i> capture-sap <i>string</i> ingress
Tree	ingress
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the filter context
Context	configure service vpls <i>string</i> capture-sap <i>string</i> ingress filter
Tree	filter
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *reference*

Synopsis	MAC filter policy name
Context	configure service vpls <i>string</i> capture-sap <i>string</i> ingress filter mac <i>reference</i>
Tree	mac
Reference	configure filter mac-filter <i>string</i>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session

Synopsis	Enter the ipoe-session context
Context	configure service vpls string capture-sap string ipoe-session
Tree	ipoe-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IPoE session management
Context	configure service vpls string capture-sap string ipoe-session admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vpls string capture-sap string ipoe-session description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPoE Session policy to be used for new sessions
Context	configure service vpls string capture-sap string ipoe-session ipoe-session-policy reference
Tree	ipoe-session-policy
Reference	configure subscriber-mgmt ipoe-session-policy string

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Local user database that is used to (pre-)authenticate new sessions
Context **configure** [service vpls string capture-sap string ipoe-session user-db reference](#)
Tree [user-db](#)
Reference **configure** [subscriber-mgmt local-user-db string](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap-defaults

Synopsis Enter the **msap-defaults** context
Context **configure** [service vpls string capture-sap string msap-defaults](#)
Tree [msap-defaults](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface *string*

Synopsis Group interface
Context **configure** [service vpls string capture-sap string msap-defaults group-interface string](#)
Tree [group-interface](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis MSAP policy

Context	configure service vpls string capture-sap string msap-defaults policy reference
Tree	policy
Reference	configure subscriber-mgmt msap-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

Synopsis	Administrative service name
Context	configure service vpls string capture-sap string msap-defaults service-name string
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq-auth-policy *reference*

Synopsis	Diameter NASREQ application policy to use for authentication
Context	configure service vpls string capture-sap string nasreq-auth-policy reference
Tree	nasreq-auth-policy
Reference	configure subscriber-mgmt diameter-nasreq-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pfcp

Synopsis	Enter the pfcp context
Context	configure service vpls string capture-sap string pfcp
Tree	pfcp
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

association *reference*

Synopsis	Association used for PFCP messages on the capture SAP
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Context	configure service vpls string capture-sap string pfcf association reference
Tree	association
Description	This command links the capture SAP to a PFCF association. This enables CUPS for the capture SAP and any trigger packets are forwarded to the BNG CUPS CPF.
Reference	configure subscriber-mgmt pfcf association string
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

I2-access-id-alias string

Synopsis	String used as Layer 2 access ID for the capture SAP
Context	configure service vpls string capture-sap string pfcf I2-access-id-alias string
Tree	I2-access-id-alias
Description	This command defines a Layer 2 access ID alias for the capture SAP. It replaces the default underlying port-based or LAG-based Layer 2 access ID. Different capture SAPs on the same underlying port or LAG can have different Layer 2 access ID aliases.
String Length	1 to 32
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up-resiliency

Synopsis	Enter the up-resiliency context
Context	configure service vpls string capture-sap string pfcf up-resiliency
Tree	up-resiliency
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group [oper-group] reference

Synopsis	Enter the monitor-oper-group list instance
Context	configure service vpls string capture-sap string pfcf up-resiliency monitor-oper-group reference
Tree	monitor-oper-group
Description	Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF.

The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).

Note:

The following is only applicable for the **configure service vpls capture-sap** context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups.

Max. Instances	4
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[oper-group] reference

Synopsis	Operational group name
Context	configure service vpls string capture-sap string pfc up-resiliency monitor-oper-group reference
Tree	monitor-oper-group
Reference	configure service oper-group string
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

health-drop number

Synopsis	Number subtracted from the health value per failure
Context	configure service vpls string capture-sap string pfc up-resiliency monitor-oper-group reference health-drop number
Tree	health-drop
Description	This command defines how the failure of an operational group member affects the health value. The base health value is 255; the value decreases with the defined number per member failure to a minimum of 0.
Range	1 to 255
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the pppoe context
Context	configure service vpls string capture-sap string pppoe
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy reference

Synopsis	PPP policy
Context	configure service vpls string capture-sap string pppoe policy reference
Tree	policy
Reference	configure subscriber-mgmt ppp-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy reference

Synopsis	Python policy
Context	configure service vpls string capture-sap string pppoe python-policy reference
Tree	python-policy
Reference	configure python python-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db reference

Synopsis	Local user database
Context	configure service vpls string capture-sap string pppoe user-db reference
Tree	user-db
Reference	configure subscriber-mgmt local-user-db string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *reference*

Synopsis	RADIUS authentication policy
Context	configure service vpls string capture-sap string radius-auth-policy reference
Tree	radius-auth-policy
Reference	configure subscriber-mgmt radius-authentication-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicit

Synopsis	Enter the router-solicit context
Context	configure service vpls string capture-sap string router-solicit
Tree	router-solicit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database
Context	configure service vpls string capture-sap string router-solicit user-db reference
Tree	user-db
Reference	configure subscriber-mgmt local-user-db string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp *number*

Synopsis	SRRP instance that this capture SAP tracks
Context	configure service vpls string capture-sap string track-srrp number
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trigger-packet

Synopsis	Enter the trigger-packet context
Context	configure service vpls string capture-sap string trigger-packet
Tree	trigger-packet
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp *boolean*

Synopsis	ARP packet
Context	configure service vpls string capture-sap string trigger-packet arp <i>boolean</i>
Tree	arp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data *boolean*

Synopsis	Data packet
Context	configure service vpls string capture-sap string trigger-packet data <i>boolean</i>
Tree	data
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	DHCP packet
Context	configure service vpls string capture-sap string trigger-packet dhcp <i>boolean</i>
Tree	dhcp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp6 *boolean*

Synopsis	DHCP6 packet
Context	configure service vpls <i>string</i> capture-sap <i>string</i> trigger-packet dhcp6 <i>boolean</i>
Tree	dhcp6
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe *boolean*

Synopsis	PPPoE packet
Context	configure service vpls <i>string</i> capture-sap <i>string</i> trigger-packet pppoe <i>boolean</i>
Tree	pppoe
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rtr-solicit *boolean*

Synopsis	Router-solicit packet
Context	configure service vpls <i>string</i> capture-sap <i>string</i> trigger-packet rtr-solicit <i>boolean</i>
Tree	rtr-solicit
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

customer *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	configure service vpls <i>string</i> customer <i>reference</i>
Tree	customer
Reference	configure service customer <i>string</i>

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vpls <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

endpoint [[name](#)] *string*

Synopsis	Enter the endpoint list instance
Context	configure service vpls <i>string</i> endpoint <i>string</i>
Tree	endpoint
Max. Instances	10
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Service endpoint name
Context	configure service vpls <i>string</i> endpoint <i>string</i>
Tree	endpoint
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

block-on-mesh-failure *boolean*

Synopsis	Enable blocking after the endpoints are in a down state
Context	configure service vpls <i>string</i> endpoint <i>string</i> block-on-mesh-failure <i>boolean</i>
Tree	block-on-mesh-failure
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vpls <i>string</i> endpoint <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the fdb context
Context	configure service vpls <i>string</i> endpoint <i>string</i> fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Populate automatically MAC protect list with MAC addresses learned on SDP with this endpoint
Context	configure service vpls <i>string</i> endpoint <i>string</i> fdb auto-learn-mac-protect <i>boolean</i>
Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R1
Platforms	All

mac-pinning *boolean*

Synopsis	Activate MAC address pinning on this endpoint
Context	configure service vpls <i>string</i> endpoint <i>string</i> fdb mac-pinning <i>boolean</i>
Tree	mac-pinning
Default	false
Introduced	16.0.R1
Platforms	All

maximum-mac-addresses *number*

Synopsis	Maximum learned and static entries for this end point
Context	configure service vpls <i>string</i> endpoint <i>string</i> fdb maximum-mac-addresses <i>number</i>
Tree	maximum-mac-addresses
Range	1 to 511999
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action when a relearn request for a protected MAC is received on the SDP
Context	configure service vpls <i>string</i> endpoint <i>string</i> fdb protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

ignore-standby-signaling *boolean*

Synopsis	Ignore standby-bit received from TLDP peers when performing internal tasks
Context	configure service vpls <i>string</i> endpoint <i>string</i> ignore-standby-signaling <i>boolean</i>
Tree	ignore-standby-signaling
Default	false
Introduced	16.0.R1
Platforms	All

mc-endpoint [*mc-ep-id*] *number*

Synopsis	Enter the mc-endpoint list instance
Context	configure service vpls string endpoint string mc-endpoint number
Tree	mc-endpoint
Max. Instances	1
Introduced	22.10.R1
Platforms	All

[mc-ep-id] *number*

Synopsis	MC-EP ID
Context	configure service vpls string endpoint string mc-endpoint number
Tree	mc-endpoint
Description	This command configures the identifier associated with the MC-EP. The ID must be the same on both MC-EP peers.
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

mc-ep-peer

Synopsis	Enter the mc-ep-peer context
Context	configure service vpls string endpoint string mc-endpoint number mc-ep-peer
Tree	mc-ep-peer
Introduced	22.10.R1
Platforms	All

name *string*

Synopsis	Name of the MC-EP peer
Context	configure service vpls string endpoint string mc-endpoint number mc-ep-peer name string
Tree	name

String Length	1 to 32
Notes	The following elements are part of a choice: name or peer-address .
Introduced	22.10.R1
Platforms	All

peer-address *reference*

Synopsis	IP address of the MC-EP peer
Context	configure service vpls <i>string</i> endpoint <i>string</i> mc-endpoint <i>number</i> mc-ep-peer peer-address <i>reference</i>
Tree	peer-address
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	The following elements are part of a choice: name or peer-address .
Introduced	22.10.R1
Platforms	All

revert-time (*number* | *keyword*)

Synopsis	Time to wait before reverting back to the primary spoke-sdp defined on this service endpoint
Context	configure service vpls <i>string</i> endpoint <i>string</i> revert-time (<i>number</i> <i>keyword</i>)
Tree	revert-time
Range	1 to 600
Default	immediate
Units	seconds
Options	never, immediate
Introduced	16.0.R1
Platforms	All

suppress-standby-signaling *boolean*

Synopsis	Do not send pseudowire standby bit to TLDP peer when specified spoke SDP is selected as standby
Context	configure service vpls <i>string</i> endpoint <i>string</i> suppress-standby-signaling <i>boolean</i>
Tree	suppress-standby-signaling

Default	true
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service vpls string eth-cfm
Tree	eth-cfm
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep **md-admin-name reference ma-admin-name reference mep-id number**

Synopsis	Enter the mep list instance
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain string
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
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Context	configure service vpls string eth-cfm mep md-admin-name <i>reference ma-admin-name reference mep-id number</i>
Tree	mep
Reference	configure eth-cfm domain string association string
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id number

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service vpls string eth-cfm mep md-admin-name <i>reference ma-admin-name reference mep-id number</i>
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state keyword

Synopsis	Administrative state of the MEP
Context	configure service vpls string eth-cfm mep md-admin-name <i>reference ma-admin-name reference mep-id number admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service vpls string eth-cfm mep md-admin-name <i>reference ma-admin-name reference mep-id number alarm-notification</i>
Tree	alarm-notification

Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i>
Tree	ccm
Default	false

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i>
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> cfm-vlan-tag <i>string</i>
Tree	cfm-vlan-tag
String Length	1 to 9

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean
Tree	crc-tlv
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority <i>number</i>

Tree	priority
Range	0 to 7
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed <i>boolean</i>
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	<p>When configured to true, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>When configured to false, the router disables the Nokia Grace function.</p>
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace
Description	<p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
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Context	configure service vpls string eth-cfm mep md-admin-name <i>reference ma-admin-name reference mep-id number low-priority-defect keyword</i>
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	configure service vpls string eth-cfm mep md-admin-name <i>reference ma-admin-name reference mep-id number mac-address string</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service vpls string eth-cfm mep md-admin-name <i>reference ma-admin-name reference mep-id number one-way-delay-threshold number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

etree boolean



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use VPLS service as an E-Tree VPLS
Context	configure service vpls string etree boolean
Tree	etree
Default	false
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the fdb context
Context	configure service vpls string fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

discard-unknown boolean

Synopsis	Discard packets with unknown destination MAC addresses
Context	configure service vpls string fdb discard-unknown boolean
Tree	discard-unknown
Default	false
Introduced	16.0.R1
Platforms	All

mac-learning

Synopsis	Enter the mac-learning context
Context	configure service vpls string fdb mac-learning
Tree	mac-learning
Introduced	16.0.R1
Platforms	All

aging *boolean*

Synopsis	Enable aging of MAC addresses
Context	configure service vpls <i>string</i> fdb mac-learning aging <i>boolean</i>
Tree	aging
Default	true
Introduced	16.0.R1
Platforms	All

learning *boolean*

Synopsis	Enable learning of new MAC addresses
Context	configure service vpls <i>string</i> fdb mac-learning learning <i>boolean</i>
Tree	learning
Default	true
Introduced	16.0.R1
Platforms	All

local-age-time *number*

Synopsis	Aging time for locally learned MAC addresses
Context	configure service vpls <i>string</i> fdb mac-learning local-age-time <i>number</i>
Tree	local-age-time
Range	60 to 86400
Default	300
Introduced	16.0.R1
Platforms	All

remote-age-time *number*

Synopsis	Aging time for locally learned MAC addresses
Context	configure service vpls <i>string</i> fdb mac-learning remote-age-time <i>number</i>
Tree	remote-age-time
Range	60 to 86400
Default	900

Introduced 16.0.R1
Platforms All

mac-move

Synopsis Enter the **mac-move** context
Context **configure service vpls string fdb mac-move**
Tree [mac-move](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of MAC move
Context **configure service vpls string fdb mac-move admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

hold-down-time *number*

Synopsis Wait time before re-enabling disabled SAP
Context **configure service vpls string fdb mac-move hold-down-time number**
Tree [hold-down-time](#)
Range 0 to 600
Default 10
Units seconds
Introduced 19.7.R1
Platforms All

move-frequency *number*

Synopsis Maximum rate MACs can be re-learned in the VPLS service

Context	configure service vpls string fdb mac-move move-frequency number
Tree	move-frequency
Range	1 to 10
Default	2
Introduced	16.0.R1
Platforms	All

primary-cumulative-factor *number*

Synopsis	Factor for MAC-relearn periods for MAC-relearn rate
Context	configure service vpls string fdb mac-move primary-cumulative-factor number
Tree	primary-cumulative-factor
Range	3 to 10
Default	3
Introduced	19.7.R1
Platforms	All

retry-count (*number | keyword*)

Synopsis	Number of retries for re-enabling the SAP or SDP
Context	configure service vpls string fdb mac-move retry-count (<i>number keyword</i>)
Tree	retry-count
Range	1 to 255
Default	3
Options	unlimited
Introduced	16.0.R1
Platforms	All

sap [[sap-id](#)] *reference*

Synopsis	Enter the sap list instance
Context	configure service vpls string fdb mac-move sap reference
Tree	sap
Introduced	19.7.R1
Platforms	All

[sap-id] *reference*

Synopsis	SAP identifier
Context	configure service vpls string fdb mac-move sap reference
Tree	sap
Reference	configure service vpls string sap string
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

level *keyword*

Synopsis	Primary or secondary port level
Context	configure service vpls string fdb mac-move sap reference level keyword
Tree	level
Options	primary, secondary
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	All

secondary-cumulative-factor *number*

Synopsis	Number of periods to measure mac-relearn rate
Context	configure service vpls string fdb mac-move secondary-cumulative-factor number
Tree	secondary-cumulative-factor
Range	2 to 9
Default	2
Introduced	19.7.R1
Platforms	All

spoke-sdp [[sdp-bind-id](#)] *reference*

Synopsis	Enter the spoke-sdp list instance
Context	configure service vpls string fdb mac-move spoke-sdp reference
Tree	spoke-sdp

Introduced 19.7.R1
Platforms All

[sdp-bind-id] reference

Synopsis SDP binding ID
Context **configure** [service](#) [vpls](#) [string](#) [fdb](#) [mac-move](#) [spoke-sdp](#) [reference](#)
Tree [spoke-sdp](#)
Reference **configure** [service](#) [vpls](#) [string](#) [spoke-sdp](#) [string](#)
Notes This element is part of a list key.
Introduced 19.7.R1
Platforms All

level keyword

Synopsis Primary or secondary port level
Context **configure** [service](#) [vpls](#) [string](#) [fdb](#) [mac-move](#) [spoke-sdp](#) [reference](#) [level](#) [keyword](#)
Tree [level](#)
Options primary, secondary
Notes This element is mandatory.
Introduced 19.7.R1
Platforms All

mac-subnet-length number

Synopsis Number of bits performing MAC learning or MAC switching
Context **configure** [service](#) [vpls](#) [string](#) [fdb](#) [mac-subnet-length](#) [number](#)
Tree [mac-subnet-length](#)
Range 24 to 48
Default 48
Introduced 16.0.R1
Platforms All

selective-learning *boolean*

Synopsis	Allocate FDB entries on selectively learned line cards
Context	configure service vpls <i>string</i> fdb selective-learning <i>boolean</i>
Tree	selective-learning
Default	false
Introduced	16.0.R1
Platforms	All

static-mac

Synopsis	Enter the static-mac context
Context	configure service vpls <i>string</i> fdb static-mac
Tree	static-mac
Introduced	16.0.R1
Platforms	All

mac [[mac-address](#)] *string*

Synopsis	Enter the mac list instance
Context	configure service vpls <i>string</i> fdb static-mac mac <i>string</i>
Tree	mac
Introduced	16.0.R1
Platforms	All

[[mac-address](#)] *string*

Synopsis	Static MAC address to SAP/SDP-binding or black-hole
Context	configure service vpls <i>string</i> fdb static-mac mac <i>string</i>
Tree	mac
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

blackhole



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a static FDB entry for the MAC address to black-hole traffic
Context	configure service vpls string fdb static-mac mac string blackhole
Tree	blackhole
Notes	The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp .
Introduced	16.0.R1
Platforms	All

endpoint *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint associated with this MAC
Context	configure service vpls string fdb static-mac mac string endpoint reference
Tree	endpoint
Reference	configure service vpls string endpoint string
Notes	The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp .
Introduced	16.0.R1
Platforms	All

mesh-sdp *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mesh SDP bind associated with this MAC
Context	configure service vpls string fdb static-mac mac string mesh-sdp reference
Tree	mesh-sdp

Reference	configure service vpls string mesh-sdp string
Notes	The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp .
Introduced	16.0.R1
Platforms	All

monitor *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Entity to be monitored to decide whether this entry can be installed in the FDB
Context	configure service vpls string fdb static-mac mac string monitor keyword
Tree	monitor
Default	none
Options	none, forward-status
Introduced	16.0.R1
Platforms	All

sap *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP associated with this MAC
Context	configure service vpls string fdb static-mac mac string sap reference
Tree	sap
Reference	configure service vpls string sap string
Notes	The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp .
Introduced	16.0.R1
Platforms	All

spoke-sdp *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Spoke SDP bind associated with this MAC
Context	configure service vpls string fdb static-mac mac string spoke-sdp reference
Tree	spoke-sdp
Reference	configure service vpls string spoke-sdp string
Notes	The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp .
Introduced	16.0.R1
Platforms	All

table

Synopsis	Enter the table context
Context	configure service vpls string fdb table
Tree	table
Introduced	16.0.R1
Platforms	All

high-wmark *number*

Synopsis	High watermark for the FDB table
Context	configure service vpls string fdb table high-wmark number
Tree	high-wmark
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	All

low-wmark *number*

Synopsis	Low watermark for the FDB table
Context	configure service vpls string fdb table low-wmark number

Tree	low-wmark
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	All

size number

Synopsis	Maximum MAC entries in the FDB
Context	configure service vpls string fdb table size number
Tree	size
Range	1 to 511999
Default	250
Introduced	16.0.R1
Platforms	All

gsmp

Synopsis	Enter the gsmp context
Context	configure service vpls string gsmp
Tree	gsmp
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of GSMP
Context	configure service vpls string gsmp admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group [name] *string*

Synopsis	Enter the group list instance
Context	configure service vpls string gsmp group string
Tree	group
Max. Instances	1024
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	GSMP group name
Context	configure service vpls string gsmp group string
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the GSMP group
Context	configure service vpls string gsmp group string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

ancp

Synopsis	Enter the ancp context
Context	configure service vpls string gsmp group string ancp
Tree	ancp
Introduced	16.0.R1

Platforms All

dynamic-topology-discovery *boolean*

Synopsis Enable the ANCP dynamic topology discovery capability
Context **configure** *service vpls string gsmp group string ancp dynamic-topology-discovery boolean*
Tree [dynamic-topology-discovery](#)
Default true
Introduced 16.0.R1
Platforms All

oam *boolean*

Synopsis Enable GSMP ANCP OAM capability at startup of GSMP connection
Context **configure** *service vpls string gsmp group string ancp oam boolean*
Tree [oam](#)
Default false
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** *service vpls string gsmp group string description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

hold-multiplier *number*

Synopsis Hold-multiplier for the GSMP connections in this group
Context **configure** *service vpls string gsmp group string hold-multiplier number*
Tree [hold-multiplier](#)
Range 1 to 100

Default	3
Introduced	16.0.R1
Platforms	All

idle-filter *boolean*

Synopsis	Filter ANCP messages from IDLE DSL lines
Context	configure service vpls <i>string</i> gsmp group <i>string</i> idle-filter <i>boolean</i>
Tree	idle-filter
Default	false
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Keepalive value for the GSMP connections in this group
Context	configure service vpls <i>string</i> gsmp group <i>string</i> keepalive <i>number</i>
Tree	keepalive
Range	1 to 25
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

neighbor [[remote-address](#)] *string*

Synopsis	Enter the neighbor list instance
Context	configure service vpls <i>string</i> gsmp group <i>string</i> neighbor <i>string</i>
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[remote-address] *string*

Synopsis	GSMP neighbor remote IP address
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Context	configure service vpls string gsmp group string neighbor string
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the GSMP neighbor
Context	configure service vpls string gsmp group string neighbor string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure service vpls string gsmp group string neighbor string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

local-address string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Restrict connections to this local address only within the service running ANCP
Context	configure service vpls string gsmp group string neighbor string local-address string
Tree	local-address
Introduced	16.0.R1
Platforms	All

priority-marking



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the priority-marking context
Context	configure service vpls string gsmg group string neighbor string priority-marking
Tree	priority-marking
Introduced	16.0.R1
Platforms	All

dscp keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DSCP that is used while remarking the in profile packets
Context	configure service vpls string gsmg group string neighbor string priority-marking dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

prec number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precedence priority marking
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Context	configure service vpls string gsmp group string neighbor string priority-marking prec number
Tree	prec
Range	0 to 7
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

persistence *boolean*

Synopsis	Store DSL line information when the GSMP connection terminates
Context	configure service vpls string gsmp group string persistence boolean
Tree	persistence
Default	false
Introduced	16.0.R1
Platforms	All

igmp-host-tracking

Synopsis	Enter the igmp-host-tracking context
Context	configure service vpls string igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP host tracking
Context	configure service vpls string igmp-host-tracking admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	configure service vpls <i>string</i> igmp-host-tracking expiry-time <i>number</i>
Tree	expiry-time
Range	1 to 65535
Default	260
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service vpls <i>string</i> igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of snooping
Context	configure service vpls <i>string</i> igmp-snooping admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

evpn-proxy

Synopsis	Enter the evpn-proxy context
Context	configure service vpls <i>string</i> igmp-snooping evpn-proxy
Tree	evpn-proxy
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of EVPN proxy
Context	configure service vpls <i>string</i> igmp-snooping evpn-proxy admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

mvr

Synopsis	Enter the mvr context
Context	configure service vpls <i>string</i> igmp-snooping mvr
Tree	mvr
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MVR
Context	configure service vpls <i>string</i> igmp-snooping mvr admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vpls <i>string</i> igmp-snooping mvr description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

group-policy *string*

Synopsis Policy that applies MVR
Context **configure** [service vpls string igmp-snooping mvr group-policy string](#)
Tree [group-policy](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms All

query-interval *number*

Synopsis Time between two consecutive host-query messages
Context **configure** [service vpls string igmp-snooping query-interval number](#)
Tree [query-interval](#)
Range 1 to 65535
Default 125
Units seconds
Introduced 16.0.R1
Platforms All

query-source-address (*keyword | ipv4-address*)

Synopsis Source address for IGMP queries
Context **configure** [service vpls string igmp-snooping query-source-address \(keyword | ipv4-address\)](#)
Tree [query-source-address](#)
Default system
Options system
Introduced 16.0.R1
Platforms All

report-source-address *string*

Synopsis Source IP address used when generating IGMP reports

Context	configure service vpls string igmp-snooping report-source-address string
Tree	report-source-address
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls string igmp-snooping robust-count number
Tree	robust-count
Range	1 to 255
Default	2
Introduced	16.0.R1
Platforms	All

ignore-l2vpn-mtu-mismatch *boolean*

Synopsis	Ignore the L2 VPN MTU mismatch with local service MTU
Context	configure service vpls string ignore-l2vpn-mtu-mismatch boolean
Tree	ignore-l2vpn-mtu-mismatch
Description	<p>When configured to true, the router does not check the value of the Layer 2 MTU in the Layer2 Info Extended Community received in a BGP update message against the local service MTU or locally signaled MTU. It may, therefore, bring up the BGP VPLS service regardless of any MTU mismatch.</p> <p>When configured to false, an MTU mismatch prevents the system from bringing up a BGP-VPLS service.</p>
Default	false
Introduced	22.2.R1
Platforms	All

interface [[interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure service vpls string interface string
Tree	interface
Introduced	16.0.R1

Platforms All

[interface-name] *string*

Synopsis IP interface name
Context **configure** [service](#) [vpls](#) *string* **interface** *string*
Tree [interface](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the interface
Context **configure** [service](#) [vpls](#) *string* **interface** *string* **admin-state** *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [service](#) [vpls](#) *string* **interface** *string* **description** *string*
Tree [description](#)
String Length 1 to 255
Introduced 16.0.R1
Platforms All

hold-time

Synopsis Enter the **hold-time** context
Context **configure** [service](#) [vpls](#) *string* **interface** *string* **hold-time**

Tree	hold-time
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vpls string interface string hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the down context
Context	configure service vpls string interface string hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service vpls string interface string hold-time ipv4 down init-only boolean
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service vpls <i>string</i> interface <i>string</i> hold-time ipv4 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the up context
Context	configure service vpls <i>string</i> interface <i>string</i> hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service vpls <i>string</i> interface <i>string</i> hold-time ipv4 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vpls <i>string</i> interface <i>string</i> ipv4
Tree	ipv4

Introduced 16.0.R1
Platforms All

neighbor-discovery

Synopsis Enter the **neighbor-discovery** context
Context **configure** [service vpls string](#) [interface string](#) [ipv4 neighbor-discovery](#)
Tree [neighbor-discovery](#)
Introduced 16.0.R1
Platforms All

static-neighbor [ipv4-address] string

Synopsis Enter the **static-neighbor** list instance
Context **configure** [service vpls string](#) [interface string](#) [ipv4 neighbor-discovery static-neighbor string](#)
Tree [static-neighbor](#)
Introduced 16.0.R1
Platforms All

[ipv4-address] string

Synopsis IPv4 address that corresponds to the physical address
Context **configure** [service vpls string](#) [interface string](#) [ipv4 neighbor-discovery static-neighbor string](#)
Tree [static-neighbor](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

mac-address string

Synopsis MAC address for the static neighbor
Context **configure** [service vpls string](#) [interface string](#) [ipv4 neighbor-discovery static-neighbor string](#) [mac-address string](#)
Tree [mac-address](#)

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	ARP timeout value to determine how long an ARP entry remains in the ARP cache
Context	configure service vpls <i>string</i> interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Range	0 to 65535
Default	14400
Units	seconds
Introduced	16.0.R1
Platforms	All

primary

Synopsis	Enable the primary context
Context	configure service vpls <i>string</i> interface <i>string</i> ipv4 primary
Tree	primary
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IP address of the interface
Context	configure service vpls <i>string</i> interface <i>string</i> ipv4 primary address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
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Context	configure service vpls string interface string ipv4 primary prefix-length number
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mac string

Synopsis	MAC address for the interface
Context	configure service vpls string interface string mac string
Tree	mac
Introduced	16.0.R1
Platforms	All

isid-policy

Synopsis	Enter the isid-policy context
Context	configure service vpls string isid-policy
Tree	isid-policy
Introduced	19.10.R1
Platforms	All

entry [range-entry-id] number

Synopsis	Enter the entry list instance
Context	configure service vpls string isid-policy entry number
Tree	entry
Introduced	19.10.R1
Platforms	All

[range-entry-id] number

Synopsis	ISID policy entry ID
Context	configure service vpls string isid-policy entry number

Tree	entry
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

advertise-local *boolean*

Synopsis	Advertise locally-defined I-VPLS ISIDs or static ISIDs
Context	configure service vpls <i>string</i> isid-policy entry <i>number</i> advertise-local <i>boolean</i>
Tree	advertise-local
Default	true
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure service vpls <i>string</i> isid-policy entry <i>number</i> range
Tree	range
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound of the ISID range
Context	configure service vpls <i>string</i> isid-policy entry <i>number</i> range end <i>number</i>
Tree	end
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	Lower bound of the ISID range
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Context	configure service vpls string isid-policy entry number range start number
Tree	start
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

use-def-mcast *boolean*

Synopsis	Use default multicast tree to propagate ISIS range
Context	configure service vpls string isid-policy entry number use-def-mcast boolean
Tree	use-def-mcast
Default	false
Introduced	19.10.R1
Platforms	All

load-balancing

Synopsis	Enter the load-balancing context
Context	configure service vpls string load-balancing
Tree	load-balancing
Introduced	16.0.R1
Platforms	All

lbl-eth-or-ip-l4-teid *boolean*

Synopsis	Enable hashing of MPLS ethernet and IP packets on SAPs
Context	configure service vpls string load-balancing lbl-eth-or-ip-l4-teid boolean
Tree	lbl-eth-or-ip-l4-teid
Description	When configured to true , this command enables hashing of MPLS Ethernet and MPLS IP packets received on the Epipe and VPLS service SAP using the MPLS labels, the inner IP addresses, the port numbers, and the GTP TEID field, if read by the system. This capability is supported on line cards that are FP4-based and later.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

per-service-hashing *boolean*

Synopsis	Enable per-service hashing for Ethernet services
Context	configure service vpls string load-balancing per-service-hashing boolean
Tree	per-service-hashing
Default	false
Introduced	16.0.R1
Platforms	All

spi-load-balancing *boolean*

Synopsis	Allow use of SPI (Security Parameter Index) in hashing for ESP/AH encrypted IPv4/IPv6 traffic
Context	configure service vpls string load-balancing spi-load-balancing boolean
Tree	spi-load-balancing
Default	false
Introduced	16.0.R1
Platforms	All

teid-load-balancing *boolean*

Synopsis	Include TEID in hashing algorithm for GTP-U/C encapsulated traffic
Context	configure service vpls string load-balancing teid-load-balancing boolean
Tree	teid-load-balancing
Default	false
Introduced	16.0.R1
Platforms	All

m-vpls *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Specify whether this is a management VPLS
Context	configure service vpls string m-vpls boolean

Tree	m-vpls
Default	false
Introduced	16.0.R1
Platforms	All

mac-flush

Synopsis	Enter the mac-flush context
Context	configure service vpls <i>string</i> mac-flush
Tree	mac-flush
Introduced	16.0.R1
Platforms	All

tldp

Synopsis	Enter the tldp context
Context	configure service vpls <i>string</i> mac-flush tldp
Tree	tldp
Introduced	16.0.R1
Platforms	All

propagate *boolean*

Synopsis	Propagate MAC flush messages received from the T-LDP
Context	configure service vpls <i>string</i> mac-flush tldp propagate <i>boolean</i>
Tree	propagate
Default	false
Introduced	16.0.R1
Platforms	All

send-on-failure *boolean*

Synopsis	Send MAC withdraw message on SAP/Spoke-SDP failure
Context	configure service vpls <i>string</i> mac-flush tldp send-on-failure <i>boolean</i>
Tree	send-on-failure

Default	false
Introduced	16.0.R1
Platforms	All

mac-protect

Synopsis	Enter the mac-protect context
Context	configure service vpls string mac-protect
Tree	mac-protect
Introduced	19.10.R1
Platforms	All

mac [mac-address] string

Synopsis	Add a list entry for mac
Context	configure service vpls string mac-protect mac string
Tree	mac
Introduced	19.10.R1
Platforms	All

[mac-address] string

Synopsis	Protected MAC address
Context	configure service vpls string mac-protect mac string
Tree	mac
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mcast-ipv6-snooping-scope keyword

Synopsis	IPv6 multicast snooping scope
Context	configure service vpls string mcast-ipv6-snooping-scope keyword
Tree	mcast-ipv6-snooping-scope
Default	mac-based

Options	sg-based, mac-based
Introduced	16.0.R1
Platforms	All

mcr-default-gtw

Synopsis	Enter the mcr-default-gtw context
Context	configure service vpls string mcr-default-gtw
Tree	mcr-default-gtw
Introduced	16.0.R1
Platforms	All

ip string

Synopsis	Multi-chassis ring default gateway IP address
Context	configure service vpls string mcr-default-gtw ip string
Tree	ip
Introduced	16.0.R1
Platforms	All

mac string

Synopsis	Multi-chassis ring default gateway MAC address
Context	configure service vpls string mcr-default-gtw mac string
Tree	mac
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

mesh-sdp [sdp-bind-id] string

Synopsis	Enter the mesh-sdp list instance
Context	configure service vpls string mesh-sdp string
Tree	mesh-sdp
Introduced	16.0.R1

Platforms All

[sdp-bind-id] *string*

Synopsis SDP binding ID
Context **configure service vpls string mesh-sdp string**
Tree [mesh-sdp](#)
String Length 3 to 16
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

accounting-policy *reference*

Synopsis Policy to collect accounting statistics
Context **configure service vpls string mesh-sdp string accounting-policy reference**
Tree [accounting-policy](#)
Reference **configure log accounting-policy number**
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the SDP binding to the service
Context **configure service vpls string mesh-sdp string admin-state keyword**
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

bfd

Synopsis Enter the **bfd** context
Context **configure service vpls string mesh-sdp string bfd**

Tree	bfd
Introduced	21.2.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service vpls string mesh-sdp string bfd bfd-liveness
Tree	bfd-liveness
Introduced	21.2.R1
Platforms	All

encap keyword

Synopsis	BFD encapsulation used on the SDP binding
Context	configure service vpls string mesh-sdp string bfd bfd-liveness encap keyword
Tree	encap
Default	ipv4
Options	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template reference

Synopsis	BFD template associated with the SDP binding
Context	configure service vpls string mesh-sdp string bfd bfd-template reference
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context.
Reference	configure bfd bfd-template string
Introduced	21.2.R1
Platforms	All

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

control-word *boolean*

Synopsis	Use the control word as preferred
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> control-word <i>boolean</i>
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	All

cpu-protection

Synopsis	Enter the cpu-protection context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the eth-cfm-monitoring context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> cpu-protection policy-id <i>reference</i>
Tree	policy-id
Reference	configure system security cpu-protection policy <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dhcp

Synopsis	Enter the dhcp context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> dhcp description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

snoop *boolean*

Synopsis	Allow DHCP snooping of DHCP messages on the SAP or SDP
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> dhcp snoop <i>boolean</i>
Tree	snoop
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure service vpls string mesh-sdp string egress
Tree	egress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service vpls string mesh-sdp string egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vpls string mesh-sdp string egress filter ip reference
Tree	ip
Reference	configure filter ip-filter string
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vpls string mesh-sdp string egress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter string
Introduced	16.0.R1
Platforms	All

mac reference

Synopsis	MAC filter policy name
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> egress filter mac reference
Tree	mac
Reference	configure filter mac-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

mfib-allowed-mda-destinations

Synopsis	Enter the mfib-allowed-mda-destinations context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> egress mfib-allowed-mda-destinations
Tree	mfib-allowed-mda-destinations
Introduced	16.0.R4
Platforms	All

mda [[mda-id](#)] *string*

Synopsis	Add a list entry for mda
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> egress mfib-allowed-mda-destinations mda <i>string</i>
Tree	mda
Introduced	16.0.R4
Platforms	All

[[mda-id](#)] *string*

Synopsis	MFIB allowed MDA destination
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> egress mfib-allowed-mda-destinations mda <i>string</i>
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> egress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> egress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>string</i>
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the egress port queue group
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> egress qos network port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue-group instance ID
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> egress qos network port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> entropy-label

Tree	entropy-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service vpls string mesh-sdp string eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure service vpls string mesh-sdp string eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	configure service vpls string mesh-sdp string eth-cfm collect-lmm-fc-stats fc keyword
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-imm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	configure service vpls string mesh-sdp string eth-cfm collect-imm-fc-stats fc-in-profile keyword
Tree	fc-in-profile
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-imm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-imm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure service vpls string mesh-sdp string eth-cfm collect-imm-stats boolean
Tree	collect-imm-stats
Description	When configured to true , the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.

The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters.

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number*

Synopsis	Enter the mep list instance
Context	configure <i>service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure <i>service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Reference	configure <i>eth-cfm domain string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure <i>service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Reference	configure <i>eth-cfm domain string association string</i>
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis Maintenance Endpoint (MEP) ID
Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* **mep-id** *number*
Tree [mep](#)
Range 1 to 8191
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the MEP
Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* **mep-id** *number* **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis Enable the **ais** context
Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* **mep-id** *number* **ais**
Tree [ais](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level number
Tree	client-meg-level
Range	1 to 7
Max.	7
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support boolean
Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval number
Tree	interval
Range	1 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
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Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	all-def
Options	all-def, mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais priority <i>number</i>
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
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Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time number

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm boolean

Synopsis	Generate CCM messages
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority number

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number
Tree	ccm-ltm-priority
Range	0 to 7

Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i>
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> cfm-vlan-tag <i>string</i>
Tree	cfm-vlan-tag
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the csf context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf
Tree	csf
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis Multiplication factor used to clear the CSF condition

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **csf** **multiplier** *decimal-number*

Tree [multiplier](#)

Range 0.0 | 2.0 to 30.0

Default 3.5

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Direction the MEP faces

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **direction** *keyword*

Tree [direction](#)

Default down

Options down, up

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation <i>keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
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Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i>
Tree	priority
Range	0 to 7

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-ed rx-eth-ed](#) *boolean*
Tree [rx-eth-ed](#)
Description This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP
Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-ed tx-eth-ed](#) *boolean*
Tree [tx-eth-ed](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis Enter the **eth-vsm-grace** context
Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-vsm-grace](#)
Tree [eth-vsm-grace](#)
Description Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace
Description	When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to false , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
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Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> lbm-svc-act-responder <i>boolean</i>
Tree	lbm-svc-act-responder
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> mac-address <i>string</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3

Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID
Context	configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number primary-vlan boolean
Tree	primary-vlan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip primary-vlan (*number | keyword*)

Synopsis	Enter the mip list instance
Context	configure service vpls string mesh-sdp string eth-cfm mip primary-vlan (<i>number keyword</i>)
Tree	mip
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan (*number | keyword*)

Synopsis	VLAN ID to which the MIP is attached
Context	configure service vpls string mesh-sdp string eth-cfm mip primary-vlan (<i>number keyword</i>)
Tree	mip
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the none option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none

Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) cfm-vlan-tag <i>string</i>
Tree	cfm-vlan-tag
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MIP
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) mac-address <i>string</i>
Tree	mac-address
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-ctag-levels *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm squelch-ingress-ctag-levels <i>number</i>
Tree	squelch-ingress-ctag-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation

of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.

Range	0 to 7
Max. Instances	8
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm squelch-ingress-levels <i>number</i>
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vmep-filter *boolean*

Synopsis	Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm vmep-filter <i>boolean</i>
Tree	vmep-filter
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

etree-leaf *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable etree leaf access-circuit status
Context **configure** *service vpls string mesh-sdp string etree-leaf boolean*
Tree *etree-leaf*
Default false
Introduced 16.0.R1
Platforms All

etree-root-leaf-tag *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Status for E-tree root leaf tag
Context **configure** *service vpls string mesh-sdp string etree-root-leaf-tag boolean*
Tree *etree-root-leaf-tag*
Default false
Introduced 16.0.R1
Platforms All

fdb

Synopsis Enter the **fdb** context
Context **configure** *service vpls string mesh-sdp string fdb*
Tree *fdb*
Introduced 16.0.R1
Platforms All

auto-learn-mac-protect *boolean*

Synopsis	Enable automatic population of the MAC protect list
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> fdb auto-learn-mac-protect <i>boolean</i>
Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R4
Platforms	All

auto-learn-mac-protect-exclude-list *reference*

Synopsis	Referenced MAC protect exclusion list name
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> fdb auto-learn-mac-protect-exclude-list <i>reference</i>
Tree	auto-learn-mac-protect-exclude-list
Description	<p>This command references the name of a MAC protect exclusion list.</p> <p>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.</p> <p>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.</p>
Reference	configure service mac-list <i>string</i>
Introduced	20.5.R1
Platforms	All

mac-pinning *boolean*

Synopsis	MAC address pinning in active status
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> fdb mac-pinning <i>boolean</i>
Tree	mac-pinning
Default	false
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action to take whenever a relearn request for a protected MAC is received
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Context	configure service vpls string mesh-sdp string fdb protected-src-mac-violation-action keyword
Tree	protected-src-mac-violation-action
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R4
Platforms	All

force-vc-forwarding keyword

Synopsis	VC forwarding action
Context	configure service vpls string mesh-sdp string force-vc-forwarding keyword
Tree	force-vc-forwarding
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

hash-label

Synopsis	Enable the hash-label context
Context	configure service vpls string mesh-sdp string hash-label
Tree	hash-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	16.0.R1
Platforms	All

signal-capability

Synopsis	Enable the signaling of the hash label between PE nodes
Context	configure service vpls string mesh-sdp string hash-label signal-capability
Tree	signal-capability
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service vpls string mesh-sdp string igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	configure service vpls string mesh-sdp string igmp-snooping fast-leave boolean
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vpls string mesh-sdp string igmp-snooping import-policy reference
Tree	import-policy
Reference	configure policy-options policy-statement string
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum group source combinations
Context	configure service vpls string mesh-sdp string igmp-snooping maximum-number-group-sources number
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	configure service vpls string mesh-sdp string igmp-snooping maximum-number-groups number
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum sources that are allowed per group
Context	configure service vpls string mesh-sdp string igmp-snooping maximum-number-sources number
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the mcac context
Context	configure service vpls string mesh-sdp string igmp-snooping mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
Context	configure service vpls string mesh-sdp string igmp-snooping mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	Multicast CAC policy name
Context	configure service vpls string mesh-sdp string igmp-snooping mcac policy reference
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy string
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls string mesh-sdp string igmp-snooping mrouter-port boolean
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls string mesh-sdp string igmp-snooping query-interval number
Tree	query-interval
Range	2 to 1024

Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls string mesh-sdp string igmp-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls string mesh-sdp string igmp-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls string mesh-sdp string igmp-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2

Introduced 16.0.R1
Platforms All

router-alert-check *boolean*

Synopsis Enable IP router alert check option
Context **configure** [service vpls string mesh-sdp string igmp-snooping router-alert-check](#) *boolean*
Tree [router-alert-check](#)
Default true
Introduced 16.0.R1
Platforms All

send-queries *boolean*

Synopsis Generate IGMP general queries
Context **configure** [service vpls string mesh-sdp string igmp-snooping send-queries](#) *boolean*
Tree [send-queries](#)
Default false
Introduced 16.0.R1
Platforms All

static

Synopsis Enter the **static** context
Context **configure** [service vpls string mesh-sdp string igmp-snooping static](#)
Tree [static](#)
Introduced 16.0.R1
Platforms All

group [[group-address](#)] *string*

Synopsis Enter the **group** list instance
Context **configure** [service vpls string mesh-sdp string igmp-snooping static group](#) *string*
Tree [group](#)
Introduced 16.0.R1

Platforms All

[group-address] *string*

Synopsis Group address of static IGMP multicast channel

Context **configure** *service vpls string mesh-sdp string igmp-snooping static group string*

Tree *group*

Description This command configures an address that receives data on an interface. The IP address must be unique for each static group.

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

source [*source-address*] *string*

Synopsis Add a list entry for **source**

Context **configure** *service vpls string mesh-sdp string igmp-snooping static group string source string*

Tree *source*

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 16.0.R1

Platforms All

[source-address] *string*

Synopsis Source IP address of multicast channel sending data

Context **configure** *service vpls string mesh-sdp string igmp-snooping static group string source string*

Tree *source*

Notes This element is part of a list key.

Introduced 16.0.R2

Platforms All

starg

Synopsis any source address (*,G)

Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping static group <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	IGMP protocol version
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping version <i>keyword</i>
Tree	version
Default	3
Options	1, 2, 3
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
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Context	configure service vpls string mesh-sdp string ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter string
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vpls string mesh-sdp string ingress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter string
Introduced	16.0.R1
Platforms	All

mac reference

Synopsis	MAC filter policy name
Context	configure service vpls string mesh-sdp string ingress filter mac reference
Tree	mac
Reference	configure filter mac-filter string
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vpls string mesh-sdp string ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
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Context	configure service vpls string mesh-sdp string ingress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service vpls string mesh-sdp string ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	configure service vpls string mesh-sdp string ingress qos network fp-redirect-group group-name reference
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group string
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of the forwarding-plane ingress Queue Group for this SDP binding
Context	configure service vpls string mesh-sdp string ingress qos network fp-redirect-group instance number
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
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Context	configure service vpls string mesh-sdp string ingress qos network policy-name reference
Tree	policy-name
Reference	configure qos network string
Introduced	16.0.R1
Platforms	All

vc-label number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure service vpls string mesh-sdp string ingress vc-label number
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls string mesh-sdp string mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

fast-leave boolean

Synopsis	Allow IGMP fast leave processing
Context	configure service vpls string mesh-sdp string mld-snooping fast-leave boolean
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping mrouter-port <i>boolean</i>
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Default	125

Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1

Platforms All

router-alert-check *boolean*

Synopsis Enable IP router alert check option
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [mld-snooping](#) **router-alert-check** *boolean*
 Tree [router-alert-check](#)
 Default true
 Introduced 16.0.R1
 Platforms All

send-queries *boolean*

Synopsis Generate IGMP general queries
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [mld-snooping](#) **send-queries** *boolean*
 Tree [send-queries](#)
 Default false
 Introduced 16.0.R1
 Platforms All

static

Synopsis Enter the **static** context
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [mld-snooping](#) **static**
 Tree [static](#)
 Introduced 16.0.R1
 Platforms All

group [[group-address](#)] *string*

Synopsis Enter the **group** list instance
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [mld-snooping](#) **static** **group** *string*
 Tree [group](#)
 Introduced 16.0.R1
 Platforms All

[group-address] *string*

Synopsis	Group address of multicast channel
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping static group <i>string</i>
Tree	group
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for source
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping static group <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping static group <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping static group <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .

Introduced 16.0.R2
Platforms All

version *keyword*

Synopsis Version of MLD running on the SAP or SDP
Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [mld-snooping](#) *version* *keyword*
Tree [version](#)
Default 2
Options 1, 2
Introduced 16.0.R1
Platforms All

mrp

Synopsis Enter the **mrp** context
Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [mrp](#)
Tree [mrp](#)
Introduced 20.10.R1
Platforms All

join-time *number*

Synopsis Maximum rate for attribute join messages sent on SDP
Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [mrp](#) *join-time* *number*
Tree [join-time](#)
Range 1 to 10
Default 2
Units deciseconds
Introduced 20.10.R1
Platforms All

leave-all-time *number*

Synopsis Frequency of LeaveAll PDUs by LeaveAll state machine

Context	configure service vpls string mesh-sdp string mrp leave-all-time number
Tree	leave-all-time
Range	60 to 300
Default	100
Units	deciseconds
Introduced	20.10.R1
Platforms	All

leave-time number

Synopsis	Time in LV state before transition to MT state
Context	configure service vpls string mesh-sdp string mrp leave-time number
Tree	leave-time
Range	30 to 60
Default	30
Units	deciseconds
Introduced	20.10.R1
Platforms	All

periodic-time number

Synopsis	Frequency of periodic events generated by state machine
Context	configure service vpls string mesh-sdp string mrp periodic-time number
Tree	periodic-time
Range	10 to 100
Default	10
Units	deciseconds
Introduced	20.10.R1
Platforms	All

periodic-timer boolean

Synopsis	Enable the Periodic Transmission Timer
Context	configure service vpls string mesh-sdp string mrp periodic-timer boolean
Tree	periodic-timer

Default	false
Introduced	20.10.R1
Platforms	All

policy reference

Synopsis	MRP policy to control Group B-MAC attributes
Context	configure service vpls string mesh-sdp string mrp policy reference
Tree	policy
Reference	configure service mrp policy string
Introduced	20.10.R1
Platforms	All

pbb

Synopsis	Enter the pbb context
Context	configure service vpls string mesh-sdp string pbb
Tree	pbb
Introduced	20.10.R1
Platforms	All

fault-propagation

Synopsis	Enter the fault-propagation context
Context	configure service vpls string mesh-sdp string pbb fault-propagation
Tree	fault-propagation
Introduced	20.10.R1
Platforms	All

backbone-mac-address [[address](#)] *string*

Synopsis	Add a list entry for backbone-mac-address
Context	configure service vpls string mesh-sdp string pbb fault-propagation backbone-mac-address string
Tree	backbone-mac-address

Introduced 20.10.R1
Platforms All

[address] *string*

Synopsis Backbone MAC address
Context **configure** [service](#) [vpls](#) *string* [mesh-sdp](#) *string* [pbb](#) [fault-propagation](#) [backbone-mac-address](#) *string*
Tree [backbone-mac-address](#)
Notes This element is part of a list key.
Introduced 20.10.R1
Platforms All

backbone-mac-name [[name](#)] *reference*

Synopsis Add a list entry for **backbone-mac-name**
Context **configure** [service](#) [vpls](#) *string* [mesh-sdp](#) *string* [pbb](#) [fault-propagation](#) [backbone-mac-name](#) *reference*
Tree [backbone-mac-name](#)
Introduced 20.10.R1
Platforms All

[name] *reference*

Synopsis Backbone MAC address name
Context **configure** [service](#) [vpls](#) *string* [mesh-sdp](#) *string* [pbb](#) [fault-propagation](#) [backbone-mac-name](#) *reference*
Tree [backbone-mac-name](#)
Reference **configure** [service](#) [pbb](#) [mac](#) *string*
Notes This element is part of a list key.
Introduced 20.10.R1
Platforms All

vc-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported
Context	configure service vpls string mesh-sdp string vc-type keyword
Tree	vc-type
Default	ether
Options	ether, vlan
Introduced	16.0.R1
Platforms	All

vlan-vc-tag *number*

Synopsis	SDP bind VC tag
Context	configure service vpls string mesh-sdp string vlan-vc-tag number
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	16.0.R1
Platforms	All

mfib

Synopsis	Enter the mfib context
Context	configure service vpls string mfib
Tree	mfib
Introduced	16.0.R1
Platforms	All

table

Synopsis	Enter the table context
Context	configure service vpls string mfib table
Tree	table
Introduced	16.0.R1

Platforms All

high-wmark *number*

Synopsis High watermark for the MFIB table
Context **configure service vpls string mfib table high-wmark number**
Tree [high-wmark](#)
Range 0 to 100
Default 95
Introduced 16.0.R1
Platforms All

low-wmark *number*

Synopsis Low watermark for the MFIB table
Context **configure service vpls string mfib table low-wmark number**
Tree [low-wmark](#)
Range 0 to 100
Default 90
Introduced 16.0.R1
Platforms All

size *number*

Synopsis Maximum SG entries in the MFIB
Context **configure service vpls string mfib table size number**
Tree [size](#)
Range 1 to 40959
Introduced 16.0.R1
Platforms All

mld-snooping

Synopsis Enter the **mld-snooping** context
Context **configure service vpls string mld-snooping**

Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of snooping
Context	configure service vpls <i>string</i> mld-snooping admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

evpn-proxy

Synopsis	Enter the evpn-proxy context
Context	configure service vpls <i>string</i> mld-snooping evpn-proxy
Tree	evpn-proxy
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of EVPN proxy
Context	configure service vpls <i>string</i> mld-snooping evpn-proxy admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

mvr

Synopsis	Enter the mvr context
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Context	configure service vpls string mld-snooping mvr
Tree	mvr
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MVR
Context	configure service vpls string mld-snooping mvr admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vpls string mld-snooping mvr description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

group-policy *string*

Synopsis	Policy that applies MVR
Context	configure service vpls string mld-snooping mvr group-policy string
Tree	group-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls <i>string</i> mld-snooping query-interval <i>number</i>
Tree	query-interval
Range	1 to 65535
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-source-address (*keyword* | *ipv6-address*)

Synopsis	Source IP address used in MLD queries
Context	configure service vpls <i>string</i> mld-snooping query-source-address (<i>keyword</i> <i>ipv6-address</i>)
Tree	query-source-address
Default	system
Options	system
Introduced	16.0.R1
Platforms	All

report-source-address *string*

Synopsis	Source IP address used when generating MLD reports
Context	configure service vpls <i>string</i> mld-snooping report-source-address <i>string</i>
Tree	report-source-address
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>string</i> mld-snooping robust-count <i>number</i>
Tree	robust-count
Range	1 to 255

Default	2
Introduced	16.0.R1
Platforms	All

mrp

Synopsis	Enter the mrp context
Context	configure service vpls string mrp
Tree	mrp
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MRP
Context	configure service vpls string mrp admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

mmp

Synopsis	Enter the mmp context
Context	configure service vpls string mmp mmp
Tree	mmp
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MMP
Context	configure service vpls string mmp mmp admin-state keyword
Tree	admin-state

Options	enable, disable
Introduced	20.10.R1
Platforms	All

attribute-table

Synopsis	Enter the attribute-table context
Context	configure service vpls string mrp mmp attribute-table
Tree	attribute-table
Introduced	20.10.R1
Platforms	All

high-wmark *number*

Synopsis	High watermark for the MMRP attribute table
Context	configure service vpls string mrp mmp attribute-table high-wmark <i>number</i>
Tree	high-wmark
Range	0 to 100
Default	95
Introduced	20.10.R1
Platforms	All

low-wmark *number*

Synopsis	Low watermark for the MMRP attribute table
Context	configure service vpls string mrp mmp attribute-table low-wmark <i>number</i>
Tree	low-wmark
Range	0 to 100
Default	90
Introduced	20.10.R1
Platforms	All

size *number*

Synopsis	Maximum number of attributes accepted by B-VPLS
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Context	configure service vpls string mrp mmp attribute-table size number
Tree	size
Range	1 to 8192
Default	2048
Introduced	20.10.R1
Platforms	All

end-station-only *boolean*

Synopsis	Prevent generation or processing of MMRP messages
Context	configure service vpls string mrp mmp end-station-only boolean
Tree	end-station-only
Default	false
Introduced	20.10.R1
Platforms	All

flood-time *number*

Synopsis	Time when traffic is flooded after status change
Context	configure service vpls string mrp mmp flood-time number
Tree	flood-time
Range	3 to 600
Introduced	20.10.R1
Platforms	All

multicast-info-policy *reference*

Synopsis	Multicast information policy
Context	configure service vpls string multicast-info-policy reference
Tree	multicast-info-policy
Reference	configure multicast-management multicast-info-policy string
Introduced	16.0.R1
Platforms	All

pbb

Synopsis	Enter the pbb context
Context	configure service vpls string pbb
Tree	pbb
Introduced	16.0.R1
Platforms	All

backbone-vpls [[backbone-vpls-service-name](#)] *reference*

Synopsis	Enter the backbone-vpls list instance
Context	configure service vpls string pbb backbone-vpls reference
Tree	backbone-vpls
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[backbone-vpls-service-name] *reference*

Synopsis	Service name
Context	configure service vpls string pbb backbone-vpls reference
Tree	backbone-vpls
Reference	configure service vpls string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the fdb context
Context	configure service vpls string pbb backbone-vpls reference fdb
Tree	fdb
Introduced	20.2.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action taken upon a relearn request for protected MAC
Context	configure service vpls string pbb backbone-vpls reference fdb protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Options	discard
Introduced	20.5.R1
Platforms	All

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service vpls string pbb backbone-vpls reference igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

mrouter-destination [[mac-reference](#)] *reference*

Synopsis	Add a list entry for mrouter-destination
Context	configure service vpls string pbb backbone-vpls reference igmp-snooping mrouter-destination <i>reference</i>
Tree	mrouter-destination
Introduced	16.0.R1
Platforms	All

[mac-reference] *reference*

Synopsis	Mac name reference
Context	configure service vpls string pbb backbone-vpls reference igmp-snooping mrouter-destination <i>reference</i>
Tree	mrouter-destination
Reference	configure service pbb mac <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

isid *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Backbone VPLS ISID
 Context **configure** *service vpls string pbb backbone-vpls reference isid number*
 Tree [isid](#)
 Range 0 to 16777215
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

mesh-sdp [[sdp-bind-id](#)] *reference*

Synopsis Enter the **mesh-sdp** list instance
 Context **configure** *service vpls string pbb backbone-vpls reference mesh-sdp reference*
 Tree [mesh-sdp](#)
 Introduced 16.0.R1
 Platforms All

[sdp-bind-id] *reference*

Synopsis Backbone VPLS SDP Binding ID
 Context **configure** *service vpls string pbb backbone-vpls reference mesh-sdp reference*
 Tree [mesh-sdp](#)
 Reference **configure** *service vpls string mesh-sdp string*
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service vpls string pbb backbone-vpls reference mesh-sdp reference igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls string pbb backbone-vpls reference mesh-sdp reference igmp-snooping mrouter-port boolean
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls string pbb backbone-vpls reference mesh-sdp reference mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls string pbb backbone-vpls reference mesh-sdp reference mld-snooping mrouter-port boolean
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls string pbb backbone-vpls reference mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

mrouter-destination [[mac-reference](#)] *reference*

Synopsis	Add a list entry for mrouter-destination
Context	configure service vpls string pbb backbone-vpls reference mld-snooping mrouter-destination reference
Tree	mrouter-destination
Introduced	16.0.R1
Platforms	All

[[mac-reference](#)] *reference*

Synopsis	Mac name reference
Context	configure service vpls string pbb backbone-vpls reference mld-snooping mrouter-destination reference
Tree	mrouter-destination
Reference	configure service pbb mac string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sap [[sap-id](#)] *reference*

Synopsis	Enter the sap list instance
Context	configure service vpls string pbb backbone-vpls reference sap reference
Tree	sap
Introduced	16.0.R1
Platforms	All

[sap-id] *reference*

Synopsis	Backbone VPLS SAP
Context	configure service vpls string pbb backbone-vpls reference sap reference
Tree	sap
Reference	configure service vpls string sap string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service vpls string pbb backbone-vpls reference sap reference igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls string pbb backbone-vpls reference sap reference igmp-snooping mrouter-port boolean
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls string pbb backbone-vpls reference sap reference mld-snooping
Tree	mld-snooping
Introduced	16.0.R1

Platforms All

mrouter-port *boolean*

Synopsis Operate port as a multicast router port

Context **configure** [service vpls string pbb backbone-vpls reference sap reference mld-snooping mrouter-port boolean](#)

Tree [mrouter-port](#)

Default false

Introduced 16.0.R1

Platforms All

spoke-sdp [[sdp-bind-id](#)] *reference*

Synopsis Enter the **spoke-sdp** list instance

Context **configure** [service vpls string pbb backbone-vpls reference spoke-sdp reference](#)

Tree [spoke-sdp](#)

Introduced 16.0.R1

Platforms All

[sdp-bind-id] *reference*

Synopsis Backbone VPLS SDP Binding ID

Context **configure** [service vpls string pbb backbone-vpls reference spoke-sdp reference](#)

Tree [spoke-sdp](#)

Reference **configure** [service vpls string spoke-sdp string](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

igmp-snooping

Synopsis Enter the **igmp-snooping** context

Context **configure** [service vpls string pbb backbone-vpls reference spoke-sdp reference igmp-snooping](#)

Tree [igmp-snooping](#)

Introduced 16.0.R1
Platforms All

mrouter-port *boolean*

Synopsis Operate port as a multicast router port
Context **configure** [service](#) [vpls](#) [string](#) [pbb](#) [backbone-vpls](#) [reference](#) [spoke-sdp](#) [reference](#) [igmp-snooping](#) [mrouter-port](#) *boolean*
Tree [mrouter-port](#)
Default false
Introduced 16.0.R1
Platforms All

mld-snooping

Synopsis Enter the **mld-snooping** context
Context **configure** [service](#) [vpls](#) [string](#) [pbb](#) [backbone-vpls](#) [reference](#) [spoke-sdp](#) [reference](#) [mld-snooping](#)
Tree [mld-snooping](#)
Introduced 16.0.R1
Platforms All

mrouter-port *boolean*

Synopsis Operate port as a multicast router port
Context **configure** [service](#) [vpls](#) [string](#) [pbb](#) [backbone-vpls](#) [reference](#) [spoke-sdp](#) [reference](#) [mld-snooping](#) [mrouter-port](#) *boolean*
Tree [mrouter-port](#)
Default false
Introduced 16.0.R1
Platforms All

force-qtag-forwarding *boolean*

Synopsis Add an IEEE 802.1q tag after C-MAC addresses PBB header
Context **configure** [service](#) [vpls](#) [string](#) [pbb](#) [force-qtag-forwarding](#) *boolean*

Tree	force-qtag-forwarding
Default	false
Introduced	16.0.R1
Platforms	All

i-vpls-mac-flush

Synopsis	Enter the i-vpls-mac-flush context
Context	configure service vpls string pbb i-vpls-mac-flush
Tree	i-vpls-mac-flush
Introduced	16.0.R1
Platforms	All

bgp-evpn

Synopsis	Enter the bgp-evpn context
Context	configure service vpls string pbb i-vpls-mac-flush bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

send-to-bvpls *boolean*

Synopsis	Send b-VPLS EVPN flush
Context	configure service vpls string pbb i-vpls-mac-flush bgp-evpn send-to-bvpls <i>boolean</i>
Tree	send-to-bvpls
Default	false
Introduced	16.0.R1
Platforms	All

tldp

Synopsis	Enter the tldp context
Context	configure service vpls string pbb i-vpls-mac-flush tldp
Tree	tldp

Introduced 16.0.R1
Platforms All

propagate-from-bvpls *boolean*

Synopsis Propagate MAC flush message from B-VPLS into local I-VPLS
Context **configure service vpls string pbb i-vpls-mac-flush tldp propagate-from-bvpls** *boolean*
Tree [propagate-from-bvpls](#)
Default false
Introduced 16.0.R1
Platforms All

send-on-bvpls-failure *boolean*

Synopsis Send negative flush message (flush-all-from-me) on B-VPLS failure
Context **configure service vpls string pbb i-vpls-mac-flush tldp send-on-bvpls-failure** *boolean*
Tree [send-on-bvpls-failure](#)
Default false
Introduced 16.0.R1
Platforms All

send-to-bvpls

Synopsis Enter the **send-to-bvpls** context
Context **configure service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls**
Tree [send-to-bvpls](#)
Introduced 16.0.R1
Platforms All

all-but-mine *boolean*

Synopsis Generate LDP MAC withdraw message to b-VPLS
Context **configure service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls all-but-mine** *boolean*
Tree [all-but-mine](#)
Default false

Introduced 16.0.R1
Platforms All

all-from-me *boolean*

Synopsis Generate LDP MAC withdraw all from me message to b-VPLS
Context **configure** [service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls all-from-me](#)
boolean
Tree [all-from-me](#)
Default false
Introduced 16.0.R1
Platforms All

mac-notification

Synopsis Enter the **mac-notification** context
Context **configure** [service vpls string pbb mac-notification](#)
Tree [mac-notification](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of MAC notification messages
Context **configure** [service vpls string pbb mac-notification admin-state keyword](#)
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

count *number*

Synopsis MAC notification messages count
Context **configure** [service vpls string pbb mac-notification count number](#)
Tree [count](#)

Range	1 to 10
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval for MAC notification messages
Context	configure service vpls <i>string</i> pbb mac-notification interval <i>number</i>
Tree	interval
Range	1 to 100
Units	deciseconds
Introduced	16.0.R1
Platforms	All

renotify (*number* | *keyword*)

Synopsis	Re-notify interval for MAC-notification messages
Context	configure service vpls <i>string</i> pbb mac-notification renotify (<i>number</i> <i>keyword</i>)
Tree	renotify
Range	240 to 840
Default	none
Units	seconds
Options	none
Introduced	16.0.R1
Platforms	All

source-bmac

Synopsis	Enter the source-bmac context
Context	configure service vpls <i>string</i> pbb source-bmac
Tree	source-bmac
Introduced	16.0.R1
Platforms	All

address string

Synopsis	Base source B-MAC address for the B-VPLS
Context	configure service vpls string pbb source-bmac address string
Tree	address
Introduced	16.0.R1
Platforms	All

use-es-bmac-lsb boolean

Synopsis	Use LSB from Ethernet-segment backbone MAC
Context	configure service vpls string pbb source-bmac use-es-bmac-lsb boolean
Tree	use-es-bmac-lsb
Default	false
Introduced	16.0.R1
Platforms	All

use-mclag-bmac-lsb boolean

Synopsis	Use MC LAG backbone MAC LSB
Context	configure service vpls string pbb source-bmac use-mclag-bmac-lsb boolean
Tree	use-mclag-bmac-lsb
Default	false
Introduced	16.0.R1
Platforms	All

pbb-type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBB VPLS type
Context	configure service vpls string pbb-type keyword
Tree	pbb-type
Options	b-vpls, i-vpls
Introduced	16.0.R1

Platforms All

pim-snooping

Synopsis Enable the **pim-snooping** context
Context **configure service vpls string pim-snooping**
Tree [pim-snooping](#)
Introduced 16.0.R1
Platforms All

group-policy string

Synopsis Group policy name
Context **configure service vpls string pim-snooping group-policy string**
Tree [group-policy](#)
String Length 1 to 255
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

hold-time number

Synopsis Duration that allows the PIM-snooping switch to snoop all the PIM states in the VPLS
Context **configure service vpls string pim-snooping hold-time number**
Tree [hold-time](#)
Range 0 to 300
Default 90
Units seconds
Introduced 16.0.R1
Platforms All

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vpls string pim-snooping ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of snooping for multicast traffic
Context	configure service vpls string pim-snooping ipv4 admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure service vpls string pim-snooping ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of snooping for multicast traffic
Context	configure service vpls string pim-snooping ipv6 admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

provider-tunnel

Synopsis	Enable the provider-tunnel context
Context	configure service vpls string provider-tunnel
Tree	provider-tunnel
Introduced	19.7.R1
Platforms	All

inclusive



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the inclusive context
Context	configure service vpls string provider-tunnel inclusive
Tree	inclusive
Introduced	19.7.R1
Platforms	All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of P2MP LSP as the I-PMSI
Context	configure service vpls string provider-tunnel inclusive admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1
Platforms	All

data-delay-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	I-PMSI data delay timer
Context	configure service vpls string provider-tunnel inclusive data-delay-interval number
Tree	data-delay-interval
Range	3 to 180
Default	15
Units	seconds
Introduced	19.7.R1
Platforms	All

mldp



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable/Disable MLDP
Context	configure service vpls string provider-tunnel inclusive mldp
Tree	mldp
Notes	The following elements are part of a choice: mldp or rsvp .
Introduced	19.7.R1
Platforms	All

owner *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure provider-tunnel owner
Context	configure service vpls string provider-tunnel inclusive owner keyword
Tree	owner
Options	bgp-ad, bgp-vpls, bgp-evpn-mpls

Introduced 19.7.R1
Platforms All

root-and-leaf *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Configure whether the provider tunnel acts as a leaf or both a root and leaf
Context **configure** [service vpls](#) *string* [provider-tunnel inclusive](#) **root-and-leaf** *boolean*
Tree [root-and-leaf](#)
Default false
Introduced 19.7.R1
Platforms All

rsvp



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **rsvp** context
Context **configure** [service vpls](#) *string* [provider-tunnel inclusive](#) **rsvp**
Tree [rsvp](#)
Notes The following elements are part of a choice: **mldp** or **rsvp**.
Introduced 19.7.R1
Platforms All

lsp-template *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Configure LSP template name
Context **configure** [service vpls](#) *string* [provider-tunnel inclusive](#) **rsvp** **lsp-template** *reference*

Tree	lsp-template
Reference	configure router <i>string</i> mpls lsp-template <i>string</i>
Introduced	19.7.R1
Platforms	All

proxy-arp

Synopsis	Enable the proxy-arp context
Context	configure service vpls <i>string</i> proxy-arp
Tree	proxy-arp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the proxy
Context	configure service vpls <i>string</i> proxy-arp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

age-time (*number* | *keyword*)

Synopsis	Aging timer for proxy entries, where entries are flushed upon timer expiry
Context	configure service vpls <i>string</i> proxy-arp age-time (<i>number</i> <i>keyword</i>)
Tree	age-time
Range	60 to 86400
Default	never
Units	seconds
Options	never
Introduced	16.0.R1
Platforms	All

duplicate-detect

Synopsis	Enter the duplicate-detect context
Context	configure service vpls string proxy-arp duplicate-detect
Tree	duplicate-detect
Introduced	16.0.R1
Platforms	All

anti-spoof-mac *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address to replace the proxy-ARP/ND offending entry's MAC
Context	configure service vpls string proxy-arp duplicate-detect anti-spoof-mac string
Tree	anti-spoof-mac
Introduced	16.0.R1
Platforms	All

hold-down-time (*number* | *keyword*)

Synopsis	Hold down time for a duplicate entry
Context	configure service vpls string proxy-arp duplicate-detect hold-down-time (<i>number</i> <i>keyword</i>)
Tree	hold-down-time
Range	2 to 60
Default	9
Units	minutes
Options	max
Introduced	16.0.R1
Platforms	All

num-moves *number*

Synopsis	Number of moves required to declare a duplicate entry
----------	---

Context	configure service vpls string proxy-arp duplicate-detect num-moves number
Tree	num-moves
Range	3 to 10
Default	5
Introduced	16.0.R1
Platforms	All

static-blackhole boolean



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Consider anti-spoof MAC as black-hole static MAC in FDB
Context	configure service vpls string proxy-arp duplicate-detect static-blackhole boolean
Tree	static-blackhole
Default	false
Introduced	16.0.R1
Platforms	All

window number

Synopsis	Time to monitor the MAC address in the anti-spoofing mechanism
Context	configure service vpls string proxy-arp duplicate-detect window number
Tree	window
Range	1 to 15
Default	3
Units	minutes
Introduced	16.0.R1
Platforms	All

dynamic-arp

Synopsis	Enter the dynamic-arp context
Context	configure service vpls string proxy-arp dynamic-arp
Tree	dynamic-arp

Introduced 16.0.R1
Platforms All

ip-address [[ipv4-address](#)] *string*

Synopsis Enter the **ip-address** list instance
Context **configure** [service vpls string proxy-arp dynamic-arp ip-address string](#)
Tree [ip-address](#)
Introduced 16.0.R1
Platforms All

[ipv4-address] *string*

Synopsis Proxy ARP IPv4 address
Context **configure** [service vpls string proxy-arp dynamic-arp ip-address string](#)
Tree [ip-address](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

mac-list *reference*

Synopsis MAC list for the dynamic entry
Context **configure** [service vpls string proxy-arp dynamic-arp ip-address string mac-list reference](#)
Tree [mac-list](#)
Reference **configure** [service proxy-arp-nd mac-list list string](#)
Introduced 16.0.R1
Platforms All

resolve-retry-time *number*

Synopsis Frequency at which the resolve messages are sent
Context **configure** [service vpls string proxy-arp dynamic-arp ip-address string resolve-retry-time number](#)
Tree [resolve-retry-time](#)

Range	1 to 60
Default	5
Units	minutes
Introduced	16.0.R1
Platforms	All

dynamic-populate *boolean*

Synopsis	Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings
Context	configure service vpls <i>string</i> proxy-arp dynamic-populate <i>boolean</i>
Tree	dynamic-populate
Default	false
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the evpn context
Context	configure service vpls <i>string</i> proxy-arp evpn
Tree	evpn
Introduced	16.0.R1
Platforms	All

flood

Synopsis	Enter the flood context
Context	configure service vpls <i>string</i> proxy-arp evpn flood
Tree	flood
Introduced	16.0.R1
Platforms	All

gratuitous-arp *boolean*

Synopsis	Flood GARP-requests/GARP-replies to the EVPN
Context	configure service vpls <i>string</i> proxy-arp evpn flood gratuitous-arp <i>boolean</i>

Tree	gratuitous-arp
Default	true
Introduced	16.0.R1
Platforms	All

unknown-arp-req *boolean*

Synopsis	Flood ARP-requests (with source squelching) if there is no active proxy-ARP entry for requested IP
Context	configure service vpls string proxy-arp evpn flood unknown-arp-req <i>boolean</i>
Tree	unknown-arp-req
Default	true
Introduced	16.0.R1
Platforms	All

route-tag *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module
Context	configure service vpls string proxy-arp evpn route-tag <i>number</i>
Tree	route-tag
Range	0 1 to 255
Default	0
Introduced	16.0.R1
Platforms	All

process-arp-probes *boolean*

Synopsis	Enable replies to DAD ARP probes
Context	configure service vpls string proxy-arp process-arp-probes <i>boolean</i>
Tree	process-arp-probes
Default	true

Introduced 22.7.R1
Platforms All

send-refresh (*number* | *keyword*)

Synopsis Time at which to send a refresh message
Context **configure** [service vpls string proxy-arp send-refresh](#) (*number* | *keyword*)
Tree [send-refresh](#)
Range 120 to 86400
Default never
Options never
Introduced 16.0.R1
Platforms All

static-arp

Synopsis Enter the **static-arp** context
Context **configure** [service vpls string proxy-arp static-arp](#)
Tree [static-arp](#)
Introduced 16.0.R1
Platforms All

ip-address [[ipv4-address](#)] *string*

Synopsis Enter the **ip-address** list instance
Context **configure** [service vpls string proxy-arp static-arp ip-address string](#)
Tree [ip-address](#)
Introduced 16.0.R1
Platforms All

[[ipv4-address](#)] *string*

Synopsis Proxy ARP IPv4 address
Context **configure** [service vpls string proxy-arp static-arp ip-address string](#)
Tree [ip-address](#)

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac string

Synopsis	Proxy ARP MAC address for static entry
Context	configure service vpls string proxy-arp static-arp ip-address string mac string
Tree	mac
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

table-size number

Synopsis	Maximum number of learned and static entries allowed in the proxy table of this service
Context	configure service vpls string proxy-arp table-size number
Tree	table-size
Range	1 to 16383
Default	250
Introduced	16.0.R1
Platforms	All

proxy-nd

Synopsis	Enable the proxy-nd context
Context	configure service vpls string proxy-nd
Tree	proxy-nd
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the proxy
Context	configure service vpls string proxy-nd admin-state keyword

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

age-time (*number* | *keyword*)

Synopsis	Aging timer for proxy entries, where entries are flushed upon timer expiry
Context	configure service vpls string proxy-nd age-time (<i>number</i> <i>keyword</i>)
Tree	age-time
Range	60 to 86400
Default	never
Units	seconds
Options	never
Introduced	16.0.R1
Platforms	All

duplicate-detect

Synopsis	Enter the duplicate-detect context
Context	configure service vpls string proxy-nd duplicate-detect
Tree	duplicate-detect
Introduced	16.0.R1
Platforms	All

anti-spoof-mac *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address to replace the proxy-ARP/ND offending entry's MAC
Context	configure service vpls string proxy-nd duplicate-detect anti-spoof-mac string
Tree	anti-spoof-mac
Introduced	16.0.R1

Platforms All

hold-down-time (*number* | *keyword*)

Synopsis Hold down time for a duplicate entry

Context **configure service vpls string proxy-nd duplicate-detect hold-down-time** (*number* | *keyword*)

Tree [hold-down-time](#)

Range 2 to 60

Default 9

Units minutes

Options max

Introduced 16.0.R1

Platforms All

num-moves *number*

Synopsis Number of moves required to declare a duplicate entry

Context **configure service vpls string proxy-nd duplicate-detect num-moves** *number*

Tree [num-moves](#)

Range 3 to 10

Default 5

Introduced 16.0.R1

Platforms All

static-blackhole *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Consider anti-spoof MAC as black-hole static MAC in FDB

Context **configure service vpls string proxy-nd duplicate-detect static-blackhole** *boolean*

Tree [static-blackhole](#)

Default false

Introduced 16.0.R1

Platforms All

window *number*

Synopsis Time to monitor the MAC address in the anti-spoofing mechanism
Context **configure** [service vpls](#) *string* [proxy-nd duplicate-detect](#) **window** *number*
Tree [window](#)
Range 1 to 15
Default 3
Units minutes
Introduced 16.0.R1
Platforms All

dynamic-neighbor

Synopsis Enter the **dynamic-neighbor** context
Context **configure** [service vpls](#) *string* [proxy-nd dynamic-neighbor](#)
Tree [dynamic-neighbor](#)
Introduced 16.0.R1
Platforms All

ip-address [[ipv6-address](#)] *string*

Synopsis Enter the **ip-address** list instance
Context **configure** [service vpls](#) *string* [proxy-nd dynamic-neighbor ip-address](#) *string*
Tree [ip-address](#)
Introduced 16.0.R1
Platforms All

[ipv6-address] *string*

Synopsis Proxy ND IPv6 address
Context **configure** [service vpls](#) *string* [proxy-nd dynamic-neighbor ip-address](#) *string*
Tree [ip-address](#)
Notes This element is part of a list key.

Introduced 16.0.R1
Platforms All

mac-list *reference*

Synopsis MAC list for the dynamic entry
Context **configure** [service](#) [vpls](#) *string* [proxy-nd](#) [dynamic-neighbor](#) [ip-address](#) *string* **mac-list** *reference*
Tree [mac-list](#)
Reference **configure** [service](#) [proxy-arp-nd](#) [mac-list](#) *list* *string*
Introduced 16.0.R1
Platforms All

resolve-retry-time *number*

Synopsis Frequency at which the resolve messages are sent
Context **configure** [service](#) [vpls](#) *string* [proxy-nd](#) [dynamic-neighbor](#) [ip-address](#) *string* **resolve-retry-time** *number*
Tree [resolve-retry-time](#)
Range 1 to 60
Default 5
Units minutes
Introduced 16.0.R1
Platforms All

dynamic-populate *boolean*

Synopsis Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings
Context **configure** [service](#) [vpls](#) *string* [proxy-nd](#) **dynamic-populate** *boolean*
Tree [dynamic-populate](#)
Default false
Introduced 16.0.R1
Platforms All

evpn

Synopsis	Enter the evpn context
Context	configure service vpls <i>string</i> proxy-nd evpn
Tree	evpn
Introduced	16.0.R1
Platforms	All

advertise-neighbor-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertisement type of static or dynamic entries in the EVPN
Context	configure service vpls <i>string</i> proxy-nd evpn advertise-neighbor-type <i>keyword</i>
Tree	advertise-neighbor-type
Default	router
Options	router, host
Introduced	16.0.R1
Platforms	All

flood

Synopsis	Enter the flood context
Context	configure service vpls <i>string</i> proxy-nd evpn flood
Tree	flood
Introduced	16.0.R1
Platforms	All

unknown-neighbor-advertise-host *boolean*

Synopsis	Flood host unsolicited Neighbor Advertisement (NA) replies to EVPN
Context	configure service vpls <i>string</i> proxy-nd evpn flood unknown-neighbor-advertise-host <i>boolean</i>
Tree	unknown-neighbor-advertise-host
Default	true

Introduced 16.0.R1
Platforms All

unknown-neighbor-advertise-router *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Flood router unsolicited Neighbor Advertisement (NA) replies to EVPN
Context **configure** [service vpls](#) [string proxy-nd evpn flood](#) [unknown-neighbor-advertise-router](#) *boolean*
Tree [unknown-neighbor-advertise-router](#)
Default true
Introduced 16.0.R1
Platforms All

unknown-neighbor-solicitation *boolean*

Synopsis Flood unsolicited Neighbor Solicitation messages (with source squelching) into EVPN network
Context **configure** [service vpls](#) [string proxy-nd evpn flood](#) [unknown-neighbor-solicitation](#) *boolean*
Tree [unknown-neighbor-solicitation](#)
Default true
Introduced 16.0.R1
Platforms All

route-tag *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module
Context **configure** [service vpls](#) [string proxy-nd evpn](#) [route-tag](#) *number*
Tree [route-tag](#)

Range	0 1 to 255
Default	0
Introduced	16.0.R1
Platforms	All

process-dad-neighbor-solicitations *boolean*

Synopsis	Enable replies to DAD neighbor solicitations
Context	configure service vpls string proxy-nd process-dad-neighbor-solicitations <i>boolean</i>
Tree	process-dad-neighbor-solicitations
Default	true
Introduced	22.7.R1
Platforms	All

send-refresh (*number | keyword*)

Synopsis	Time at which to send a refresh message
Context	configure service vpls string proxy-nd send-refresh (<i>number keyword</i>)
Tree	send-refresh
Range	120 to 86400
Default	never
Options	never
Introduced	16.0.R1
Platforms	All

static-neighbor

Synopsis	Enter the static-neighbor context
Context	configure service vpls string proxy-nd static-neighbor
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

ip-address [ipv6-address] *string*

Synopsis	Enter the ip-address list instance
Context	configure service vpls <i>string</i> proxy-nd static-neighbor ip-address <i>string</i>
Tree	ip-address
Introduced	16.0.R1
Platforms	All

[ipv6-address] *string*

Synopsis	Proxy ND IPv6 address
Context	configure service vpls <i>string</i> proxy-nd static-neighbor ip-address <i>string</i>
Tree	ip-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Proxy ARP MAC address for static entry
Context	configure service vpls <i>string</i> proxy-nd static-neighbor ip-address <i>string</i> mac <i>string</i>
Tree	mac
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Entry type
Context	configure service vpls <i>string</i> proxy-nd static-neighbor ip-address <i>string</i> type <i>keyword</i>
Tree	type
Default	router
Options	host, router
Introduced	16.0.R1
Platforms	All

table-size *number*

Synopsis	Maximum number of learned and static entries allowed in the proxy table of this service
Context	configure service vpls string proxy-nd table-size number
Tree	table-size
Range	1 to 16383
Default	250
Introduced	16.0.R1
Platforms	All

routed-vpls

Synopsis	Enable the routed-vpls context
Context	configure service vpls string routed-vpls
Tree	routed-vpls
Introduced	16.0.R1
Platforms	All

evpn-mpls-ecmp *boolean*

Synopsis	Enable ECMP behavior on R-VPLS services
Context	configure service vpls string routed-vpls evpn-mpls-ecmp boolean
Tree	evpn-mpls-ecmp
Default	false
Introduced	19.10.R1
Platforms	All

multicast

Synopsis	Enter the multicast context
Context	configure service vpls string routed-vpls multicast
Tree	multicast
Introduced	16.0.R1
Platforms	All

evpn-gateway

Synopsis	Enable the evpn-gateway context
Context	configure service vpls string routed-vpls multicast evpn-gateway
Tree	evpn-gateway
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the multicast EVPN gateway
Context	configure service vpls string routed-vpls multicast evpn-gateway admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	All

advertise *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of the multicast EVPN gateway
Context	configure service vpls string routed-vpls multicast evpn-gateway advertise keyword
Tree	advertise
Description	This command configures EVPN OISM to advertise the type of OISM gateway function in the Inclusive Multicast Ethernet Tag routes.
Default	mvpn-pim
Options	mvpn-pim, mvpn-only, pim-only
Introduced	21.10.R1
Platforms	All

dr-activation-timer *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DR activation timer for the EVPN gateway
Context	configure service vpls string routed-vpls multicast evpn-gateway dr-activation-timer <i>number</i>
Tree	dr-activation-timer
Description	This command configures the the designated router (DR) activation timer for the EVPN gateway. After the DR activation timer expires, each provider edge router (PE) runs the MEG or PEG DR election. The timer allows the PE to collect Inclusive Multicast Ethernet Tag routes from other MEG or PEG gateways and avoids running the DR election multiple times.
Range	0 to 100
Default	3
Units	seconds
Introduced	21.10.R1
Platforms	All

non-dr-attract-traffic *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multicast traffic attraction option on non-DR router GW
Context	configure service vpls string routed-vpls multicast evpn-gateway non-dr-attract-traffic <i>keyword</i>
Tree	non-dr-attract-traffic
Default	from-pim-mvpn
Options	none, from-evpn, from-pim-mvpn, from-evpn-pim-mvpn
Introduced	21.10.R1
Platforms	All

ip-multicast-ecmp *boolean*

Synopsis	ECMP behaviour for multicast traffic on bgp-evpn mpls and vxlan
Context	configure service vpls <i>string</i> routed-vpls multicast ip-multicast-ecmp <i>boolean</i>
Tree	ip-multicast-ecmp
Default	false
Introduced	19.10.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vpls <i>string</i> routed-vpls multicast ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

forward-to-ip-interface *boolean*

Synopsis	Forward IPv4 multicast from RVPLS to L3 interface
Context	configure service vpls <i>string</i> routed-vpls multicast ipv4 forward-to-ip-interface <i>boolean</i>
Tree	forward-to-ip-interface
Default	false
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service vpls <i>string</i> routed-vpls multicast ipv4 igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate VPLS L3 interface as a multicast router port
Context	configure service vpls <i>string</i> routed-vpls multicast ipv4 igmp-snooping mrouter-port <i>boolean</i>
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure service vpls <i>string</i> routed-vpls multicast ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

forward-to-ip-interface *boolean*

Synopsis	Forward IPv6 multicast from RVPLS to L3 interface
Context	configure service vpls <i>string</i> routed-vpls multicast ipv6 forward-to-ip-interface <i>boolean</i>
Tree	forward-to-ip-interface
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls <i>string</i> routed-vpls multicast ipv6 mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate VPLS L3 interface as a multicast router port
Context	configure service vpls <i>string</i> routed-vpls multicast ipv6 mld-snooping mrouter-port <i>boolean</i>
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

vxlan-ipv4-tep-ecmp *boolean*

Synopsis	Use ECMP on VXLAN IPv4 destinations for R-VPLS services
Context	configure service vpls <i>string</i> routed-vpls vxlan-ipv4-tep-ecmp <i>boolean</i>
Tree	vxlan-ipv4-tep-ecmp
Default	false
Introduced	16.0.R1
Platforms	All

sap [[sap-id](#)] *string*

Synopsis	Enter the sap list instance
Context	configure service vpls <i>string</i> sap <i>string</i>
Tree	sap
Introduced	16.0.R1
Platforms	All

[[sap-id](#)] *string*

Synopsis	SAP identifier
Context	configure service vpls <i>string</i> sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure service vpls <i>string</i> sap <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service vpls <i>string</i> sap <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

anti-spoof *keyword*

Synopsis	Type of anti-spoof filtering
Context	configure service vpls <i>string</i> sap <i>string</i> anti-spoof <i>keyword</i>
Tree	anti-spoof
Options	source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure service vpls <i>string</i> sap <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	16.0.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp-host

Synopsis Enter the **arp-host** context

Context **configure service vpls string sap string arp-host**

Tree [arp-host](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of ARP hosts

Context **configure service vpls string sap string arp-host admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis Maximum number of ARP triggered hosts

Context **configure service vpls string sap string arp-host host-limit number**

Tree [host-limit](#)

Range 1 to 131071

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis Minimum authentication interval

Context **configure service vpls string sap string arp-host min-auth-interval number**

Tree [min-auth-interval](#)

Range 1 to 6000

Default 15

Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-reply-agent *keyword*

Synopsis	Enable arp-reply-agent function
Context	configure service vpls <i>string</i> sap <i>string</i> arp-reply-agent <i>keyword</i>
Tree	arp-reply-agent
Options	true, with-subscr-ident
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	SAP bandwidth
Context	configure service vpls <i>string</i> sap <i>string</i> bandwidth <i>number</i>
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

bgp-vpls-mh-veid *number*

Synopsis	BGP-VPLS multi-homing VE-ID
Context	configure service vpls <i>string</i> sap <i>string</i> bgp-vpls-mh-veid <i>number</i>
Tree	bgp-vpls-mh-veid
Description	<p>This command specifies a VE ID that is configured on SAPs that are part of an EVPN single-active Ethernet Segment. The configuration of this command allows the advertisement of L2VPN routes that indicate the state of multi-homed SAPs to the remote BGP-VPLS PEs, which can trigger a MAC flush operation on the service to avoid traffic from being blackholed when a failure occurs in the active PE.</p> <p>When unconfigured from the SAP, L2VPN routes are withdrawn, which causes MAC flush processing on the remote BGP-VPLS.</p>
Range	1 to 65535
Introduced	20.5.R1

Platforms All

bpdu-translation *keyword*

Synopsis Bpdu translation on this SAP
Context **configure** [service vpls string sap string bpdu-translation keyword](#)
Tree [bpdu-translation](#)
Options auto, pvst, stp, pvst-rw, auto-rw
Introduced 16.0.R1
Platforms All

calling-station-id *string*

Synopsis Calling station ID
Context **configure** [service vpls string sap string calling-station-id string](#)
Tree [calling-station-id](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd *boolean*

Synopsis Enable Cflowd collection and analysis on this SAP
Context **configure** [service vpls string sap string cflowd boolean](#)
Tree [cflowd](#)
Default false
Introduced 16.0.R1
Platforms All

collect-stats *boolean*

Synopsis Collect accounting statistics
Context **configure** [service vpls string sap string collect-stats boolean](#)
Tree [collect-stats](#)
Default false

Introduced 16.0.R1
Platforms All

cpu-protection

Synopsis Enter the **cpu-protection** context
Context **configure service vpls string sap string cpu-protection**
Tree [cpu-protection](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context
Context **configure service vpls string sap string cpu-protection eth-cfm-monitoring**
Tree [eth-cfm-monitoring](#)
Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates
Context **configure service vpls string sap string cpu-protection eth-cfm-monitoring aggregate**
Tree [aggregate](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate
Context **configure service vpls string sap string cpu-protection eth-cfm-monitoring car**
Tree [car](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	configure service vpls string sap string cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	configure service vpls string sap string cpu-protection policy-id reference
Tree	policy-id
Reference	configure system security cpu-protection policy number
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service vpls string sap string description string
Tree	description
String Length	1 to 160
Introduced	16.0.R1
Platforms	All

dhcp

Synopsis	Enter the dhcp context
Context	configure service vpls string sap string dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	configure service vpls string sap string dhcp admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vpls string sap string dhcp description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service vpls string sap string dhcp lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	All

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases
Context	configure service vpls string sap string dhcp lease-populate max-leases number
Tree	max-leases
Range	0 to 131071
Introduced	16.0.R1
Platforms	All

option-82

Synopsis	Enter the option-82 context
Context	configure service vpls string sap string dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

action keyword

Synopsis	Action to take with received DHCP Option 82
Context	configure service vpls string sap string dhcp option-82 action keyword
Tree	action
Default	keep
Options	replace, drop, keep
Introduced	16.0.R1
Platforms	All

circuit-id

Synopsis	Enter the circuit-id context
Context	configure service vpls string sap string dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	All

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	configure service vpls string sap string dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , hex-string , none , or vlan-ascii-tuple .

Introduced 16.0.R1
Platforms All

hex-string *string*

Synopsis User-defined hexadecimal value of the option
Context **configure service vpls string sap string dhcp option-82 circuit-id hex-string string**
Tree [hex-string](#)
String Length 1 to 66
Notes The following elements are part of a choice: **ascii-tuple**, **hex-string**, **none**, or **vlan-ascii-tuple**.
Introduced 16.0.R1
Platforms All

none

Synopsis Do not include the circuit ID
Context **configure service vpls string sap string dhcp option-82 circuit-id none**
Tree [none](#)
Notes The following elements are part of a choice: **ascii-tuple**, **hex-string**, **none**, or **vlan-ascii-tuple**.
Introduced 16.0.R1
Platforms All

vlan-ascii-tuple

Synopsis Include the VLAN ID and dot1p bits in the ASCII tuple
Context **configure service vpls string sap string dhcp option-82 circuit-id vlan-ascii-tuple**
Tree [vlan-ascii-tuple](#)
Description When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.
When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes The following elements are part of a choice: **ascii-tuple**, **hex-string**, **none**, or **vlan-ascii-tuple**.
Introduced 16.0.R1

Platforms All

remote-id

Synopsis Enter the **remote-id** context

Context **configure service vpls string sap string dhcp option-82 remote-id**

Tree [remote-id](#)

Description Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).

Introduced 16.0.R1

Platforms All

ascii-string *string*

Synopsis User-defined ASCII string for the remote ID

Context **configure service vpls string sap string dhcp option-82 remote-id ascii-string string**

Tree [ascii-string](#)

String Length 1 to 32

Notes The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

hex-string *string*

Synopsis Option as a hexadecimal string

Context **configure service vpls string sap string dhcp option-82 remote-id hex-string string**

Tree [hex-string](#)

String Length 1 to 66

Notes The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

mac

Synopsis Use the MAC address for the remote ID

Context	configure service vpls string sap string dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: ascii-string , hex-string , mac , or none .
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the remote ID
Context	configure service vpls string sap string dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: ascii-string , hex-string , mac , or none .
Introduced	16.0.R1
Platforms	All

vendor-specific-option

Synopsis	Enter the vendor-specific-option context
Context	configure service vpls string sap string dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	All

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	configure service vpls string sap string dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i>
Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	All

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	configure service vpls string sap string dhcp option-82 vendor-specific-option sap-id <i>boolean</i>
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	All

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	configure service vpls string sap string dhcp option-82 vendor-specific-option service-id <i>boolean</i>
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	configure service vpls string sap string dhcp option-82 vendor-specific-option string <i>string</i>
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	configure service vpls string sap string dhcp option-82 vendor-specific-option system-id <i>boolean</i>
Tree	system-id
Default	false

Introduced 16.0.R1
Platforms All

proxy-server

Synopsis Enter the **proxy-server** context
Context **configure service vpls string sap string dhcp proxy-server**
Tree [proxy-server](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the DHCP proxy server
Context **configure service vpls string sap string dhcp proxy-server admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

emulated-server *string*

Synopsis IP address used as DHCP server address in SAP context
Context **configure service vpls string sap string dhcp proxy-server emulated-server string**
Tree [emulated-server](#)
Introduced 16.0.R1
Platforms All

lease-time

Synopsis Enter the **lease-time** context
Context **configure service vpls string sap string dhcp proxy-server lease-time**
Tree [lease-time](#)
Introduced 16.0.R1

Platforms All

radius-override *boolean*

Synopsis Use lease time information provided by RADIUS server
Context **configure** [service vpls string sap string dhcp proxy-server lease-time radius-override boolean](#)
Tree [radius-override](#)
Default false
Introduced 16.0.R1
Platforms All

value *number*

Synopsis DHCP lease time
Context **configure** [service vpls string sap string dhcp proxy-server lease-time value number](#)
Tree [value](#)
Range 300 to 315446399
Units seconds
Introduced 16.0.R1
Platforms All

snoop *boolean*

Synopsis Enable DHCP snooping on the SAP
Context **configure** [service vpls string sap string dhcp snoop boolean](#)
Tree [snoop](#)
Default false
Introduced 16.0.R1
Platforms All

dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP
Context **configure** [service vpls string sap string dist-cpu-protection reference](#)
Tree [dist-cpu-protection](#)

Reference	configure system security dist-cpu-protection policy <i>string</i>
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure service vpls <i>string</i> sap <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	All

agg-rate

Synopsis	Enter the agg-rate context
Context	configure service vpls <i>string</i> sap <i>string</i> egress agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: agg-rate or percent-agg-rate .
Introduced	16.0.R1
Platforms	All

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	configure service vpls <i>string</i> sap <i>string</i> egress agg-rate adaptation-rule <i>keyword</i>
Tree	adaptation-rule
Default	closest
Options	max, min, closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	configure service vpls <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>)

Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	configure service vpls <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on all policers and queues associated with context
Context	configure service vpls <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	configure service vpls <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i>
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1

Platforms All

dest-mac-rewrite *string*

Synopsis Destination MAC overwrite for unicast
Context **configure** [service vpls string sap string egress dest-mac-rewrite string](#)
Tree [dest-mac-rewrite](#)
Introduced 16.0.R5
Platforms All

filter

Synopsis Enter the **filter** context
Context **configure** [service vpls string sap string egress filter](#)
Tree [filter](#)
Introduced 16.0.R1
Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure** [service vpls string sap string egress filter ip reference](#)
Tree [ip](#)
Reference **configure** [filter ip-filter string](#)
Introduced 16.0.R1
Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [service vpls string sap string egress filter ipv6 reference](#)
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter string](#)
Introduced 16.0.R1
Platforms All

mac reference

Synopsis	MAC filter policy name
Context	configure service vpls <i>string</i> sap <i>string</i> egress filter mac reference
Tree	mac
Reference	configure filter mac-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the root context
Context	configure service vpls string sap string egress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service vpls string sap string egress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service vpls string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service vpls string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [[priority-level](#)] *number*

Synopsis Enter the **priority** list instance
Context **configure** [service vpls string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds priority number](#)
Tree [priority](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] *number*

Synopsis Priority level
Context **configure** [service vpls string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds priority number](#)
Tree [priority](#)
Range 1 to 8
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number | keyword*)

Synopsis Minimum amount of cumulative buffer space allowed
Context **configure** [service vpls string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds priority number mbs-contribution \(number | keyword\)](#)
Tree [mbs-contribution](#)
Range 0 to 16777216
Units bytes
Options auto
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i>
Tree	qinq-mark-top-only
Default	false
Introduced	16.0.R1
Platforms	All

sap-egress

Synopsis	Enter the sap-egress context
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

hs-secondary-shaper *string*

Synopsis	HS Secondary Shaper
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-secondary-shaper <i>string</i>
Tree	hs-secondary-shaper
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [[group-id](#)] *reference*

Synopsis	Enter the hs-wrr-group list instance
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i>
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[[group-id](#)] *reference*

Synopsis	HS WRR group identifier
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i>
Tree	hs-wrr-group
Reference	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override of the WRR group
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8

Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis Percent rate override applied to the HS WRR group
Context **configure** [service vpls string sap string egress qos sap-egress overrides hs-wrr-group](#)
[reference percent-rate decimal-number](#)
Tree [percent-rate](#)
Range 0.01 to 100.00
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis Scheduling rate override applied to the HS WRR group
Context **configure** [service vpls string sap string egress qos sap-egress overrides hs-wrr-group](#)
[reference rate \(number | keyword\)](#)
Tree [rate](#)
Range 1 to 2000000000
Units kilobps
Options max
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

policer [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance
Context **configure** [service vpls string sap string egress qos sap-egress overrides policer](#)
[reference](#)
Tree [policer](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i>
Tree	policer
Reference	configure qos sap-egress <i>string</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service vpls string sap string egress qos sap-egress overrides policer reference packet-byte-offset number
Tree	packet-byte-offset
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service vpls string sap string egress qos sap-egress overrides policer reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service vpls string sap string egress qos sap-egress overrides policer reference percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service vpls string sap string egress qos sap-egress overrides policer reference percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis Enter the **rate** context
Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#)
[reference](#) **rate**
Tree [rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis CIR rate
Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#)
[reference](#) **rate** **cir** (*number* | *keyword*)
Tree [cir](#)
Range 0 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis PIR rate
Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#)
[reference](#) **rate** **pir** (*number* | *keyword*)
Tree [pir](#)
Range 1 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference
Tree	queue
Introduced	16.0.R1
Platforms	All

[[queue-id](#)] *reference*

Synopsis	Policer unique ID
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference
Tree	queue
Reference	configure qos sap-egress <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference adaptation-rule

Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference avg-frame-overhead <i>decimal-number</i>
Tree	avg-frame-overhead
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size for the queue
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
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Context	configure service vpls string sap string egress qos sap-egress overrides queue reference drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number | keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

hs-class-weight *number*

Synopsis	Class weight override for the queue
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the hs-wred-queue context
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy reference

Synopsis	Slope policy applied to the HSQ queue group queue
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wred-queue policy reference
Tree	policy
Reference	configure qos slope-policy string
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight number

Synopsis	Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wrr-weight number
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs (number | keyword)

Synopsis	MBS
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference mbs (number keyword)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
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Context	configure service vpls string sap string egress qos sap-egress overrides queue reference monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference monitor-queue-depth fast-polling boolean
Tree	fast-polling
Description	When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to false , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold decimal-number
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference parent
Tree	parent

Introduced 16.0.R1
Platforms All

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group
Context **configure** [service vpls string sap string egress qos sap-egress overrides queue reference parent cir-weight number](#)
Tree [cir-weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group
Context **configure** [service vpls string sap string egress qos sap-egress overrides queue reference parent weight number](#)
Tree [weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

percent-rate

Synopsis Enter the **percent-rate** context
Context **configure** [service vpls string sap string egress qos sap-egress overrides queue reference percent-rate](#)
Tree [percent-rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms All

cir decimal-number

Synopsis CIR percent rate

Context	configure service vpls string sap string egress qos sap-egress overrides queue reference percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir decimal-number

Synopsis	PIR percent rate
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (number | keyword)

Synopsis	CIR rate
Context	configure service vpls string sap string egress qos sap-egress overrides queue reference rate cir (number keyword)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max

Introduced 16.0.R1
Platforms All

pir (*number* | *keyword*)

Synopsis PIR rate
Context **configure** [service vpls string sap string egress qos sap-egress overrides queue reference rate pir](#) (*number* | *keyword*)
Tree [pir](#)
Range 1 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms All

policy-name *reference*

Synopsis Policy ID to associate with SAP for mirrored service
Context **configure** [service vpls string sap string egress qos sap-egress policy-name reference](#)
Tree [policy-name](#)
Reference **configure** [qos sap-egress string](#)
Introduced 16.0.R1
Platforms All

port-redirect-group

Synopsis Enter the **port-redirect-group** context
Context **configure** [service vpls string sap string egress qos sap-egress port-redirect-group](#)
Tree [port-redirect-group](#)
Introduced 16.0.R1
Platforms All

group-name *reference*

Synopsis Name of the queue group redirect list policy

Context	configure service vpls string sap string egress qos sap-egress port-redirect-group group-name reference
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group string
Introduced	16.0.R1
Platforms	All

instance number

Synopsis	Instance of port queue group
Context	configure service vpls string sap string egress qos sap-egress port-redirect-group instance number
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service vpls string sap string egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service vpls string sap string egress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [**scheduler-name**] *string*

Synopsis	Enter the scheduler list instance
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Context	configure service vpls string sap string egress qos scheduler-policy overrides scheduler string
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[scheduler-name] string

Synopsis	Scheduler name
Context	configure service vpls string sap string egress qos scheduler-policy overrides scheduler string
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service vpls string sap string egress qos scheduler-policy overrides scheduler string parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service vpls string sap string egress qos scheduler-policy overrides scheduler string parent cir-weight number
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service vpls string sap string egress qos scheduler-policy overrides scheduler string parent weight number
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service vpls string sap string egress qos scheduler-policy overrides scheduler string rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	configure service vpls string sap string egress qos scheduler-policy overrides scheduler string rate cir (number keyword)
Tree	cir
Range	0 to 6400000000

Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service vpls string sap string egress qos scheduler-policy overrides scheduler string rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service vpls string sap string egress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service vpls string sap string eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure service vpls string sap string eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	configure service vpls string sap string eth-cfm collect-lmm-fc-stats fc keyword
Tree	fc
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile keyword

Synopsis	Forwarding class name for profile-aware counter
Context	configure service vpls string sap string eth-cfm collect-lmm-fc-stats fc-in-profile keyword
Tree	fc-in-profile

Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure <i>service vpls</i> <i>string sap</i> <i>string eth-cfm</i> collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*

Synopsis	Enter the mep list instance
Context	configure <i>service vpls</i> <i>string sap</i> <i>string eth-cfm</i> mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> mep-id <i>number</i>
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure <i>service vpls</i> <i>string sap</i> <i>string eth-cfm</i> mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> mep-id <i>number</i>
Tree	mep

Reference	configure eth-cfm domain string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain string association string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the ais context
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level number
Tree	client-meg-level
Range	1 to 7
Max.	7
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support boolean
Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
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Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval number
Tree	interval
Range	1 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais low-priority-defect keyword
Tree	low-priority-defect
Default	all-def
Options	all-def, mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais priority number
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification

Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i>
Tree	ccm

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number
Tree	ccm-padding-size
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number cfm-vlan-tag string
Tree	cfm-vlan-tag

String Length 1 to 9
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis Enable the **csf** context
Context **configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf**
Tree **csf**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier decimal-number

Synopsis Multiplication factor used to clear the CSF condition
Context **configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number**
Tree **multiplier**
Range 0.0 | 2.0 to 30.0
Default 3.5
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis Text description
Context **configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string**
Tree **description**
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> direction <i>keyword</i>
Tree	direction
Default	down
Options	down, up
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window

Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure service vpls string sap string eth-cfm mep md-admin-name <i>reference ma-admin-name reference mep-id number grace eth-ed priority number</i>
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed boolean

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure service vpls string sap string eth-cfm mep md-admin-name <i>reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</i>
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed boolean

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vpls string sap string eth-cfm mep md-admin-name <i>reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace boolean
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace boolean
Tree	tx-eth-vsm-grace
Description	When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number lbm-svc-act-responder boolean
Tree	lbm-svc-act-responder
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number low-priority-defect keyword
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis Threshold time limit for the one-way delay test

Context **configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number**

Tree [one-way-delay-threshold](#)

Range 0 to 600

Default 3

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis MEP provisioned using MA primary VLAN ID

Context **configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number primary-vlan boolean**

Tree [primary-vlan](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip primary-vlan (*number* | *keyword*)

Synopsis Enter the **mip** list instance

Context **configure service vpls string sap string eth-cfm mip primary-vlan (number | keyword)**

Tree [mip](#)

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan (*number* | *keyword*)

Synopsis	VLAN ID to which the MIP is attached
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>)
Tree	mip
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the none option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) cfm-vlan-tag <i>string</i>
Tree	cfm-vlan-tag
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MIP
Context	configure service vpls <i>string</i> sap <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) mac-address <i>string</i>
Tree	mac-address
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

snelch- ingress-ctag-levels *number*

Synopsis Snelch levels using additional VLAN C-Tag space

Context **configure service vpls string sap string eth-cfm snelch- ingress-ctag-levels *number***

Tree [snelch- ingress-ctag-levels](#)

Description This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.

Range 0 to 7

Max. 8

Instances

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

snelch- ingress-levels *number*

Synopsis Levels for which ETH-CFM packets are silently discarded

Context **configure service vpls string sap string eth-cfm snelch- ingress-levels *number***

Tree [snelch- ingress-levels](#)

Description This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.

Range 0 to 7

Max. 8

Instances

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vmep-filter *boolean*

Synopsis Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP
Context **configure** *service vpls string sap string eth-cfm vmep-filter boolean*
Tree *vmep-filter*
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ring *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Ethernet ring operation
Context **configure** *service vpls string sap string eth-ring number*
Tree *eth-ring*
Range 1 to 128
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

etree-leaf *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable etree leaf access-circuit status
Context **configure** *service vpls string sap string etree-leaf boolean*
Tree *etree-leaf*
Default false
Introduced 16.0.R1
Platforms All

etree-root-leaf-tag

Synopsis	Enable the etree-root-leaf-tag context
Context	configure service vpls string sap string etree-root-leaf-tag
Tree	etree-root-leaf-tag
Introduced	16.0.R1
Platforms	All

leaf number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Leaf tag value
Context	configure service vpls string sap string etree-root-leaf-tag leaf number
Tree	leaf
Range	1 to 4094
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the fdb context
Context	configure service vpls string sap string fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Enable automatic update of MAC protect list
Context	configure service vpls string sap string fdb auto-learn-mac-protect boolean
Tree	auto-learn-mac-protect
Default	false

Introduced 16.0.R1
Platforms All

auto-learn-mac-protect-exclude-list *reference*

Synopsis Referenced MAC protect exclusion list

Context **configure** [service vpls string](#) [sap string](#) [fdb auto-learn-mac-protect-exclude-list reference](#)

Tree [auto-learn-mac-protect-exclude-list](#)

Description This command references the name of a MAC protect exclusion list.
Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.
An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.

Reference **configure** [service mac-list string](#)

Introduced 20.5.R1

Platforms All

discard-unknown-source *boolean*

Synopsis Discard frames with unknown source

Context **configure** [service vpls string](#) [sap string](#) [fdb discard-unknown-source boolean](#)

Tree [discard-unknown-source](#)

Default false

Introduced 16.0.R1

Platforms All

discard-unprotected-dest-mac *boolean*

Synopsis Discard packet with unprotected destination MAC address

Context **configure** [service vpls string](#) [sap string](#) [fdb discard-unprotected-dest-mac boolean](#)

Tree [discard-unprotected-dest-mac](#)

Default false

Introduced 16.0.R1

Platforms All

limit-mac-move *keyword*

Synopsis	MAC move
Context	configure service vpls <i>string</i> sap <i>string</i> fdb limit-mac-move <i>keyword</i>
Tree	limit-mac-move
Default	blockable
Options	blockable, non-blockable
Introduced	16.0.R1
Platforms	All

mac-learning

Synopsis	Enter the mac-learning context
Context	configure service vpls <i>string</i> sap <i>string</i> fdb mac-learning
Tree	mac-learning
Introduced	16.0.R1
Platforms	All

aging *boolean*

Synopsis	Enable aging of MAC addresses
Context	configure service vpls <i>string</i> sap <i>string</i> fdb mac-learning aging <i>boolean</i>
Tree	aging
Default	true
Introduced	16.0.R1
Platforms	All

learning *boolean*

Synopsis	Enable learning of new MAC addresses
Context	configure service vpls <i>string</i> sap <i>string</i> fdb mac-learning learning <i>boolean</i>
Tree	learning
Default	true
Introduced	16.0.R1
Platforms	All

mac-pinning *boolean*

Synopsis	Enable MAC address pinning on this SAP
Context	configure service vpls string sap string fdb mac-pinning boolean
Tree	mac-pinning
Default	false
Introduced	16.0.R1
Platforms	All

maximum-mac-addresses *number*

Synopsis	Maximum number of MAC entries in the FDB
Context	configure service vpls string sap string fdb maximum-mac-addresses number
Tree	maximum-mac-addresses
Range	1 to 511999
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action to take whenever a relearn request for a protected MAC is received
Context	configure service vpls string sap string fdb protected-src-mac-violation-action keyword
Tree	protected-src-mac-violation-action
Options	sap-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

host-admin-state *keyword*

Synopsis	Administrative state of the hosts
Context	configure service vpls string sap string host-admin-state keyword
Tree	host-admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis Host lockout policy
Context **configure** [service vpls](#) *string* [sap](#) *string* [host-lockout-policy](#) *reference*
Tree [host-lockout-policy](#)
Reference **configure** [subscriber-mgmt](#) [host-lockout-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

i-vpls-mac-flush

Synopsis Enter the **i-vpls-mac-flush** context
Context **configure** [service vpls](#) *string* [sap](#) *string* [i-vpls-mac-flush](#)
Tree [i-vpls-mac-flush](#)
Introduced 16.0.R1
Platforms All

bgp-evpn

Synopsis Enter the **bgp-evpn** context
Context **configure** [service vpls](#) *string* [sap](#) *string* [i-vpls-mac-flush](#) [bgp-evpn](#)
Tree [bgp-evpn](#)
Introduced 16.0.R1
Platforms All

send-to-bvpls *boolean*

Synopsis Send B-VPLS EVPN flush
Context **configure** [service vpls](#) *string* [sap](#) *string* [i-vpls-mac-flush](#) [bgp-evpn](#) [send-to-bvpls](#) *boolean*
Tree [send-to-bvpls](#)
Default true
Introduced 16.0.R1

Platforms All

igmp-host-tracking

Synopsis Enter the **igmp-host-tracking** context
Context **configure** [service vpls string sap string igmp-host-tracking](#)
Tree [igmp-host-tracking](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis Time that the system continues to track inactive hosts
Context **configure** [service vpls string sap string igmp-host-tracking expiry-time number](#)
Tree [expiry-time](#)
Range 1 to 65535
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis Import policy that filters IGMP packets
Context **configure** [service vpls string sap string igmp-host-tracking import-policy reference](#)
Tree [import-policy](#)
Reference **configure** [policy-options policy-statement string](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis Maximum number of multicast groups to be tracked per group
Context **configure** [service vpls string sap string igmp-host-tracking maximum-number-group-sources number](#)
Tree [maximum-number-group-sources](#)

Range 1 to 32000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis Maximum number of multicast groups to be tracked
Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [igmp-host-tracking](#) [maximum-number-groups](#) *number*
Tree [maximum-number-groups](#)
Range 1 to 16000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis Maximum number of multicast sources to be tracked
Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [igmp-host-tracking](#) [maximum-number-sources](#) *number*
Tree [maximum-number-sources](#)
Range 1 to 1000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis Enable IGMP router alert check option
Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [igmp-host-tracking](#) [router-alert-check](#) *boolean*
Tree [router-alert-check](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-snooping

Synopsis Enter the **igmp-snooping** context

Context	configure service vpls string sap string igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	configure service vpls string sap string igmp-snooping fast-leave boolean
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vpls string sap string igmp-snooping import-policy reference
Tree	import-policy
Reference	configure policy-options policy-statement string
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum group source combinations
Context	configure service vpls string sap string igmp-snooping maximum-number-group-sources number
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum sources that are allowed per group
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the mcac context
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the mc-constraints context
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Context	configure service vpls string sap string igmp-snooping mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

level [**level-id**] *number*

Synopsis	Enter the level list instance
Context	configure service vpls string sap string igmp-snooping mcac mc-constraints level number
Tree	level
Introduced	16.0.R1
Platforms	All

[level-id] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure service vpls string sap string igmp-snooping mcac mc-constraints level number
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure service vpls string sap string igmp-snooping mcac mc-constraints level number bandwidth number
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [**number-lag-port-down**] *number*

Synopsis	Enter the number-down list instance
Context	configure service vpls string sap string igmp-snooping mcac mc-constraints number-down <i>number</i>
Tree	number-down
Introduced	16.0.R1
Platforms	All

[number-lag-port-down] *number*

Synopsis	Number of ports that are down in this LAG link
Context	configure service vpls string sap string igmp-snooping mcac mc-constraints number-down <i>number</i>
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	configure service vpls string sap string igmp-snooping mcac mc-constraints number-down <i>number</i> level <i>number</i>
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
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Context	configure service vpls string sap string igmp-snooping mcac mc-constraints use-lag-port-weight boolean
Tree	use-lag-port-weight
Description	When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	Multicast CAC policy name
Context	configure service vpls string sap string igmp-snooping mcac policy reference
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none">• subscriber level and redirected interface when redirection is configured• subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy string
Introduced	16.0.R1
Platforms	All

mrouter-port boolean

Synopsis	Operate port as a multicast router port
Context	configure service vpls string sap string igmp-snooping mrouter-port boolean

Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

mvr

Synopsis	Enter the mvr context
Context	configure service vpls string sap string igmp-snooping mvr
Tree	mvr
Introduced	16.0.R1
Platforms	All

from-vpls *reference*

Synopsis	MVR VPLS from which the multicast channels are taken
Context	configure service vpls string sap string igmp-snooping mvr from-vpls reference
Tree	from-vpls
Reference	configure service vpls string
Introduced	16.0.R1
Platforms	All

to-sap *string*

Synopsis	Multicast channels copied to SAP
Context	configure service vpls string sap string igmp-snooping mvr to-sap string
Tree	to-sap
String Length	1 to 45
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls string sap string igmp-snooping query-interval number

Tree	query-interval
Range	2 to 1024
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls string sap string igmp-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls string sap string igmp-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls string sap string igmp-snooping robust-count <i>number</i>
Tree	robust-count

Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping send-queries <i>boolean</i>
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the static context
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping static
Tree	static
Introduced	16.0.R1
Platforms	All

group [[group-address](#)] *string*

Synopsis	Enter the group list instance
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping static group <i>string</i>

Tree	group
Introduced	16.0.R1
Platforms	All

[group-address] *string*

Synopsis	Group address of static IGMP multicast channel
Context	configure service vpls string sap string igmp-snooping static group string
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure service vpls string sap string igmp-snooping static group string source string
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure service vpls string sap string igmp-snooping static group string source string
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping static group <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

version keyword

Synopsis	IGMP protocol version
Context	configure service vpls <i>string</i> sap <i>string</i> igmp-snooping <i>version</i> <i>keyword</i>
Tree	version
Default	3
Options	1, 2, 3
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure service vpls <i>string</i> sap <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service vpls <i>string</i> sap <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vpls string sap string ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter string
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vpls string sap string ingress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter string
Introduced	16.0.R1
Platforms	All

mac reference

Synopsis	MAC filter policy name
Context	configure service vpls string sap string ingress filter mac reference
Tree	mac
Reference	configure filter mac-filter string
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vpls string sap string ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos match-qinq-dot1p <i>keyword</i>
Tree	match-qinq-dot1p
Options	top, bottom
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the root context
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
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Context	configure service vpls string sap string ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service vpls string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service vpls string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [[priority-level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure service vpls string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] *number*

Synopsis Priority level

Context **configure** [service vpls](#) *string* [sap](#) *string* [ingress qos policer-control-policy overrides root](#) [priority-mbs-thresholds](#) [priority](#) *number*

Tree [priority](#)

Range 1 to 8

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis Minimum amount of cumulative buffer space allowed

Context **configure** [service vpls](#) *string* [sap](#) *string* [ingress qos policer-control-policy overrides root](#) [priority-mbs-thresholds](#) [priority](#) *number* [mbs-contribution](#) (*number* | *keyword*)

Tree [mbs-contribution](#)

Range 0 to 16777216

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis Policer control policy name

Context **configure** [service vpls](#) *string* [sap](#) *string* [ingress qos policer-control-policy](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos policer-control-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

sap-ingress

Synopsis	Enter the sap-ingress context
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress
Tree	sap-ingress
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue group instance
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service vpls string sap string ingress qos sap-ingress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure service vpls string sap string ingress qos sap-ingress overrides ip-criteria
Tree	ip-criteria
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	configure service vpls string sap string ingress qos sap-ingress overrides ip-criteria activate-entry-tag <i>number</i>
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure service vpls string sap string ingress qos sap-ingress overrides ipv6-criteria
Tree	ipv6-criteria
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv6 criteria
Context	configure service vpls string sap string ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag number
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [**policer-id**] *reference*

Synopsis	Enter the policer list instance
Context	configure service vpls string sap string ingress qos sap-ingress overrides policer reference
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	configure service vpls string sap string ingress qos sap-ingress overrides policer reference
Tree	policer
Reference	configure qos sap-ingress string policer number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service vpls string sap string ingress qos sap-ingress overrides policer reference cbs (number keyword)
Tree	cbs
Range	0 to 268435456

Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service vpls string sap string ingress qos sap-ingress overrides policer reference percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service vpls string sap string ingress qos sap-ingress overrides policer reference percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure service vpls string sap string ingress qos sap-ingress overrides policer reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service vpls string sap string ingress qos sap-ingress overrides policer reference rate cir (number keyword)
Tree	cir

Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference
Tree	queue
Introduced	16.0.R1

Platforms All

[queue-id] reference

Synopsis Policer unique ID

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference](#)

Tree [queue](#)

Reference **configure** [qos sap-ingress string queue number](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

adaptation-rule

Synopsis Enter the **adaptation-rule** context

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference adaptation-rule](#)

Tree [adaptation-rule](#)

Introduced 16.0.R1

Platforms All

cir keyword

Synopsis Constraint used when deriving the operational CIR value

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference adaptation-rule cir keyword](#)

Tree [cir](#)

Options max, min, closest

Introduced 16.0.R1

Platforms All

pir keyword

Synopsis Constraint used when deriving the operational PIR value

Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
----------	--

Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth fast-polling boolean
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference parent cir-weight number
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference parent weight number
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir decimal-number

Synopsis	CIR percent rate
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir decimal-number

Synopsis	PIR percent rate
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service vpls string sap string ingress qos sap-ingress overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .

Introduced 16.0.R1
Platforms All

cir (*number* | *keyword*)

Synopsis CIR rate
Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference rate cir](#) (*number* | *keyword*)
Tree [cir](#)
Range 0 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms All

pir (*number* | *keyword*)

Synopsis PIR rate
Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference rate pir](#) (*number* | *keyword*)
Tree [pir](#)
Range 1 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms All

policy-name *reference*

Synopsis Policy ID
Context **configure** [service vpls string sap string ingress qos sap-ingress policy-name reference](#)
Tree [policy-name](#)
Reference **configure** [qos sap-ingress string](#)
Introduced 16.0.R1
Platforms All

queuing-type *keyword*

Synopsis	Queuing type
Context	configure service vpls string sap string ingress qos sap-ingress queuing-type <i>keyword</i>
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service vpls string sap string ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service vpls string sap string ingress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [[scheduler-name](#)] *string*

Synopsis	Enter the scheduler list instance
Context	configure service vpls string sap string ingress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100

Introduced 16.0.R1
Platforms All

weight *number*

Synopsis Relative weight of the scheduler to feed the queue
Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#)
[scheduler](#) *string* [parent](#) **weight** *number*
Tree [weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

rate

Synopsis Enter the **rate** context
Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#)
[scheduler](#) *string* **rate**
Tree [rate](#)
Introduced 16.0.R1
Platforms All

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate
Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#)
[scheduler](#) *string* [rate](#) **cir** (*number* | *keyword*)
Tree [cir](#)
Range 0 to 6400000000
Units kilobps
Options sum, max
Introduced 16.0.R1
Platforms All

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

qtag-manipulation

Synopsis	Enter the qtag-manipulation context
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qtag-manipulation
Tree	qtag-manipulation
Introduced	16.0.R1
Platforms	All

c-tag (*number* | *keyword*)

Synopsis	Inner ingress vlan translation for two service delimiting vlan values
Context	configure service vpls <i>string</i> sap <i>string</i> ingress qtag-manipulation c-tag (<i>number</i> <i>keyword</i>)
Tree	c-tag
Range	0 to 4094

Options	tag-*
Notes	The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag).
Introduced	22.10.R1
Platforms	All

push-dot1q-vlan (*number* | *keyword*)

Synopsis	VLAN translation information
Context	configure service vpls string sap string ingress qtag-manipulation push-dot1q-vlan (<i>number</i> <i>keyword</i>)
Tree	push-dot1q-vlan
Range	0 to 4094
Options	use-sap-svlan
Notes	The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag).
Introduced	16.0.R1
Platforms	All

s-tag *number*

Synopsis	Outer ingress VLAN translation for two service delimiting VLAN values
Context	configure service vpls string sap string ingress qtag-manipulation s-tag <i>number</i>
Tree	s-tag
Range	0 to 4094
Notes	The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag).
Introduced	22.10.R1
Platforms	All

l2pt

Synopsis	Enter the l2pt context
Context	configure service vpls string sap string l2pt
Tree	l2pt
Introduced	16.0.R1
Platforms	All

force-boundary

Synopsis	Enable the force-boundary context
Context	configure service vpls string sap string l2pt force-boundary
Tree	force-boundary
Introduced	16.0.R1
Platforms	All

protocols

Synopsis	Enter the protocols context
Context	configure service vpls string sap string l2pt force-boundary protocols
Tree	protocols
Introduced	16.0.R1
Platforms	All

cdp boolean

Synopsis	Enable Cisco discovery protocol
Context	configure service vpls string sap string l2pt force-boundary protocols cdp boolean
Tree	cdp
Default	false
Introduced	16.0.R1
Platforms	All

dtp boolean

Synopsis	Enable dynamic trunking protocol
Context	configure service vpls string sap string l2pt force-boundary protocols dtp boolean
Tree	dtp
Default	false
Introduced	16.0.R1
Platforms	All

pagp *boolean*

Synopsis	Enable port aggregation protocol
Context	configure service vpls <i>string sap string l2pt force-boundary protocols pagp boolean</i>
Tree	pagp
Default	false
Introduced	16.0.R1
Platforms	All

stp *boolean*

Synopsis	Enable all spanning tree protocols
Context	configure service vpls <i>string sap string l2pt force-boundary protocols stp boolean</i>
Tree	stp
Default	true
Introduced	16.0.R1
Platforms	All

udld *boolean*

Synopsis	Enable unidirectional link detection
Context	configure service vpls <i>string sap string l2pt force-boundary protocols udld boolean</i>
Tree	udld
Default	false
Introduced	16.0.R1
Platforms	All

vtp *boolean*

Synopsis	Enable virtual trunk protocol
Context	configure service vpls <i>string sap string l2pt force-boundary protocols vtp boolean</i>
Tree	vtp
Default	false
Introduced	16.0.R1
Platforms	All

termination

Synopsis	Enable the termination context
Context	configure service vpls string sap string l2pt termination
Tree	termination
Introduced	16.0.R1
Platforms	All

protocols

Synopsis	Enter the protocols context
Context	configure service vpls string sap string l2pt termination protocols
Tree	protocols
Introduced	16.0.R1
Platforms	All

cdp boolean

Synopsis	Enable Cisco discovery protocol
Context	configure service vpls string sap string l2pt termination protocols cdp boolean
Tree	cdp
Default	false
Introduced	16.0.R1
Platforms	All

dtp boolean

Synopsis	Enable dynamic trunking protocol
Context	configure service vpls string sap string l2pt termination protocols dtp boolean
Tree	dtp
Default	false
Introduced	16.0.R1
Platforms	All

pagp *boolean*

Synopsis	Enable port aggregation protocol
Context	configure service vpls <i>string</i> sap <i>string</i> l2pt termination protocols pagp <i>boolean</i>
Tree	pagp
Default	false
Introduced	16.0.R1
Platforms	All

stp *boolean*

Synopsis	Enable all spanning tree protocols
Context	configure service vpls <i>string</i> sap <i>string</i> l2pt termination protocols stp <i>boolean</i>
Tree	stp
Default	true
Introduced	16.0.R1
Platforms	All

udld *boolean*

Synopsis	Enable unidirectional link detection
Context	configure service vpls <i>string</i> sap <i>string</i> l2pt termination protocols udld <i>boolean</i>
Tree	udld
Default	false
Introduced	16.0.R1
Platforms	All

vtp *boolean*

Synopsis	Enable virtual trunk protocol
Context	configure service vpls <i>string</i> sap <i>string</i> l2pt termination protocols vtp <i>boolean</i>
Tree	vtp
Default	false
Introduced	16.0.R1
Platforms	All

I2tpv3-session

Synopsis	Enable the I2tpv3-session context
Context	configure service vpls string sap string I2tpv3-session
Tree	I2tpv3-session
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the session for the service
Context	configure service vpls string sap string I2tpv3-session admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

pseudo-wire



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the pseudo-wire context
Context	configure service vpls string sap string I2tpv3-session pseudo-wire
Tree	pseudo-wire
Introduced	16.0.R4
Platforms	All

ethernet



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the Ethernet PW-type for the L2TPv3 session
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Context	configure service vpls string sap string l2tpv3-session pseudo-wire ethernet
Tree	ethernet
Notes	The following elements are part of a choice: ethernet or ethernet-vlan-id .
Introduced	16.0.R4
Platforms	All

ethernet-vlan-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ethernet-VLAN PW-type ID for the L2TPv3 session
Context	configure service vpls string sap string l2tpv3-session pseudo-wire ethernet-vlan-id number
Tree	ethernet-vlan-id
Range	0 to 4095
Notes	The following elements are part of a choice: ethernet or ethernet-vlan-id .
Introduced	16.0.R4
Platforms	All

router



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the router context
Context	configure service vpls string sap string l2tpv3-session router
Tree	router
Introduced	16.0.R4
Platforms	All

group *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel group name
Context	configure service vpls string sap string l2tpv3-session router group string
Tree	group
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router name used to identify the router instance
Context	configure service vpls string sap string l2tpv3-session router router-instance string
Tree	router-instance
String Length	1 to 64
Introduced	16.0.R4
Platforms	All

vc-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VC ID for the L2TPv3 session
Context	configure service vpls string sap string l2tpv3-session vc-id number
Tree	vc-id
Range	1 to 4294967295
Introduced	16.0.R4
Platforms	All

lag

Synopsis	Enter the lag context
Context	configure service vpls string sap string lag
Tree	lag
Introduced	16.0.R1
Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	configure service vpls string sap string lag link-map-profile number
Tree	link-map-profile
Description	<p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p>
Range	1 to 64
Introduced	16.0.R1
Platforms	All

per-link-hash

Synopsis	Enter the per-link-hash context
Context	configure service vpls string sap string lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	configure service vpls string sap string lag per-link-hash class number
Tree	class

Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	configure service vpls <i>string</i> sap <i>string</i> lag <i>per-link-hash</i> weight <i>number</i>
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

managed-vlan-list

Synopsis	Enter the managed-vlan-list context
Context	configure service vpls <i>string</i> sap <i>string</i> managed-vlan-list
Tree	managed-vlan-list
Introduced	19.10.R1
Platforms	All

range [[vlan-range](#)] *string*

Synopsis	Add a list entry for range
Context	configure service vpls <i>string</i> sap <i>string</i> managed-vlan-list range <i>string</i>
Tree	range
Introduced	19.10.R1
Platforms	All

[[vlan-range](#)] *string*

Synopsis	Range of VLANs associated with the M-VPLS SAP
Context	configure service vpls <i>string</i> sap <i>string</i> managed-vlan-list range <i>string</i>

Tree	range
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mc-ring

Synopsis	Enable the mc-ring context
Context	configure service vpls string sap string mc-ring
Tree	mc-ring
Introduced	16.0.R1
Platforms	All

ring-node *string*

Synopsis	Name for the ring node associated with this SAP
Context	configure service vpls string sap string mc-ring ring-node string
Tree	ring-node
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls string sap string mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	configure service vpls string sap string mld-snooping fast-leave boolean

Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vpls string sap string mld-snooping import-policy reference
Tree	import-policy
Reference	configure policy-options policy-statement string
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	configure service vpls string sap string mld-snooping maximum-number-groups number
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls string sap string mld-snooping mrouter-port boolean
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

mvr

Synopsis	Enter the mvr context
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Context	configure service vpls string sap string mld-snooping mvr
Tree	mvr
Introduced	16.0.R1
Platforms	All

from-vpls *reference*

Synopsis	MVR VPLS from which the multicast channels are taken
Context	configure service vpls string sap string mld-snooping mvr from-vpls reference
Tree	from-vpls
Reference	configure service vpls string
Introduced	16.0.R1
Platforms	All

to-sap *string*

Synopsis	SAP to which the multicast channels are copied
Context	configure service vpls string sap string mld-snooping mvr to-sap string
Tree	to-sap
String Length	1 to 45
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls string sap string mld-snooping query-interval number
Tree	query-interval
Range	2 to 1024
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls <i>string</i> sap <i>string</i> mld-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls <i>string</i> sap <i>string</i> mld-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>string</i> sap <i>string</i> mld-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
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Context	configure service vpls string sap string mld-snooping router-alert-check boolean
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	configure service vpls string sap string mld-snooping send-queries boolean
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the static context
Context	configure service vpls string sap string mld-snooping static
Tree	static
Introduced	16.0.R1
Platforms	All

group [*group-address*] *string*

Synopsis	Enter the group list instance
Context	configure service vpls string sap string mld-snooping static group string
Tree	group
Introduced	16.0.R1
Platforms	All

[group-address] *string*

Synopsis	Group address of multicast channel
Context	configure service vpls string sap string mld-snooping static group string

Tree	group
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure service vpls <i>string</i> sap <i>string</i> mld-snooping static group <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address
Context	configure service vpls <i>string</i> sap <i>string</i> mld-snooping static group <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	configure service vpls <i>string</i> sap <i>string</i> mld-snooping static group <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	Version of MLD running on the SAP or SDP
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Context	configure service vpls string sap string mld-snooping version keyword
Tree	version
Default	2
Options	1, 2
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Monitor operational group
Context	configure service vpls string sap string monitor-oper-group reference
Tree	monitor-oper-group
Reference	configure service oper-group string
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	16.0.R1
Platforms	All

mrp

Synopsis	Enter the mrp context
Context	configure service vpls string sap string mrp
Tree	mrp
Introduced	20.10.R1
Platforms	All

join-time *number*

Synopsis	Interval between transmit opportunities
Context	configure service vpls string sap string mrp join-time number
Tree	join-time
Range	1 to 10
Default	2
Introduced	20.10.R1
Platforms	All

leave-all-time *number*

Synopsis	Frequency that LeaveAll PDUs are generated
Context	configure service vpls <i>string</i> sap <i>string</i> mrp leave-all-time <i>number</i>
Tree	leave-all-time
Range	60 to 300
Default	100
Introduced	20.10.R1
Platforms	All

leave-time *number*

Synopsis	Time in leave state before transitioning to MT state
Context	configure service vpls <i>string</i> sap <i>string</i> mrp leave-time <i>number</i>
Tree	leave-time
Range	30 to 60
Default	30
Introduced	20.10.R1
Platforms	All

periodic-time *number*

Synopsis	Frequency of periodic events generation
Context	configure service vpls <i>string</i> sap <i>string</i> mrp periodic-time <i>number</i>
Tree	periodic-time
Range	10 to 100
Default	10
Introduced	20.10.R1
Platforms	All

periodic-timer *boolean*

Synopsis	Enable the periodic transmission timer
Context	configure service vpls <i>string</i> sap <i>string</i> mrp periodic-timer <i>boolean</i>
Tree	periodic-timer

Default	false
Introduced	20.10.R1
Platforms	All

policy reference

Synopsis	MMRP policy name
Context	configure service vpls <i>string</i> sap <i>string</i> mrp <i>policy</i> <i>reference</i>
Tree	policy
Reference	configure service mrp <i>policy</i> <i>string</i>
Introduced	20.10.R1
Platforms	All

multi-service-site reference

Synopsis	Multi service site name
Context	configure service vpls <i>string</i> sap <i>string</i> multi-service-site <i>reference</i>
Tree	multi-service-site
Reference	configure service customer <i>string</i> multi-service-site <i>string</i>
Introduced	16.0.R1
Platforms	All

oper-group reference

Synopsis	Operational group
Context	configure service vpls <i>string</i> sap <i>string</i> oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>string</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	16.0.R1
Platforms	All

pbb

Synopsis	Enter the pbb context
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Context	configure service vpls string sap string pbb
Tree	pbb
Introduced	20.10.R1
Platforms	All

fault-propagation

Synopsis	Enter the fault-propagation context
Context	configure service vpls string sap string pbb fault-propagation
Tree	fault-propagation
Introduced	20.10.R1
Platforms	All

backbone-mac-address [address] string

Synopsis	Add a list entry for backbone-mac-address
Context	configure service vpls string sap string pbb fault-propagation backbone-mac-address string
Tree	backbone-mac-address
Introduced	20.10.R1
Platforms	All

[address] string

Synopsis	Backbone MAC address
Context	configure service vpls string sap string pbb fault-propagation backbone-mac-address string
Tree	backbone-mac-address
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

backbone-mac-name [name] reference

Synopsis	Add a list entry for backbone-mac-name
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Context	configure service vpls string sap string pbb fault-propagation backbone-mac-name reference
Tree	backbone-mac-name
Introduced	20.10.R1
Platforms	All

[name] reference

Synopsis	Backbone MAC address name
Context	configure service vpls string sap string pbb fault-propagation backbone-mac-name reference
Tree	backbone-mac-name
Reference	configure service pbb mac string
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

pim-snooping

Synopsis	Enter the pim-snooping context
Context	configure service vpls string sap string pim-snooping
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

maximum-number-groups number

Synopsis	Maximum groups for this interface
Context	configure service vpls string sap string pim-snooping maximum-number-groups number
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

process-cpm-traffic-on-sap-down *boolean*

Synopsis	Process CPM traffic on SAP down event
Context	configure service vpls <i>string</i> sap <i>string</i> process-cpm-traffic-on-sap-down <i>boolean</i>
Tree	process-cpm-traffic-on-sap-down
Default	false
Introduced	16.0.R1
Platforms	All

radius-auth-policy *reference*

Synopsis	RADIUS authentication policy
Context	configure service vpls <i>string</i> sap <i>string</i> radius-auth-policy <i>reference</i>
Tree	radius-auth-policy
Reference	configure subscriber-mgmt radius-authentication-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv4 *reference*

Synopsis	Subscriber host connectivity verification policy for IPv4
Context	configure service vpls <i>string</i> sap <i>string</i> shcv-policy-ipv4 <i>reference</i>
Tree	shcv-policy-ipv4
Reference	configure subscriber-mgmt shcv-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spb

Synopsis	Enable the spb context
Context	configure service vpls <i>string</i> sap <i>string</i> spb
Tree	spb
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Admin state
Context	configure service vpls <i>string</i> sap <i>string</i> spb admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	All

level [*id*] *number*

Synopsis	Enter the level list instance
Context	configure service vpls <i>string</i> sap <i>string</i> spb level <i>number</i>
Tree	level
Introduced	21.10.R1
Platforms	All

[id] *number*

Synopsis	Level identifier
Context	configure service vpls <i>string</i> sap <i>string</i> spb level <i>number</i>
Tree	level
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

hello-interval *number*

Synopsis	Hello interval
Context	configure service vpls <i>string</i> sap <i>string</i> spb level <i>number</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 20000
Default	9
Units	seconds

Introduced 21.10.R1
Platforms All

hello-multiplier *number*

Synopsis Hello multiplier
Context **configure** [service vpls](#) *string* [sap](#) *string* [spb level](#) *number* **hello-multiplier** *number*
Tree [hello-multiplier](#)
Range 2 to 100
Default 3
Introduced 21.10.R1
Platforms All

metric *number*

Synopsis Metric
Context **configure** [service vpls](#) *string* [sap](#) *string* [spb level](#) *number* **metric** *number*
Tree [metric](#)
Range 0 to 16777215
Default 0
Introduced 21.10.R1
Platforms All

lsp-pacing-interval *number*

Synopsis Lsp pacing interval
Context **configure** [service vpls](#) *string* [sap](#) *string* [spb](#) **lsp-pacing-interval** *number*
Tree [lsp-pacing-interval](#)
Range 0 to 65535
Default 100
Units milliseconds
Introduced 21.10.R1
Platforms All

retransmit-interval *number*

Synopsis	Retransmit interval
Context	configure service vpls <i>string sap string spb retransmit-interval number</i>
Tree	retransmit-interval
Range	1 to 65535
Default	5
Units	seconds
Introduced	21.10.R1
Platforms	All

split-horizon-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Split horizon group
Context	configure service vpls <i>string sap string split-horizon-group reference</i>
Tree	split-horizon-group
Reference	configure service vpls <i>string split-horizon-group string</i>
Introduced	16.0.R1
Platforms	All

static-host

Synopsis	Enter the static-host context
Context	configure service vpls <i>string sap string static-host</i>
Tree	static-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 [*ip*] *string mac string*

Synopsis	Enter the ipv4 list instance
Context	configure service vpls <i>string sap string static-host ipv4 string mac string</i>
Tree	ipv4

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ip] string

Synopsis IP address
Context **configure service vpls string sap string static-host ipv4 string mac string**
Tree [ipv4](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string

Synopsis MAC address
Context **configure service vpls string sap string static-host ipv4 string mac string**
Tree [ipv4](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of the static host
Context **configure service vpls string sap string static-host ipv4 string mac string admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string string

Synopsis ANCP string

Context	configure service vpls string sap string static-host ipv4 string mac string ancp-string string
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis	Enter the app-profile context
Context	configure service vpls string sap string static-host ipv4 string mac string app-profile
Tree	app-profile
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile reference

Synopsis	Application profile used by the static host
Context	configure service vpls string sap string static-host ipv4 string mac string app-profile profile reference
Tree	profile
Reference	configure application-assurance group number partition number policy app-profile string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id string

Synopsis	Intermediate destination ID
Context	configure service vpls string sap string static-host ipv4 string mac string int-dest-id string
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv

Synopsis	Enter the shcv context
Context	configure service vpls <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> shcv
Tree	shcv
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	configure service vpls <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Sub-profile name
Context	configure service vpls <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the subscriber-id context
Context	configure service vpls <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Subscriber identification
Context	configure service vpls string sap string static-host ipv4 string mac string subscriber-id string string
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: string or use-sap-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	configure service vpls string sap string static-host ipv4 string mac string subscriber-id use-sap-id
Tree	use-sap-id
Notes	The following elements are part of a choice: string or use-sap-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

static-isid

Synopsis	Enter the static-isid context
Context	configure service vpls string sap string static-isid
Tree	static-isid
Introduced	19.10.R1
Platforms	All

range [[range-id](#)] *number*

Synopsis	Enter the range list instance
Context	configure service vpls string sap string static-isid range <i>number</i>
Tree	range
Introduced	19.10.R1
Platforms	All

[range-id] *number*

Synopsis	Range ID for static ISID
Context	configure service vpls <i>string sap string static-isid range number</i>
Tree	range
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound of the ISID range
Context	configure service vpls <i>string sap string static-isid range number end number</i>
Tree	end
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	Lower bound of the ISID range
Context	configure service vpls <i>string sap string static-isid range number start number</i>
Tree	start
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

stp

Synopsis	Enter the stp context
Context	configure service vpls <i>string sap string stp</i>
Tree	stp
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of STP
Context	configure service vpls <i>string</i> sap <i>string</i> stp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R4
Platforms	All

auto-edge *boolean*

Synopsis	Enable automatic detection of edge port characteristics
Context	configure service vpls <i>string</i> sap <i>string</i> stp auto-edge <i>boolean</i>
Tree	auto-edge
Default	true
Introduced	16.0.R4
Platforms	All

edge-port *boolean*

Synopsis	Designate SAP or SDP as an edge port
Context	configure service vpls <i>string</i> sap <i>string</i> stp edge-port <i>boolean</i>
Tree	edge-port
Default	false
Introduced	16.0.R4
Platforms	All

link-type *keyword*

Synopsis	Configure STP link-type
Context	configure service vpls <i>string</i> sap <i>string</i> stp link-type <i>keyword</i>
Tree	link-type
Default	pt-pt
Options	pt-pt, shared
Introduced	16.0.R4

Platforms All

mst-instance [*mst-inst-number*] *number*

Synopsis Enter the **mst-instance** list instance
Context **configure service vpls string sap string stp mst-instance number**
Tree [mst-instance](#)
Introduced 19.10.R1
Platforms All

[mst-inst-number] *number*

Synopsis Multiple Spanning Tree Instance number
Context **configure service vpls string sap string stp mst-instance number**
Tree [mst-instance](#)
Range 1 to 4094
Notes This element is part of a list key.
Introduced 19.10.R1
Platforms All

mst-path-cost *number*

Synopsis MSTI path cost
Context **configure service vpls string sap string stp mst-instance number mst-path-cost number**
Tree [mst-path-cost](#)
Range 1 to 200000000
Default 10
Introduced 19.10.R1
Platforms All

mst-port-priority *number*

Synopsis MSTI port priority
Context **configure service vpls string sap string stp mst-instance number mst-port-priority number**

Tree	mst-port-priority
Range	0 16 32 48 64 80 96 112 128 144 160 176 192 208 224 240
Default	128
Introduced	19.10.R1
Platforms	All

path-cost *number*

Synopsis	Configure path-cost
Context	configure service vpls <i>string</i> sap <i>string</i> stp path-cost <i>number</i>
Tree	path-cost
Range	1 to 200000000
Default	10
Introduced	16.0.R4
Platforms	All

port-num *number*

Synopsis	Configure virtual port number
Context	configure service vpls <i>string</i> sap <i>string</i> stp port-num <i>number</i>
Tree	port-num
Range	1 to 2047
Introduced	16.0.R4
Platforms	All

priority *number*

Synopsis	Configure STP priority
Context	configure service vpls <i>string</i> sap <i>string</i> stp priority <i>number</i>
Tree	priority
Range	0 to 255
Default	128
Introduced	16.0.R4
Platforms	All

root-guard *boolean*

Synopsis	Enable/disable STP root-guard
Context	configure service vpls <i>string</i> sap <i>string</i> stp root-guard <i>boolean</i>
Tree	root-guard
Default	false
Introduced	16.0.R4
Platforms	All

sub-sla-mgmt

Synopsis	Enter the sub-sla-mgmt context
Context	configure service vpls <i>string</i> sap <i>string</i> sub-sla-mgmt
Tree	sub-sla-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of SAP subscriber management
Context	configure service vpls <i>string</i> sap <i>string</i> sub-sla-mgmt admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the defaults context
Context	configure service vpls <i>string</i> sap <i>string</i> sub-sla-mgmt defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Default application profile name for this SAP
Context	configure service vpls string sap string sub-sla-mgmt defaults app-profile reference
Tree	app-profile
Reference	configure application-assurance group number partition number policy app-profile string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id

Synopsis	Enter the int-dest-id context
Context	configure service vpls string sap string sub-sla-mgmt defaults int-dest-id
Tree	int-dest-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Use the configured string
Context	configure service vpls string sap string sub-sla-mgmt defaults int-dest-id string string
Tree	string
String Length	1 to 32
Notes	The following elements are part of a choice: string or top-q-tag .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

top-q-tag

Synopsis	Use the top Q-tag of this SAP
Context	configure service vpls string sap string sub-sla-mgmt defaults int-dest-id top-q-tag
Tree	top-q-tag
Notes	The following elements are part of a choice: string or top-q-tag .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Default SLA profile for hosts on this SAP
Context	configure service vpls string sap string sub-sla-mgmt defaults sla-profile reference
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Default subscriber profile used for subscribers on this SAP
Context	configure service vpls string sap string sub-sla-mgmt defaults sub-profile reference
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the subscriber-id context
Context	configure service vpls string sap string sub-sla-mgmt defaults subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis	Use auto-generated subscriber identification string
Context	configure service vpls string sap string sub-sla-mgmt defaults subscriber-id auto-id
Tree	auto-id
Notes	The following elements are part of a choice: auto-id , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use SAP ID as default subscriber identification string
Context	configure service vpls string sap string sub-sla-mgmt defaults subscriber-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: auto-id , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string string

Synopsis	Default subscriber identification string for the SAP
Context	configure service vpls string sap string sub-sla-mgmt defaults subscriber-id string string
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: auto-id , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-da-hashing boolean

Synopsis	Use destination MAC address instead of subscriber ID to select egress LAG link
Context	configure service vpls string sap string sub-sla-mgmt mac-da-hashing boolean
Tree	mac-da-hashing
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-sub-parameters

Synopsis	Enter the single-sub-parameters context
Context	configure service vpls string sap string sub-sla-mgmt single-sub-parameters
Tree	single-sub-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

non-sub-traffic

Synopsis	Enable the non-sub-traffic context
Context	configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic
Tree	non-sub-traffic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name for all non-subscriber traffic
Context	configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile reference
Tree	app-profile
Reference	configure application-assurance group number partition number policy app-profile string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile applicable for all non-subscriber traffic
Context	configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic sla-profile reference
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber ID profile applied for all non-subscriber traffic
Context	configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic sub-profile reference
Tree	sub-profile

Reference	configure subscriber-mgmt sub-profile string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Subscriber ID applied for all non-subscriber traffic
Context	configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic subscriber-id string
Tree	subscriber-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profiled-traffic-only *boolean*

Synopsis	Include all traffic in subscriber profile
Context	configure service vpls string sap string sub-sla-mgmt single-sub-parameters profiled-traffic-only boolean
Tree	profiled-traffic-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis	Subscriber identification policy used on this SAP
Context	configure service vpls string sap string sub-sla-mgmt sub-ident-policy reference
Tree	sub-ident-policy
Reference	configure subscriber-mgmt sub-ident-policy string
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit (*keyword | number*)

Synopsis Maximum number of subscribers on this SAP

Context **configure** [service vpls](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [subscriber-limit](#) (*keyword | number*)

Tree [subscriber-limit](#)

Range 1 to 131071

Default 1

Options no-limit

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transit-policy

Synopsis Enable the **transit-policy** context

Context **configure** [service vpls](#) *string* [sap](#) *string* [transit-policy](#)

Tree [transit-policy](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP transit policy ID

Context **configure** [service vpls](#) *string* [sap](#) *string* [transit-policy](#) [ip reference](#)

Tree [ip](#)

Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [transit-ip-policy](#) *number*

Notes The following elements are part of a mandatory choice: **ip** or **prefix**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	configure service vpls string sap string transit-policy prefix reference
Tree	prefix
Reference	configure application-assurance group number partition number transit-prefix-policy number
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

segment-routing-v6 [[instance](#)] number

Synopsis	Enter the segment-routing-v6 list instance
Context	configure service vpls string segment-routing-v6 number
Tree	segment-routing-v6
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[[instance](#)] number

Synopsis	Segment routing v6 instance
Context	configure service vpls string segment-routing-v6 number
Tree	segment-routing-v6
Range	1
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [[locator-name](#)] *reference*

Synopsis	Enter the locator list instance
Context	configure service vpls <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i>
Tree	locator
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[[locator-name](#)] *reference*

Synopsis	SRv6 locator name
Context	configure service vpls <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i>
Tree	locator
Reference	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the function context
Context	configure service vpls <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> function
Tree	function
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt2m

Synopsis	Enable the end-dt2m context
Context	configure service vpls <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> function end-dt2m
Tree	end-dt2m
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure service vpls string segment-routing-v6 number locator reference function end-dt2m value number
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt2u

Synopsis	Enable the end-dt2u context
Context	configure service vpls string segment-routing-v6 number locator reference function end-dt2u
Tree	end-dt2u
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure service vpls string segment-routing-v6 number locator reference function end-dt2u value number
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [*locator-name*] *reference*

Synopsis	Enter the micro-segment-locator list instance
Context	configure service vpls string segment-routing-v6 number micro-segment-locator reference
Tree	micro-segment-locator
Max. Instances	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[*locator-name*] *reference*

Synopsis	Micro-segment SRv6 locator name
Context	configure service vpls string segment-routing-v6 number micro-segment-locator reference
Tree	micro-segment-locator
Description	This command associates a pre-defined micro-segment SRv6 locator (defined in the configure router segment-routing segment-routing-v6 context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN.
Reference	configure router string segment-routing segment-routing-v6 micro-segment-locator string
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the function context
Context	configure service vpls string segment-routing-v6 number micro-segment-locator reference function
Tree	function
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt2m

Synopsis	Enable the udt2m context
Context	configure service vpls string segment-routing-v6 number micro-segment-locator reference function udt2m
Tree	udt2m
Description	Commands in this context configure the SRv6 uDT2M behavior and the function value that is associated to the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occurs in the VPLS service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure service vpls string segment-routing-v6 number micro-segment-locator reference function udt2m value number
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt2u

Synopsis	Enable the udt2u context
Context	configure service vpls string segment-routing-v6 number micro-segment-locator reference function udt2u
Tree	udt2u
Description	Commands in this context configure the SRv6 uDT2U behavior and the function value that is associated to the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occurs in the VPLS service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	configure service vpls <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function udt2u <i>value</i> <i>number</i>
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure service vpls <i>string</i> service-id <i>number</i>
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

service-mtu *number*

Synopsis	MTU size
Context	configure service vpls <i>string</i> service-mtu <i>number</i>
Tree	service-mtu
Description	This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type. The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

Range	1 to 9782
Introduced	16.0.R1
Platforms	All

shcv-policy-ipv4 *reference*

Synopsis	Subscriber host connectivity verification policy for IPv4
Context	configure service vpls string shcv-policy-ipv4 reference
Tree	shcv-policy-ipv4
Reference	configure subscriber-mgmt shcv-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spb

Synopsis	Enable the spb context
Context	configure service vpls string spb
Tree	spb
Introduced	21.10.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of SPB
Context **configure** *service vpls string spb admin-state keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 21.10.R1
Platforms All

fid *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis FID identifier
Context **configure** *service vpls string spb fid number*
Tree [fid](#)
Range 1 to 4095
Default 1
Introduced 21.10.R1
Platforms All

isis-instance *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis ISIS instance
Context **configure** *service vpls string spb isis-instance number*
Tree [isis-instance](#)
Range 1024 to 2047
Default 1024

Introduced 21.10.R1
Platforms All

level [*id*] *number*

Synopsis Enter the **level** list instance
Context **configure service vpls string spb level number**
Tree [level](#)
Introduced 21.10.R1
Platforms All

[id] *number*

Synopsis Level identifier
Context **configure service vpls string spb level number**
Tree [level](#)
Range 1
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms All

bridge-priority *number*

Synopsis SPB Bridge priority
Context **configure service vpls string spb level number bridge-priority number**
Tree [bridge-priority](#)
Range 0 to 15
Default 8
Introduced 21.10.R1
Platforms All

ect-high-path-fid [*fid*] *number*

Synopsis Add a list entry for **ect-high-path-fid**
Context **configure service vpls string spb level number ect-high-path-fid number**

Tree	ect-high-path-fid
Introduced	21.10.R1
Platforms	All

[fid] *number*

Synopsis	SPB control vpls FID
Context	configure service vpls <i>string</i> spb level <i>number</i> ect-high-path-fid <i>number</i>
Tree	ect-high-path-fid
Range	1 to 4095
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

forwarding-tree

Synopsis	Enter the forwarding-tree context
Context	configure service vpls <i>string</i> spb level <i>number</i> forwarding-tree
Tree	forwarding-tree
Introduced	21.10.R1
Platforms	All

topology *keyword*

Synopsis	Topology
Context	configure service vpls <i>string</i> spb level <i>number</i> forwarding-tree topology <i>keyword</i>
Tree	topology
Default	spf
Options	spf, st
Introduced	21.10.R1
Platforms	All

lsp-lifetime *number*

Synopsis	Time LSP is considered valid by other routers
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Context	configure service vpls string spb lsp-lifetime number
Tree	lsp-lifetime
Range	350 to 65535
Default	1200
Introduced	21.10.R1
Platforms	All

lsp-refresh-interval

Synopsis	Enter the lsp-refresh-interval context
Context	configure service vpls string spb lsp-refresh-interval
Tree	lsp-refresh-interval
Introduced	21.10.R1
Platforms	All

half-lifetime boolean

Synopsis	Refresh LSP interval at half the LSP lifetime
Context	configure service vpls string spb lsp-refresh-interval half-lifetime boolean
Tree	half-lifetime
Default	true
Introduced	21.10.R1
Platforms	All

interval number

Synopsis	Specify the interval at which LSPs are refreshed
Context	configure service vpls string spb lsp-refresh-interval interval number
Tree	interval
Range	150 to 65535
Default	600
Introduced	21.10.R1
Platforms	All

overload

Synopsis	Enable the overload context
Context	configure service vpls string spb overload
Tree	overload
Introduced	21.10.R1
Platforms	All

timeout *number*

Synopsis	Time the router operates in overloaded state
Context	configure service vpls string spb overload timeout <i>number</i>
Tree	timeout
Range	0 60 to 1800
Default	0
Units	seconds
Introduced	21.10.R1
Platforms	All

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure service vpls string spb overload-on-boot
Tree	overload-on-boot
Introduced	21.10.R1
Platforms	All

timeout *number*

Synopsis	Time the router operates in overloaded state
Context	configure service vpls string spb overload-on-boot timeout <i>number</i>
Tree	timeout
Range	0 60 to 1800
Default	0
Units	seconds
Introduced	21.10.R1

Platforms All

timers

Synopsis Enter the **timers** context
Context **configure service vpls string spb timers**
Tree [timers](#)
Introduced 21.10.R1
Platforms All

lsp-wait

Synopsis Enable the **lsp-wait** context
Context **configure service vpls string spb timers lsp-wait**
Tree [lsp-wait](#)
Introduced 21.10.R1
Platforms All

initial-wait *number*

Synopsis Initial wait
Context **configure service vpls string spb timers lsp-wait initial-wait *number***
Tree [initial-wait](#)
Range 10 to 100000
Default 10
Units milliseconds
Introduced 21.10.R1
Platforms All

max-wait *number*

Synopsis Max wait time
Context **configure service vpls string spb timers lsp-wait max-wait *number***
Tree [max-wait](#)
Range 10 to 120000

Default	5000
Units	milliseconds
Introduced	21.10.R1
Platforms	All

second-wait *number*

Synopsis	Second wait
Context	configure service vpls <i>string</i> spb timers lsp-wait second-wait <i>number</i>
Tree	second-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	21.10.R1
Platforms	All

spf-wait

Synopsis	Enable the spf-wait context
Context	configure service vpls <i>string</i> spb timers spf-wait
Tree	spf-wait
Introduced	21.10.R1
Platforms	All

initial-wait *number*

Synopsis	Initial wait
Context	configure service vpls <i>string</i> spb timers spf-wait initial-wait <i>number</i>
Tree	initial-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	21.10.R1
Platforms	All

max-wait *number*

Synopsis	Max wait time
Context	configure service vpls <i>string</i> spb timers spf-wait max-wait <i>number</i>
Tree	max-wait
Range	10 to 120000
Default	10000
Units	milliseconds
Introduced	21.10.R1
Platforms	All

second-wait *number*

Synopsis	Second wait
Context	configure service vpls <i>string</i> spb timers spf-wait second-wait <i>number</i>
Tree	second-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	21.10.R1
Platforms	All

spbm-control-vpls

Synopsis	Enter the spbm-control-vpls context
Context	configure service vpls <i>string</i> spbm-control-vpls
Tree	spbm-control-vpls
Introduced	21.10.R1
Platforms	All

fid *number*

Synopsis	SPB control vpls FID
Context	configure service vpls <i>string</i> spbm-control-vpls fid <i>number</i>
Tree	fid

Range	1 to 4095
Introduced	21.10.R1
Platforms	All

service-name *string*

Synopsis	SPB control vpls service
Context	configure service vpls string spb-control-vpls service-name string
Tree	service-name
String Length	1 to 64
Introduced	21.10.R1
Platforms	All

split-horizon-group [[shg-name](#)] *string*

Synopsis	Enter the split-horizon-group list instance
Context	configure service vpls string split-horizon-group string
Tree	split-horizon-group
Introduced	16.0.R1
Platforms	All

[shg-name] *string*

Synopsis	SHG name to which the SDP belongs
Context	configure service vpls string split-horizon-group string
Tree	split-horizon-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vpls string split-horizon-group string description string

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the fdb context
Context	configure service vpls string split-horizon-group string fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

saps

Synopsis	Enter the saps context
Context	configure service vpls string split-horizon-group string fdb saps
Tree	saps
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Populate automatically MAC protect list with MAC addresses learned on SDP with split horizon group
Context	configure service vpls string split-horizon-group string fdb saps auto-learn-mac-protect <i>boolean</i>
Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect-exclude-list *reference*

Synopsis	Referenced MAC protect exclusion list name
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Context	configure service vpls string split-horizon-group string fdb saps auto-learn-mac-protect-exclude-list reference
Tree	auto-learn-mac-protect-exclude-list
Description	<p>This command references the name of a MAC protect exclusion list.</p> <p>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.</p> <p>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.</p>
Reference	configure service mac-list string
Introduced	20.5.R1
Platforms	All

discard-unprotected-dest-mac boolean

Synopsis	Discard packet with unprotected destination MAC address
Context	configure service vpls string split-horizon-group string fdb saps discard-unprotected-dest-mac boolean
Tree	discard-unprotected-dest-mac
Default	false
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action keyword

Synopsis	Action to take whenever a relearn request for a protected MAC is received
Context	configure service vpls string split-horizon-group string fdb saps protected-src-mac-violation-action keyword
Tree	protected-src-mac-violation-action
Options	sap-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

residential *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Define as a residential split horizon group
Context	configure service vpls <i>string</i> split-horizon-group <i>string</i> residential <i>boolean</i>
Tree	residential
Default	false
Introduced	16.0.R1
Platforms	All

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[[sdp-bind-id](#)] *string*

Synopsis	SDP binding ID
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Policy to collect accounting statistics
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy

Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

app-profile *reference*

Synopsis	ISA-AA application profile name for this SDP
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance <i>group</i> <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the bfd context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> bfd
Tree	bfd
Introduced	21.2.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> bfd bfd-liveness

Tree	bfd-liveness
Introduced	21.2.R1
Platforms	All

encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	configure service vpls string spoke-sdp string bfd bfd-liveness encap keyword
Tree	encap
Default	ipv4
Options	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	configure service vpls string spoke-sdp string bfd bfd-template reference
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context.
Reference	configure bfd bfd-template string
Introduced	21.2.R1
Platforms	All

failure-action *keyword*

Synopsis	VCCV BFD action taken on the SDP binding
Context	configure service vpls string spoke-sdp string bfd failure-action keyword
Tree	failure-action
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context.
Default	none

Options	none, down
Introduced	21.2.R1
Platforms	All

wait-for-up-timer *number*

Synopsis	Time waited for BFD up status
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	This command configures the time interval that is used to wait for a BFD session to come up. This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.
Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

block-on-mesh-failure *boolean*

Synopsis	Enable blocking after all SDPs are operationally down
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> block-on-mesh-failure <i>boolean</i>
Tree	block-on-mesh-failure
Default	false
Introduced	16.0.R1
Platforms	All

bpdu-translation *keyword*

Synopsis	BPDU format
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> bpdu-translation <i>keyword</i>
Tree	bpdu-translation
Options	auto, pvst, stp, pvst-rw, auto-rw
Introduced	16.0.R1

Platforms All

collect-stats *boolean*

Synopsis Allow agent to collect accounting statistics
Context **configure** [service vpls string spoke-sdp string collect-stats boolean](#)
Tree [collect-stats](#)
Default false
Introduced 16.0.R1
Platforms All

control-word *boolean*

Synopsis Use the control word as preferred
Context **configure** [service vpls string spoke-sdp string control-word boolean](#)
Tree [control-word](#)
Default false
Introduced 16.0.R1
Platforms All

cpu-protection

Synopsis Enter the **cpu-protection** context
Context **configure** [service vpls string spoke-sdp string cpu-protection](#)
Tree [cpu-protection](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context
Context **configure** [service vpls string spoke-sdp string cpu-protection eth-cfm-monitoring](#)
Tree [eth-cfm-monitoring](#)
Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates
 Context **configure service vpls string spoke-sdp string cpu-protection eth-cfm-monitoring aggregate**
 Tree **aggregate**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate
 Context **configure service vpls string spoke-sdp string cpu-protection eth-cfm-monitoring car**
 Tree **car**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis Monitor MAC for CPU protection
 Context **configure service vpls string spoke-sdp string cpu-protection mac-monitoring**
 Tree **mac-monitoring**
 Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis CPM protection policy
 Context **configure service vpls string spoke-sdp string cpu-protection policy-id *reference***
 Tree **policy-id**
 Reference **configure system security cpu-protection policy *number***
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** [service vpls string spoke-sdp string description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

dhcp

Synopsis Enter the **dhcp** context
Context **configure** [service vpls string spoke-sdp string dhcp](#)
Tree [dhcp](#)
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [service vpls string spoke-sdp string dhcp description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

snoop *boolean*

Synopsis Allow DHCP snooping of DHCP messages on the SAP or SDP
Context **configure** [service vpls string spoke-sdp string dhcp snoop boolean](#)
Tree [snoop](#)
Default false
Introduced 16.0.R1

Platforms All

egress

Synopsis Enter the **egress** context
Context **configure** [service vpls string spoke-sdp string egress](#)
Tree [egress](#)
Introduced 16.0.R1
Platforms All

filter

Synopsis Enter the **filter** context
Context **configure** [service vpls string spoke-sdp string egress filter](#)
Tree [filter](#)
Introduced 16.0.R1
Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure** [service vpls string spoke-sdp string egress filter ip reference](#)
Tree [ip](#)
Reference **configure** [filter ip-filter string](#)
Introduced 16.0.R1
Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [service vpls string spoke-sdp string egress filter ipv6 reference](#)
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter string](#)
Introduced 16.0.R1
Platforms All

mac reference

Synopsis	MAC filter policy name
Context	configure service vpls string spoke-sdp string egress filter mac reference
Tree	mac
Reference	configure filter mac-filter string
Introduced	16.0.R1
Platforms	All

mfib-allowed-mda-destinations

Synopsis	Enter the mfib-allowed-mda-destinations context
Context	configure service vpls string spoke-sdp string egress mfib-allowed-mda-destinations
Tree	mfib-allowed-mda-destinations
Introduced	16.0.R4
Platforms	All

mda [mda-id] string

Synopsis	Add a list entry for mda
Context	configure service vpls string spoke-sdp string egress mfib-allowed-mda-destinations mda string
Tree	mda
Introduced	16.0.R4
Platforms	All

[mda-id] string

Synopsis	MFIB allowed MDA destination
Context	configure service vpls string spoke-sdp string egress mfib-allowed-mda-destinations mda string
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vpls string spoke-sdp string egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure service vpls string spoke-sdp string egress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	configure service vpls string spoke-sdp string egress qos network policy-name reference
Tree	policy-name
Reference	configure qos network string
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service vpls string spoke-sdp string egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the egress port queue group
Context	configure service vpls string spoke-sdp string egress qos network port-redirect-group group-name reference
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group string
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue-group instance ID
Context	configure service vpls string spoke-sdp string egress qos network port-redirect-group instance number
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service vpls string spoke-sdp string egress vc-label number
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

endpoint

Synopsis	Enter the endpoint context
Context	configure service vpls string spoke-sdp string endpoint

Tree	endpoint
Introduced	16.0.R1
Platforms	All

name *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of service endpoint to which SDP bind is attached
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> endpoint name <i>reference</i>
Tree	name
Reference	configure service vpls <i>string</i> endpoint <i>string</i>
Introduced	16.0.R1
Platforms	All

precedence (*number* | *keyword*)

Synopsis	Precedence of this SDP bind when there are multiple SDP binds attached to one service endpoint
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> endpoint precedence (<i>number</i> <i>keyword</i>)
Tree	precedence
Range	1 to 4
Default	4
Options	primary
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	16.0.R1

Platforms All

eth-cfm

Synopsis Enter the **eth-cfm** context

Context **configure service vpls string spoke-sdp string eth-cfm**

Tree **eth-cfm**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis Enter the **collect-lmm-fc-stats** context

Context **configure service vpls string spoke-sdp string eth-cfm collect-lmm-fc-stats**

Tree **collect-lmm-fc-stats**

Description Commands in this context configure per forwarding class (FC) LMM information collection.

The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.

This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis Forwarding class name for profile-unaware counter

Context **configure service vpls string spoke-sdp string eth-cfm collect-lmm-fc-stats fc keyword**

Tree **fc**

Description This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options be, l2, af, l1, h2, ef, h1, nc

Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i>
Tree	fc-in-profile
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Description	<p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis Enter the **mep** list instance

Context **configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis Maintenance Domain (MD) name

Context **configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

Reference **configure eth-cfm domain string**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis Maintenance Association (MA) name

Context **configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

Reference **configure eth-cfm domain string association string**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis Maintenance Endpoint (MEP) ID

Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state keyword

Synopsis	Administrative state of the MEP
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the ais context
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level number

Synopsis	Client MEG level for AIS message generation
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level number
Tree	client-meg-level
Range	1 to 7

Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interface-support <i>boolean</i>
Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interval <i>number</i>
Tree	interval
Range	1 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	all-def
Options	all-def, mac-rem-err-xcon
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis Priority of the AIS messages generated by the node

Context **configure service vpls** *string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais priority number*

Tree [priority](#)

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis Enter the **alarm-notification** context

Context **configure service vpls** *string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification*

Tree [alarm-notification](#)

Description Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.

Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time number

Synopsis Time that must expire before an FNG alarm is raised

Context **configure service vpls** *string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number*

Tree [fng-alarm-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm <i>boolean</i>
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
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Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number
Tree	ccm-padding-size
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag string

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number cfm-vlan-tag string
Tree	cfm-vlan-tag
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the csf context
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier decimal-number

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number

Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> direction <i>keyword</i>
Tree	direction
Default	down
Options	down, up
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test
Tree	eth-test

Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis Test pattern for Ethernet Test frames

Context **configure service vpls** *string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword*

Tree [pattern](#)

Description This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.

Default all-zeros

Options all-zeros, all-ones

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis Fault propagation for the MEP

Context **configure service vpls** *string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation keyword*

Tree [fault-propagation](#)

Options use-if-status-tlv, suspend-ccm

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis Enter the **grace** context

Context **configure service vpls** *string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace*

Tree [grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i>
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i>
Tree	rx-eth-ed

Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-vsm-grace tx-eth-vsm-grace boolean
Tree	tx-eth-vsm-grace
Description	<p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number lbm-svc-act-responder boolean
Tree	lbm-svc-act-responder
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
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Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number low-priority-defect keyword
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address string

Synopsis	MAC address of the MEP
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold number

Synopsis	Threshold time limit for the one-way delay test
Context	configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID
Context	configure service vpls <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number primary-vlan boolean</i>
Tree	primary-vlan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip primary-vlan (*number | keyword*)

Synopsis	Enter the mip list instance
Context	configure service vpls <i>string spoke-sdp string eth-cfm mip primary-vlan (number keyword)</i>
Tree	mip
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan (*number | keyword*)

Synopsis	VLAN ID to which the MIP is attached
Context	configure service vpls <i>string spoke-sdp string eth-cfm mip primary-vlan (number keyword)</i>
Tree	mip
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the none option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) cfm-vlan-tag <i>string</i>
Tree	cfm-vlan-tag
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MIP
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) mac-address <i>string</i>
Tree	mac-address
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-ctag-levels *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm squelch-ingress-ctag-levels <i>number</i>
Tree	squelch-ingress-ctag-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.

Range	0 to 7
Max. Instances	8
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

snelch-gress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	configure service vpls string spoke-sdp string eth-cfm snelch-gress-levels number
Tree	snelch-gress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vmep-filter *boolean*

Synopsis	Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP
Context	configure service vpls string spoke-sdp string eth-cfm vmep-filter boolean
Tree	vmep-filter
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

etree-leaf *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable etree leaf access-circuit status
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> etree-leaf <i>boolean</i>
Tree	etree-leaf
Default	false
Introduced	16.0.R1
Platforms	All

etree-root-leaf-tag *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	E-tree root leaf tag status
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> etree-root-leaf-tag <i>boolean</i>
Tree	etree-root-leaf-tag
Default	false
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the fdb context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Populate automatically MAC protect list with source MAC addresses learned on SDP
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> fdb auto-learn-mac-protect <i>boolean</i>

Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect-exclude-list *reference*

Synopsis	Referenced MAC protect exclusion list name
Context	configure service vpls string spoke-sdp string fdb auto-learn-mac-protect-exclude-list reference
Tree	auto-learn-mac-protect-exclude-list
Description	<p>This command references the name of a MAC protect exclusion list.</p> <p>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.</p> <p>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.</p>
Reference	configure service mac-list string
Introduced	20.5.R1
Platforms	All

discard-unknown-source *boolean*

Synopsis	Discard packets with unknown destination MAC addresses
Context	configure service vpls string spoke-sdp string fdb discard-unknown-source boolean
Tree	discard-unknown-source
Default	false
Introduced	16.0.R1
Platforms	All

limit-mac-move *keyword*

Synopsis	MAC move
Context	configure service vpls string spoke-sdp string fdb limit-mac-move keyword
Tree	limit-mac-move
Default	blockable

Options	blockable, non-blockable
Introduced	16.0.R1
Platforms	All

mac-learning

Synopsis	Enter the mac-learning context
Context	configure service vpls string spoke-sdp string fdb mac-learning
Tree	mac-learning
Introduced	16.0.R1
Platforms	All

aging *boolean*

Synopsis	Enable aging of MAC addresses
Context	configure service vpls string spoke-sdp string fdb mac-learning aging <i>boolean</i>
Tree	aging
Default	true
Introduced	16.0.R1
Platforms	All

learning *boolean*

Synopsis	Enable learning of new MAC addresses
Context	configure service vpls string spoke-sdp string fdb mac-learning learning <i>boolean</i>
Tree	learning
Default	true
Introduced	16.0.R1
Platforms	All

mac-pinning *boolean*

Synopsis	MAC address pinning in active status
Context	configure service vpls string spoke-sdp string fdb mac-pinning <i>boolean</i>
Tree	mac-pinning

Default	false
Introduced	16.0.R1
Platforms	All

maximum-mac-addresses *number*

Synopsis	Maximum MAC entries in the FDB from this SDP
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> fdb maximum-mac-addresses <i>number</i>
Tree	maximum-mac-addresses
Range	1 to 511999
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action when a relearn request for a protected MAC is received on the SDP
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> fdb protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

force-vc-forwarding *keyword*

Synopsis	VC forwarding action
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> force-vc-forwarding <i>keyword</i>
Tree	force-vc-forwarding
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

hash-label

Synopsis	Enable the hash-label context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> hash-label

Tree	hash-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	16.0.R1
Platforms	All

signal-capability

Synopsis	Enable the signaling of the hash label between PE nodes
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> hash-label signal-capability
Tree	signal-capability
Introduced	16.0.R1
Platforms	All

i-vpls-mac-flush

Synopsis	Enter the i-vpls-mac-flush context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> i-vpls-mac-flush
Tree	i-vpls-mac-flush
Introduced	16.0.R1
Platforms	All

bgp-evpn

Synopsis	Enter the bgp-evpn context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> i-vpls-mac-flush bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

send-to-bvpls *boolean*

Synopsis	Send B-VPLS EVPN flush
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> i-vpls-mac-flush bgp-evpn send-to-bvpls <i>boolean</i>
Tree	send-to-bvpls

Default	true
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service vpls string spoke-sdp string igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	configure service vpls string spoke-sdp string igmp-snooping fast-leave boolean
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vpls string spoke-sdp string igmp-snooping import-policy reference
Tree	import-policy
Reference	configure policy-options policy-statement string
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum group source combinations
Context	configure service vpls string spoke-sdp string igmp-snooping maximum-number-group-sources number

Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum sources that are allowed per group
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the mcac context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
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Context	configure service vpls string spoke-sdp string igmp-snooping mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number | keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure service vpls string spoke-sdp string igmp-snooping mcac bandwidth mandatory (number keyword)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number | keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure service vpls string spoke-sdp string igmp-snooping mcac bandwidth total (number keyword)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure service vpls string spoke-sdp string igmp-snooping mcac interface-policy reference
Tree	interface-policy
Reference	configure mcac interface-policy string

Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	Multicast CAC policy name
Context	configure service vpls string spoke-sdp string igmp-snooping mcac policy reference
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none">• subscriber level and redirected interface when redirection is configured• subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy string
Introduced	16.0.R1
Platforms	All

mrouter-port boolean

Synopsis	Operate port as a multicast router port
Context	configure service vpls string spoke-sdp string igmp-snooping mrouter-port boolean
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping send-queries <i>boolean</i>
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the static context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping static
Tree	static
Introduced	16.0.R1
Platforms	All

group [*group-address*] *string*

Synopsis	Enter the group list instance
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping static group <i>string</i>
Tree	group
Introduced	16.0.R1
Platforms	All

[group-address] *string*

Synopsis	Group address of static IGMP multicast channel
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping static group <i>string</i>
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [*source-address*] *string*

Synopsis	Add a list entry for source
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping static group <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping static group <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.

Introduced 16.0.R2
Platforms All

starg

Synopsis any source address (*,G)
Context **configure service vpls string spoke-sdp string igmp-snooping static group string starg**
Tree **starg**
Notes The following elements are part of a mandatory choice: **source** or **starg**.
Introduced 16.0.R2
Platforms All

version *keyword*

Synopsis IGMP protocol version
Context **configure service vpls string spoke-sdp string igmp-snooping version keyword**
Tree **version**
Default 3
Options 1, 2, 3
Introduced 16.0.R1
Platforms All

ignore-standby-signaling *boolean*

Synopsis Ignore standby-bit received from TLDP peers when performing internal tasks
Context **configure service vpls string spoke-sdp string ignore-standby-signaling boolean**
Tree **ignore-standby-signaling**
Default false
Introduced 16.0.R1
Platforms All

ingress

Synopsis Enter the **ingress** context
Context **configure service vpls string spoke-sdp string ingress**

Tree [ingress](#)
Introduced 16.0.R1
Platforms All

filter

Synopsis Enter the **filter** context
Context **configure** [service vpls string spoke-sdp string ingress filter](#)
Tree [filter](#)
Introduced 16.0.R1
Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure** [service vpls string spoke-sdp string ingress filter ip reference](#)
Tree [ip](#)
Reference **configure** [filter ip-filter string](#)
Introduced 16.0.R1
Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [service vpls string spoke-sdp string ingress filter ipv6 reference](#)
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter string](#)
Introduced 16.0.R1
Platforms All

mac reference

Synopsis MAC filter policy name
Context **configure** [service vpls string spoke-sdp string ingress filter mac reference](#)
Tree [mac](#)

Reference	configure filter mac-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>

Introduced 16.0.R1
Platforms All

instance *number*

Synopsis Instance of the forwarding-plane ingress Queue Group for this SDP binding
Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [fp-redirect-group](#) [instance](#) *number*
Tree [instance](#)
Range 1 to 65535
Introduced 16.0.R1
Platforms All

policy-name *reference*

Synopsis Network policy ID
Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos](#) [network](#) *string*
Introduced 16.0.R1
Platforms All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end
Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [ingress](#) [vc-label](#) *number*
Tree [vc-label](#)
Range 1 to 1048575
Introduced 16.0.R1
Platforms All

l2pt

Synopsis	Enter the l2pt context
Context	configure service vpls string spoke-sdp string l2pt
Tree	l2pt
Introduced	16.0.R1
Platforms	All

termination

Synopsis	Enable the termination context
Context	configure service vpls string spoke-sdp string l2pt termination
Tree	termination
Introduced	16.0.R1
Platforms	All

protocols

Synopsis	Enter the protocols context
Context	configure service vpls string spoke-sdp string l2pt termination protocols
Tree	protocols
Introduced	16.0.R1
Platforms	All

cdp boolean

Synopsis	Enable Cisco discovery protocol
Context	configure service vpls string spoke-sdp string l2pt termination protocols cdp boolean
Tree	cdp
Default	false
Introduced	16.0.R1
Platforms	All

dtp boolean

Synopsis	Enable dynamic trunking protocol
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Context	configure service vpls string spoke-sdp string l2pt termination protocols dtp boolean
Tree	ntp
Default	false
Introduced	16.0.R1
Platforms	All

pagp boolean

Synopsis	Enable port aggregation protocol
Context	configure service vpls string spoke-sdp string l2pt termination protocols pagp boolean
Tree	pagp
Default	false
Introduced	16.0.R1
Platforms	All

stp boolean

Synopsis	Enable all spanning tree protocols
Context	configure service vpls string spoke-sdp string l2pt termination protocols stp boolean
Tree	stp
Default	true
Introduced	16.0.R1
Platforms	All

udld boolean

Synopsis	Enable unidirectional link detection
Context	configure service vpls string spoke-sdp string l2pt termination protocols udld boolean
Tree	udld
Default	false
Introduced	16.0.R1
Platforms	All

vtp *boolean*

Synopsis	Enable virtual trunk protocol
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> l2pt termination protocols vtp <i>boolean</i>
Tree	vtp
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping fast-leave <i>boolean</i>
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping mrouter-port <i>boolean</i>
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval

Range	1 to 50
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1

Platforms All

send-queries *boolean*

Synopsis Generate IGMP general queries
Context **configure** [service vpls string spoke-sdp string mld-snooping send-queries boolean](#)
Tree [send-queries](#)
Default false
Introduced 16.0.R1
Platforms All

static

Synopsis Enter the **static** context
Context **configure** [service vpls string spoke-sdp string mld-snooping static](#)
Tree [static](#)
Introduced 16.0.R1
Platforms All

group [[group-address](#)] *string*

Synopsis Enter the **group** list instance
Context **configure** [service vpls string spoke-sdp string mld-snooping static group string](#)
Tree [group](#)
Introduced 16.0.R1
Platforms All

[group-address] *string*

Synopsis Group address of multicast channel
Context **configure** [service vpls string spoke-sdp string mld-snooping static group string](#)
Tree [group](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping static group <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping static group <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping static group <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	Version of MLD running on the SAP or SDP
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping version <i>keyword</i>
Tree	version
Default	2

Options	1, 2
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Operational group identifier that affect the state of this SDP bind
Context	configure service vpls string spoke-sdp string monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group string
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	16.0.R1
Platforms	All

mrp

Synopsis	Enter the mrp context
Context	configure service vpls string spoke-sdp string mrp
Tree	mrp
Introduced	20.10.R1
Platforms	All

join-time *number*

Synopsis	Maximum rate for attribute join messages sent on SDP
Context	configure service vpls string spoke-sdp string mrp join-time <i>number</i>
Tree	join-time
Range	1 to 10
Default	2
Units	deciseconds
Introduced	20.10.R1
Platforms	All

leave-all-time *number*

Synopsis	Frequency of LeaveAll PDUs by LeaveAll state machine
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mrp leave-all-time <i>number</i>
Tree	leave-all-time
Range	60 to 300
Default	100
Units	deciseconds
Introduced	20.10.R1
Platforms	All

leave-time *number*

Synopsis	Time in LV state before transition to MT state
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mrp leave-time <i>number</i>
Tree	leave-time
Range	30 to 60
Default	30
Units	deciseconds
Introduced	20.10.R1
Platforms	All

periodic-time *number*

Synopsis	Frequency of periodic events generated by state machine
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> mrp periodic-time <i>number</i>
Tree	periodic-time
Range	10 to 100
Default	10
Units	deciseconds
Introduced	20.10.R1
Platforms	All

periodic-timer *boolean*

Synopsis	Enable the Periodic Transmission Timer
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Context	configure service vpls string spoke-sdp string mrp periodic-timer boolean
Tree	periodic-timer
Default	false
Introduced	20.10.R1
Platforms	All

policy reference

Synopsis	MRP policy to control Group B-MAC attributes
Context	configure service vpls string spoke-sdp string mrp policy reference
Tree	policy
Reference	configure service mrp policy string
Introduced	20.10.R1
Platforms	All

oper-group reference

Synopsis	Operational group identifier
Context	configure service vpls string spoke-sdp string oper-group reference
Tree	oper-group
Reference	configure service oper-group string
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	16.0.R1
Platforms	All

pbb

Synopsis	Enter the pbb context
Context	configure service vpls string spoke-sdp string pbb
Tree	pbb
Introduced	20.10.R1
Platforms	All

fault-propagation

Synopsis	Enter the fault-propagation context
Context	configure service vpls string spoke-sdp string pbb fault-propagation
Tree	fault-propagation
Introduced	20.10.R1
Platforms	All

backbone-mac-address [[address](#)] *string*

Synopsis	Add a list entry for backbone-mac-address
Context	configure service vpls string spoke-sdp string pbb fault-propagation backbone-mac-address string
Tree	backbone-mac-address
Introduced	20.10.R1
Platforms	All

[\[address\]](#) *string*

Synopsis	Backbone MAC address
Context	configure service vpls string spoke-sdp string pbb fault-propagation backbone-mac-address string
Tree	backbone-mac-address
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

backbone-mac-name [[name](#)] *reference*

Synopsis	Add a list entry for backbone-mac-name
Context	configure service vpls string spoke-sdp string pbb fault-propagation backbone-mac-name reference
Tree	backbone-mac-name
Introduced	20.10.R1
Platforms	All

[name] *reference*

Synopsis	Backbone MAC address name
Context	configure service vpls string spoke-sdp string pbb fault-propagation backbone-mac-name reference
Tree	backbone-mac-name
Reference	configure service pbb mac string
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

pim-snooping

Synopsis	Enter the pim-snooping context
Context	configure service vpls string spoke-sdp string pim-snooping
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups for this interface
Context	configure service vpls string spoke-sdp string pim-snooping maximum-number-groups number
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

pw-status

Synopsis	Enter the pw-status context
Context	configure service vpls string spoke-sdp string pw-status
Tree	pw-status
Introduced	16.0.R1
Platforms	All

signaling *boolean*

Synopsis	Enable the use of pseudowire status signaling
Context	configure service vpls string spoke-sdp string pw-status signaling boolean
Tree	signaling
Default	true
Introduced	16.0.R1
Platforms	All

spb

Synopsis	Enable the spb context
Context	configure service vpls string spoke-sdp string spb
Tree	spb
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Admin state
Context	configure service vpls string spoke-sdp string spb admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	All

level [*id*] *number*

Synopsis	Enter the level list instance
Context	configure service vpls string spoke-sdp string spb level number
Tree	level
Introduced	21.10.R1
Platforms	All

[id] *number*

Synopsis	Level identifier
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> spb level <i>number</i>
Tree	level
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

hello-interval *number*

Synopsis	Hello interval
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> spb level <i>number</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 20000
Default	9
Units	seconds
Introduced	21.10.R1
Platforms	All

hello-multiplier *number*

Synopsis	Hello multiplier
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> spb level <i>number</i> hello-multiplier <i>number</i>
Tree	hello-multiplier
Range	2 to 100
Default	3
Introduced	21.10.R1
Platforms	All

metric *number*

Synopsis	Metric
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> spb level <i>number</i> metric <i>number</i>

Tree	metric
Range	0 to 16777215
Default	0
Introduced	21.10.R1
Platforms	All

lsp-pacing-interval *number*

Synopsis	Lsp pacing interval
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> spb lsp-pacing-interval <i>number</i>
Tree	lsp-pacing-interval
Range	0 to 65535
Default	100
Units	milliseconds
Introduced	21.10.R1
Platforms	All

retransmit-interval *number*

Synopsis	Retransmit interval
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> spb retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 65535
Default	5
Units	seconds
Introduced	21.10.R1
Platforms	All

split-horizon-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the split horizon group where the spoke SDP bind belongs to
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> split-horizon-group <i>reference</i>

Tree	split-horizon-group
Reference	configure service vpls string split-horizon-group string
Introduced	16.0.R1
Platforms	All

static-isid

Synopsis	Enter the static-isid context
Context	configure service vpls string spoke-sdp string static-isid
Tree	static-isid
Introduced	19.10.R1
Platforms	All

range [range-id] number

Synopsis	Enter the range list instance
Context	configure service vpls string spoke-sdp string static-isid range number
Tree	range
Introduced	19.10.R1
Platforms	All

[range-id] number

Synopsis	Range ID for static ISID
Context	configure service vpls string spoke-sdp string static-isid range number
Tree	range
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

end number

Synopsis	Upper bound of the ISID range
Context	configure service vpls string spoke-sdp string static-isid range number end number

Tree	end
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

start number

Synopsis	Lower bound of the ISID range
Context	configure service vpls string spoke-sdp string static-isid range number start number
Tree	start
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

stp

Synopsis	Enter the stp context
Context	configure service vpls string spoke-sdp string stp
Tree	stp
Introduced	16.0.R4
Platforms	All

admin-state keyword

Synopsis	Administrative state of STP
Context	configure service vpls string spoke-sdp string stp admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	16.0.R4
Platforms	All

auto-edge boolean

Synopsis	Enable automatic detection of edge port characteristics
Context	configure service vpls string spoke-sdp string stp auto-edge boolean

Tree	auto-edge
Default	true
Introduced	16.0.R4
Platforms	All

edge-port *boolean*

Synopsis	Designate SAP or SDP as an edge port
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> stp edge-port <i>boolean</i>
Tree	edge-port
Default	false
Introduced	16.0.R4
Platforms	All

link-type *keyword*

Synopsis	Configure STP link-type
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> stp link-type <i>keyword</i>
Tree	link-type
Default	pt-pt
Options	pt-pt, shared
Introduced	16.0.R4
Platforms	All

path-cost *number*

Synopsis	Configure path-cost
Context	configure service vpls <i>string</i> spoke-sdp <i>string</i> stp path-cost <i>number</i>
Tree	path-cost
Range	1 to 200000000
Default	10
Introduced	16.0.R4
Platforms	All

port-num *number*

Synopsis	Virtual port number
Context	configure <i>service vpls string spoke-sdp string stp port-num number</i>
Tree	<i>port-num</i>
Range	1 to 2047
Introduced	16.0.R4
Platforms	All

priority *number*

Synopsis	Configure STP priority
Context	configure <i>service vpls string spoke-sdp string stp priority number</i>
Tree	<i>priority</i>
Range	0 to 255
Default	128
Introduced	16.0.R4
Platforms	All

root-guard *boolean*

Synopsis	Enable/disable STP root-guard
Context	configure <i>service vpls string spoke-sdp string stp root-guard boolean</i>
Tree	<i>root-guard</i>
Default	false
Introduced	16.0.R4
Platforms	All

transit-policy

Synopsis	Enable the transit-policy context
Context	configure <i>service vpls string spoke-sdp string transit-policy</i>
Tree	<i>transit-policy</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	configure <i>service vpls string spoke-sdp string transit-policy prefix reference</i>
Tree	<i>prefix</i>
Reference	configure <i>application-assurance group number partition number transit-prefix-policy number</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-type keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported
Context	configure <i>service vpls string spoke-sdp string vc-type keyword</i>
Tree	<i>vc-type</i>
Default	ether
Options	ether, vlan
Introduced	16.0.R1
Platforms	All

vlan-vc-tag number

Synopsis	SDP bind VC tag
Context	configure <i>service vpls string spoke-sdp string vlan-vc-tag number</i>
Tree	<i>vlan-vc-tag</i>
Range	0 to 4094
Introduced	16.0.R1

Platforms All

stp

Synopsis Enter the **stp** context
Context **configure service vpls string stp**
Tree **stp**
Introduced 16.0.R4
Platforms All

admin-state *keyword*

Synopsis Administrative state of STP
Context **configure service vpls string stp admin-state keyword**
Tree **admin-state**
Default disable
Options enable, disable
Introduced 16.0.R4
Platforms All

forward-delay *number*

Synopsis Configure forward-delay
Context **configure service vpls string stp forward-delay number**
Tree **forward-delay**
Range 4 to 30
Default 15
Introduced 16.0.R4
Platforms All

hello-time *number*

Synopsis Configure hello-time
Context **configure service vpls string stp hello-time number**
Tree **hello-time**

Range	1 to 10
Default	2
Introduced	16.0.R4
Platforms	All

hold-count *number*

Synopsis	Configure BPDU transmit hold count
Context	configure service vpls <i>string</i> stp hold-count <i>number</i>
Tree	hold-count
Range	1 to 20
Default	6
Introduced	16.0.R4
Platforms	All

maximum-age *number*

Synopsis	Configure maximum STP information age
Context	configure service vpls <i>string</i> stp maximum-age <i>number</i>
Tree	maximum-age
Range	6 to 40
Default	20
Introduced	16.0.R4
Platforms	All

mode *keyword*

Synopsis	Configure protocol version
Context	configure service vpls <i>string</i> stp mode <i>keyword</i>
Tree	mode
Default	rstp
Options	rstp, comp-dot1w, dot1w, mstp, pmstp
Introduced	16.0.R4
Platforms	All

mst-instance [*mst-inst-number*] *number*

Synopsis	Enter the mst-instance list instance
Context	configure <i>service vpls string stp mst-instance number</i>
Tree	<i>mst-instance</i>
Introduced	19.10.R1
Platforms	All

[mst-inst-number] *number*

Synopsis	Multiple Spanning Tree Instance number
Context	configure <i>service vpls string stp mst-instance number</i>
Tree	<i>mst-instance</i>
Range	1 to 4094
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mst-priority *number*

Synopsis	Priority of multiple spanning tree instance
Context	configure <i>service vpls string stp mst-instance number mst-priority number</i>
Tree	<i>mst-priority</i>
Range	0 4096 8192 12288 16384 20480 24576 28672 32768 36864 40960 45056 49152 53248 57344 61440
Default	32768
Introduced	19.10.R1
Platforms	All

vlan-range [*range*] *string*

Synopsis	Add a list entry for vlan-range
Context	configure <i>service vpls string stp mst-instance number vlan-range string</i>
Tree	<i>vlan-range</i>
Introduced	19.10.R1

Platforms All

[range] *string*

Synopsis Range of VLANs associated with the M-VPLS SAP
Context **configure service vpls string stp mst-instance number vlan-range string**
Tree **vlan-range**
Notes This element is part of a list key.
Introduced 19.10.R1
Platforms All

mst-maximum-hops *number*

Synopsis Maximum number of hops in an MSTP region
Context **configure service vpls string stp mst-maximum-hops number**
Tree **mst-maximum-hops**
Range 1 to 40
Default 20
Introduced 19.10.R1
Platforms All

mst-name *string*

Synopsis MST region name
Context **configure service vpls string stp mst-name string**
Tree **mst-name**
String Length 1 to 32
Introduced 19.10.R1
Platforms All

mst-revision *number*

Synopsis MST configuration revision
Context **configure service vpls string stp mst-revision number**
Tree **mst-revision**

Range	0 to 65535
Introduced	19.10.R1
Platforms	All

priority number

Synopsis	STP bridge priority
Context	configure service vpls string stp priority number
Tree	priority
Range	0 to 65535
Default	32768
Introduced	16.0.R4
Platforms	All

temp-flooding number

Synopsis	Temporary flooding
Context	configure service vpls string temp-flooding number
Tree	temp-flooding
Range	3 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

vpn-id number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	configure service vpls string vpn-id number
Tree	vpn-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

vxlan

Synopsis	Enter the vxlan context
Context	configure service vpls string vxlan
Tree	vxlan
Introduced	16.0.R1
Platforms	All

instance [vxlan-instance] number

Synopsis	Enter the instance list instance
Context	configure service vpls string vxlan instance number
Tree	instance
Introduced	16.0.R1
Platforms	All

[vxlan-instance] number

Synopsis	VXLAN instance
Context	configure service vpls string vxlan instance number
Tree	instance
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

assisted-replication

Synopsis	Enter the assisted-replication context
Context	configure service vpls string vxlan instance number assisted-replication
Tree	assisted-replication
Introduced	16.0.R1
Platforms	All

leaf

Synopsis	Enable the leaf context
Context	configure service vpls string vxlan instance number assisted-replication leaf
Tree	leaf
Notes	The following elements are part of a choice: leaf or replicator .
Introduced	16.0.R1
Platforms	All

acttime number

Synopsis	Time for the leaf to wait before sending traffic to a new replicator
Context	configure service vpls string vxlan instance number assisted-replication leaf acttime number
Tree	acttime
Range	1 to 255
Units	seconds
Introduced	16.0.R1
Platforms	All

replicator

Synopsis	AR role as replicator
Context	configure service vpls string vxlan instance number assisted-replication replicator
Tree	replicator
Notes	The following elements are part of a choice: leaf or replicator .
Introduced	16.0.R1
Platforms	All

egress-vtep [ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	Add a list entry for egress-vtep
Context	configure service vpls string vxlan instance number egress-vtep (ipv4-address-no-zone ipv6-address-no-zone)
Tree	egress-vtep
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis VTEP IP address used when originating VXLAN packets

Context **configure service vpls** *string vxlan instance number egress-vtep* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [egress-vtep](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fdb

Synopsis Enter the **fdb** context

Context **configure service vpls** *string vxlan instance number fdb*

Tree [fdb](#)

Introduced 16.0.R1

Platforms All

discard-unknown-source *boolean*

Synopsis Discard frames with unknown source

Context **configure service vpls** *string vxlan instance number fdb discard-unknown-source boolean*

Tree [discard-unknown-source](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-learning

Synopsis Enter the **mac-learning** context

Context **configure service vpls** *string vxlan instance number fdb mac-learning*

Tree [mac-learning](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

aging *boolean*

Synopsis Enable/disable aging of MAC addresses
Context **configure** [service](#) [vpls](#) *string* [vxlan](#) *instance* *number* [fdb](#) [mac-learning](#) [aging](#) *boolean*
Tree [aging](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

learning *boolean*

Synopsis Enable learning of new MAC addresses
Context **configure** [service](#) [vpls](#) *string* [vxlan](#) *instance* *number* [fdb](#) [mac-learning](#) [learning](#) *boolean*
Tree [learning](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

maximum-mac-addresses *number*

Synopsis Maximum number of MAC entries in the FDB from this vxlan instance
Context **configure** [service](#) [vpls](#) *string* [vxlan](#) *instance* *number* [fdb](#) [maximum-mac-addresses](#) *number*
Tree [maximum-mac-addresses](#)
Range 1 to 511999
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

protected-src-mac-violation-action *keyword*

Synopsis Action when a relearn request for a protected MAC is received
Context **configure** [service](#) [vpls](#) *string* [vxlan](#) *instance* *number* [fdb](#) [protected-src-mac-violation-action](#) *keyword*
Tree [protected-src-mac-violation-action](#)

Options	discard
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service vpls string vxlan instance number igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R5
Platforms	All

mrouter-port *boolean*

Synopsis	Enable VXLAN binds as multicast router ports
Context	configure service vpls string vxlan instance number igmp-snooping mrouter-port boolean
Tree	mrouter-port
Default	false
Introduced	16.0.R5
Platforms	All

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls string vxlan instance number mld-snooping
Tree	mld-snooping
Introduced	16.0.R5
Platforms	All

mrouter-port *boolean*

Synopsis	Enable VXLAN binds as multicast router ports
Context	configure service vpls string vxlan instance number mld-snooping mrouter-port boolean
Tree	mrouter-port
Default	false

Introduced 16.0.R5
Platforms All

network

Synopsis Enter the **network** context
Context **configure service vpls string vxlan instance number network**
Tree [network](#)
Introduced 16.0.R1
Platforms All

ingress

Synopsis Enter the **ingress** context
Context **configure service vpls string vxlan instance number network ingress**
Tree [ingress](#)
Introduced 16.0.R1
Platforms All

qos

Synopsis Enter the **qos** context
Context **configure service vpls string vxlan instance number network ingress qos**
Tree [qos](#)
Introduced 16.0.R1
Platforms All

network

Synopsis Enter the **network** context
Context **configure service vpls string vxlan instance number network ingress qos network**
Tree [network](#)
Introduced 16.0.R1
Platforms All

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service vpls string vxlan instance number network ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	configure service vpls string vxlan instance number network ingress qos network fp-redirect-group group-name reference
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group string
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of the forwarding-plane ingress Queue Group for this SDP binding
Context	configure service vpls string vxlan instance number network ingress qos network fp-redirect-group instance number
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Ingress network policy name applied to this SDP binding
Context	configure service vpls string vxlan instance number network ingress qos network policy-name reference
Tree	policy-name
Reference	configure qos network string
Introduced	16.0.R1

Platforms All

rx-discard-on-ndf *keyword*

Synopsis Received multicast traffic type discarded on NDF
Context **configure** [service vpls](#) *string vxlan instance number rx-discard-on-ndf keyword*
Tree [rx-discard-on-ndf](#)
Default bm
Options bm, bum, none
Introduced 16.0.R4
Platforms All

source-vtep-security *boolean*

Synopsis Enable/disable source vtep security
Context **configure** [service vpls](#) *string vxlan instance number source-vtep-security boolean*
Tree [source-vtep-security](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vni *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VNI of the VXLAN
Context **configure** [service vpls](#) *string vxlan instance number vni number*
Tree [vni](#)
Range 1 to 16777215
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

source-vtep (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Vxlan source virtual tunnel endpoint information
Context	configure service vpls string vxlan source-vtep (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-vtep
Introduced	16.0.R1
Platforms	All

wlan-gw

Synopsis	Enter the wlan-gw context
Context	configure service vpls string wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WLAN-GW
Context	configure service vpls string wlan-gw admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vpls string wlan-gw description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vprn [*service-name*] *string*

Synopsis	Enter the vprn list instance
Context	configure service vprn string
Tree	vprn
Introduced	16.0.R1
Platforms	All

[service-name] *string*

Synopsis	Administrative service name
Context	configure service vprn string
Tree	vprn
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aa-interface [*interface-name*] *string*

Synopsis	Enter the aa-interface list instance
Context	configure service vprn string aa-interface string
Tree	aa-interface
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[interface-name] *string*

Synopsis	Interface name
Context	configure service vprn string aa-interface string
Tree	aa-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service vprn <i>string aa-interface string admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string aa-interface string description string</i>
Tree	description
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	configure service vprn <i>string aa-interface string ip-mtu number</i>
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>string aa-interface string ipv4</i>
Tree	ipv4
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis Enable the **primary** context
Context **configure service vprn string aa-interface string ipv4 primary**
Tree [primary](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address string

Synopsis Primary IPv4 address assigned to the interface
Context **configure service vprn string aa-interface string ipv4 primary address string**
Tree [address](#)
Notes This element is mandatory.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-length number

Synopsis IPv4 address prefix length
Context **configure service vprn string aa-interface string ipv4 primary prefix-length number**
Tree [prefix-length](#)
Range 0 to 32
Notes This element is mandatory.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] string

Synopsis Enter the **sap** list instance
Context **configure service vprn string aa-interface string sap string**
Tree [sap](#)

Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sap-id] string

Synopsis	SAP ID
Context	configure service vprn string aa-interface string sap string
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the SAP
Context	configure service vprn string aa-interface string sap string admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure service vprn string aa-interface string sap string description string
Tree	description
String Length	1 to 160
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> egress
Tree	egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> egress filter
Tree	filter
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> egress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> egress qos
Tree	qos
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-egress

Synopsis	Enter the sap-egress context
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Context	configure service vprn <i>string aa-interface string sap string egress qos sap-egress</i>
Tree	sap-egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure service vprn <i>string aa-interface string sap string egress qos sap-egress policy-name reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fwd-wholesale

Synopsis	Enter the fwd-wholesale context
Context	configure service vprn <i>string aa-interface string sap string fwd-wholesale</i>
Tree	fwd-wholesale
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pppoe-service *reference*

Synopsis	PPPoE service name
Context	configure service vprn <i>string aa-interface string sap string fwd-wholesale pppoe-service reference</i>
Tree	pppoe-service
Reference	configure service epipe <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
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Context **configure service vprn** *string aa-interface string sap string ingress*
Tree [ingress](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
Context **configure service vprn** *string aa-interface string sap string ingress qos*
Tree [qos](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-ingress

Synopsis Enter the **sap-ingress** context
Context **configure service vprn** *string aa-interface string sap string ingress qos sap-ingress*
Tree [sap-ingress](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis Enter the **overrides** context
Context **configure service vprn** *string aa-interface string sap string ingress qos sap-ingress overrides*
Tree [overrides](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Policy ID
Context **configure service vprn** *string aa-interface string sap string ingress qos sap-ingress policy-name reference*
Tree [policy-name](#)

Reference	configure qos sap-ingress <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis	Enter the lag context
Context	configure service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> lag
Tree	lag
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aaa

Synopsis	Enter the aaa context
Context	configure service vprn <i>string</i> aaa
Tree	aaa
Introduced	16.0.R4
Platforms	All

remote-servers

Synopsis	Enter the remote-servers context
Context	configure service vprn <i>string</i> aaa remote-servers
Tree	remote-servers
Introduced	16.0.R4
Platforms	All

radius

Synopsis	Enable the radius context
Context	configure service vprn <i>string</i> aaa remote-servers radius
Tree	radius
Introduced	16.0.R4
Platforms	All

access-algorithm *keyword*

Synopsis	Algorithm used to access the set of RADIUS servers
Context	configure service vprn string aaa remote-servers radius access-algorithm keyword
Tree	access-algorithm
Default	direct
Options	direct, round-robin
Introduced	16.0.R4
Platforms	All

accounting *boolean*

Synopsis	Enable RADIUS command accounting
Context	configure service vprn string aaa remote-servers radius accounting boolean
Tree	accounting
Default	false
Introduced	16.0.R4
Platforms	All

accounting-port *number*

Synopsis	Port number on RADIUS server for accounting requests
Context	configure service vprn string aaa remote-servers radius accounting-port number
Tree	accounting-port
Range	1 to 65535
Default	1813
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the authentication server
Context	configure service vprn string aaa remote-servers radius admin-state keyword
Tree	admin-state
Default	enable

Options	enable, disable
Introduced	16.0.R4
Platforms	All

authorization *boolean*

Synopsis	Enable RADIUS authorization
Context	configure service vprn <i>string</i> aaa remote-servers radius authorization <i>boolean</i>
Tree	authorization
Default	false
Introduced	16.0.R4
Platforms	All

interactive-authentication *boolean*

Synopsis	Enable RADIUS interactive authentication
Context	configure service vprn <i>string</i> aaa remote-servers radius interactive-authentication <i>boolean</i>
Tree	interactive-authentication
Default	false
Introduced	16.0.R4
Platforms	All

port *number*

Synopsis	UDP port number on which to contact RADIUS server
Context	configure service vprn <i>string</i> aaa remote-servers radius port <i>number</i>
Tree	port
Range	1 to 65535
Default	1812
Introduced	16.0.R4
Platforms	All

server [[index](#)] *number*

Synopsis	Enter the server list instance
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Context	configure service vprn string aaa remote-servers radius server number
Tree	server
Max. Instances	5
Introduced	16.0.R4
Platforms	All

[index] number

Synopsis	RADIUS server ID
Context	configure service vprn string aaa remote-servers radius server number
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

address (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	IP address of the RADIUS server
Context	configure service vprn string aaa remote-servers radius server number address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

authenticator keyword

Synopsis	Authenticator hash algorithm for the RADIUS server
Context	configure service vprn string aaa remote-servers radius server number authenticator keyword
Tree	authenticator
Description	This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets.

Default	md5
Options	md5, sm3
Introduced	22.10.R1
Platforms	All

secret *string*

Synopsis	Secret key to access the RADIUS server
Context	configure service vprn <i>string</i> aaa remote-servers radius server <i>number</i> secret <i>string</i>
Tree	secret
String Length	1 to 115
Introduced	16.0.R4
Platforms	All

tls-client-profile *reference*

Synopsis	TLS client profile for the RADIUS server
Context	configure service vprn <i>string</i> aaa remote-servers radius server <i>number</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Description	This command specifies the TLS client profile used to encrypt RADIUS communication. When configured, RADIUS messages are sent using TLS.
Reference	configure system security tls <i>client-tls-profile</i> <i>string</i>
Introduced	21.10.R1
Platforms	All

server-retry *number*

Synopsis	Number of attempts to retry contacting RADIUS server
Context	configure service vprn <i>string</i> aaa remote-servers radius server-retry <i>number</i>
Tree	server-retry
Range	1 to 10
Default	3
Introduced	16.0.R4
Platforms	All

server-timeout *number*

Synopsis	Time to wait for a response from the RADIUS server
Context	configure service vpn <i>string</i> aaa remote-servers radius server-timeout <i>number</i>
Tree	server-timeout
Range	1 to 90
Default	3
Units	seconds
Introduced	16.0.R4
Platforms	All

use-default-template *boolean*

Synopsis	Apply the RADIUS default user template to RADIUS user
Context	configure service vpn <i>string</i> aaa remote-servers radius use-default-template <i>boolean</i>
Tree	use-default-template
Default	false
Introduced	16.0.R4
Platforms	All

tacplus

Synopsis	Enable the tacplus context
Context	configure service vpn <i>string</i> aaa remote-servers tacplus
Tree	tacplus
Introduced	16.0.R4
Platforms	All

accounting

Synopsis	Enable the accounting context
Context	configure service vpn <i>string</i> aaa remote-servers tacplus accounting
Tree	accounting
Introduced	16.0.R4
Platforms	All

record-type *keyword*

Synopsis	Type of accounting record packet sent to TACACS+ server
Context	configure service vprn <i>string</i> aaa remote-servers tacplus accounting record-type <i>keyword</i>
Tree	record-type
Default	stop-only
Options	start-stop, stop-only
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the TACACS+ protocol
Context	configure service vprn <i>string</i> aaa remote-servers tacplus admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

authorization

Synopsis	Enable the authorization context
Context	configure service vprn <i>string</i> aaa remote-servers tacplus authorization
Tree	authorization
Introduced	16.0.R4
Platforms	All

request-format

Synopsis	Enter the request-format context
Context	configure service vprn <i>string</i> aaa remote-servers tacplus authorization request-format
Tree	request-format
Description	Commands in this context configure access operations that are sent to the TACACS+ server during authorization.

Introduced	21.10.R3
Platforms	All

access-operation-cmd *keyword*

Synopsis	Access operations sent in authorization requests
Context	configure service vprn <i>string</i> aaa remote-servers tacplus authorization request-format access-operation-cmd <i>keyword</i>
Tree	access-operation-cmd
Description	This command sends an operation argument in authorization requests. In model-driven interfaces, this command configures the system to send the operation in the cmd argument, and the path in the cmd-args argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces.
Options	delete
Max. Instances	1
Introduced	21.10.R3
Platforms	All

use-priv-lvl *boolean*

Synopsis	Allow privilege level mapping
Context	configure service vprn <i>string</i> aaa remote-servers tacplus authorization use-priv-lvl <i>boolean</i>
Tree	use-priv-lvl
Description	When configured to true , this command automatically performs a single authorization request to the TACACS+ server for cmd* (all commands) immediately after login, and then uses the local profile associated (via the priv-lvl-map) with the priv-lvl returned by the TACACS+ server for all subsequent authorization (except enable-admin). After the initial authorization for cmd* , no further authorization requests are sent to the TACACS+ server (except enable-admin). When configured to false , each command is sent to the TACACS+ server for authorization (this is true regardless of whether the tacplus use-default-template setting is enabled).
Default	false
Introduced	16.0.R4
Platforms	All

interactive-authentication *boolean*

Synopsis	Allows TACACS+ interactive authentication
Context	configure service vprn string aaa remote-servers tacplus interactive-authentication boolean
Tree	interactive-authentication
Default	false
Introduced	16.0.R4
Platforms	All

priv-lvl-map

Synopsis	Enter the priv-lvl-map context
Context	configure service vprn string aaa remote-servers tacplus priv-lvl-map
Tree	priv-lvl-map
Introduced	16.0.R4
Platforms	All

priv-lvl [[level](#)] *number*

Synopsis	Enter the priv-lvl list instance
Context	configure service vprn string aaa remote-servers tacplus priv-lvl-map priv-lvl number
Tree	priv-lvl
Introduced	16.0.R4
Platforms	All

[level] *number*

Synopsis	Privilege level for the mapping
Context	configure service vprn string aaa remote-servers tacplus priv-lvl-map priv-lvl number
Tree	priv-lvl
Range	0 to 15
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

user-profile-name *reference*

Synopsis	User profile for the mapping
Context	configure service vprn <i>string</i> aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i> user-profile-name <i>reference</i>
Tree	user-profile-name
Reference	configure system security aaa local-profiles profile <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

server [[index](#)] *number*

Synopsis	Enter the server list instance
Context	configure service vprn <i>string</i> aaa remote-servers tacplus server <i>number</i>
Tree	server
Max. Instances	5
Introduced	16.0.R4
Platforms	All

[index] *number*

Synopsis	TACACS+ server ID
Context	configure service vprn <i>string</i> aaa remote-servers tacplus server <i>number</i>
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the TACACS+ server
Context	configure service vprn <i>string</i> aaa remote-servers tacplus server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)

Tree	address
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

port number

Synopsis	TCP port ID on which to contact TACACS+ server
Context	configure service vprn string aaa remote-servers tacplus server number port number
Tree	port
Range	0 1 to 65535
Default	49
Introduced	16.0.R4
Platforms	All

secret string

Synopsis	Secret key to access the TACACS+ server
Context	configure service vprn string aaa remote-servers tacplus server number secret string
Tree	secret
String Length	1 to 199
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

server-timeout number

Synopsis	Time to wait for a response from the TACACS+ server
Context	configure service vprn string aaa remote-servers tacplus server-timeout number
Tree	server-timeout
Range	1 to 90
Default	3
Units	seconds
Introduced	16.0.R4
Platforms	All

use-default-template *boolean*

Synopsis	Apply TACACS+ default user-template to TACACS+ user
Context	configure service vprn <i>string</i> aaa remote-servers tacplus use-default-template <i>boolean</i>
Tree	use-default-template
Default	true
Introduced	16.0.R4
Platforms	All

aarp-interface [[interface-name](#)] *string*

Synopsis	Enter the aarp-interface list instance
Context	configure service vprn <i>string</i> aarp-interface <i>string</i>
Tree	aarp-interface
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[interface-name] *string*

Synopsis	Interface name
Context	configure service vprn <i>string</i> aarp-interface <i>string</i>
Tree	aarp-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service vprn <i>string</i> aarp-interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [service](#) [vpn](#) *string* [aarp-interface](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 255
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis IP MTU applied to outgoing packets
Context **configure** [service](#) [vpn](#) *string* [aarp-interface](#) *string* [ip-mtu](#) *number*
Tree [ip-mtu](#)
Range 512 to 9786
Units bytes
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis Enter the **spoke-sdp** list instance
Context **configure** [service](#) [vpn](#) *string* [aarp-interface](#) *string* [spoke-sdp](#) *string*
Tree [spoke-sdp](#)
Max. 1
Instances
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sdp-bind-id] *string*

Synopsis SDP binding ID
Context **configure** [service](#) [vpn](#) *string* [aarp-interface](#) *string* [spoke-sdp](#) *string*
Tree [spoke-sdp](#)

String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aarp

Synopsis	Enable the aarp context
Context	configure service vprn string aarp-interface string spoke-sdp string aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AARP instance ID
Context	configure service vprn string aarp-interface string spoke-sdp string aarp id reference
Tree	id
Reference	configure application-assurance aarp number
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Role of the spoke SDP referenced by the AARP
Context	configure service vprn string aarp-interface string spoke-sdp string aarp type keyword
Tree	type

Options	subscriber-side-shunt, network-side-shunt
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this service SDP binding
Context	configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress
Tree	egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress filter
Tree	filter
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis	IP filter identifier
Context	configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Static MPLS VC label to send packets to far-end device
Context	configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress vc-label number
Tree	vc-label
Range	16 to 1048575
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> ingress
Tree	ingress

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis Enter the **filter** context
Context **configure** [service](#) [vpn](#) *string* [aarp-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#)
Tree [filter](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis IP filter ID
Context **configure** [service](#) [vpn](#) *string* [aarp-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#) [ip](#) [reference](#)
Tree [ip](#)
Reference **configure** [filter](#) [ip-filter](#) *string*
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis VC ingress value that indicates a specific connection
Context **configure** [service](#) [vpn](#) *string* [aarp-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [vc-label](#) [number](#)
Tree [vc-label](#)
Range 1 to 1048575
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the service
Context	configure service vprn string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

aggregates

Synopsis	Enter the aggregates context
Context	configure service vprn string aggregates
Tree	aggregates
Introduced	16.0.R1
Platforms	All

aggregate [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the aggregate list instance
Context	configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix)
Tree	aggregate
Introduced	16.0.R1
Platforms	All

[[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP address prefix of the aggregate route
Context	configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix)
Tree	aggregate
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aggregator

Synopsis	Enter the aggregator context
Context	configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix) aggregator
Tree	aggregator
Introduced	16.0.R1
Platforms	All

address string

Synopsis	Aggregator IP address
Context	configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix) aggregator address string
Tree	address
Introduced	16.0.R1
Platforms	All

as-number number

Synopsis	Aggregator AS number
Context	configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix) aggregator as-number number
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

as-set boolean

Synopsis	Use AS_SET path segment type for the aggregate route
Context	configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix) as-set boolean
Tree	as-set
Description	<p>When configured to true, the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes.</p> <p>When configured to false, the AS_PATH attribute contains no AS_SET and will be originated by the ESR.</p>

Default	false
Introduced	16.0.R1
Platforms	All

blackhole

Synopsis	Enable the blackhole context
Context	configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix) blackhole
Tree	blackhole
Notes	The following elements are part of a choice: blackhole or indirect .
Introduced	16.0.R1
Platforms	All

generate-icmp *boolean*

Synopsis	Send ICMP unreachable messages for aggregate routes
Context	configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix) blackhole generate-icmp boolean
Tree	generate-icmp
Description	When configured to true , ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop. When configured to false , ICMP unreachable messages are not generated.
Default	false
Introduced	16.0.R2
Platforms	All

community *string*

Synopsis	Community name that is added to the aggregate route
Context	configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix) community string
Tree	community
Description	This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route.
String Length	1 to 72

Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

discard-component-communities *boolean*

Synopsis	Advertise aggregate with aggregate route community set
Context	configure service vprn <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) discard-component-communities <i>boolean</i>
Tree	discard-component-communities
Default	false
Introduced	19.7.R1
Platforms	All

indirect (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Address of the indirect next hop
Context	configure service vprn <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	indirect

Description	This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded.
Notes	The following elements are part of a choice: blackhole or indirect .
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Local preference used when aggregate route is exported
Context	configure service vprn string aggregates aggregate (<i>ipv4-prefix ipv6-prefix</i>) local-preference number
Tree	local-preference
Description	This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes.
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Policy name for the aggregated route
Context	configure service vprn string aggregates aggregate (<i>ipv4-prefix ipv6-prefix</i>) policy reference
Tree	policy
Description	<p>This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub-tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes.</p> <p>If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.</p>
Reference	configure policy-options policy-statement string
Introduced	20.10.R1
Platforms	All

summary-only *boolean*

Synopsis	Advertise the aggregate route only
Context	configure service vpn <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) summary-only <i>boolean</i>
Tree	summary-only
Description	When configured to true , the router suppresses the advertisement of more specific component routes for the aggregate. When configured to false , the router advertises both the aggregate route and its contributing routes.
Default	false
Introduced	16.0.R1
Platforms	All

tunnel-group *number*

Synopsis	Tunnel group from which to associate the MC IPsec state
Context	configure service vpn <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) tunnel-group <i>number</i>
Tree	tunnel-group
Description	This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route.
Range	1 to 64
Introduced	20.7.R1
Platforms	All

allow-export-bgp-vpn *boolean*

Synopsis	Include BGP-VPN routes for export
Context	configure service vpn <i>string</i> allow-export-bgp-vpn <i>boolean</i>
Tree	allow-export-bgp-vpn
Default	false
Introduced	16.0.R1
Platforms	All

autonomous-system *number*

Synopsis	AS number advertised to peers for this router
Context	configure service vprn <i>string</i> autonomous-system <i>number</i>
Tree	autonomous-system
Description	This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated. If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bgp

Synopsis	Enable the bgp context
Context	configure service vprn <i>string</i> bgp
Tree	bgp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BGP instance
Context	configure service vprn <i>string</i> bgp admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise inactive BGP routes to peers
Context	configure service vprn <i>string</i> bgp advertise-inactive <i>boolean</i>
Tree	advertise-inactive

Description	When configured to true , this command allows any inactive BGP route to be advertised, even though it is not the used route. When configured to false , the advertisement of inactive BGP routes to other BGP peers is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enter the advertise-ipv6-next-hops context
Context	configure service vprn string bgp advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 routes to be advertised
Context	configure service vprn string bgp advertise-ipv6-next-hops ipv4 boolean
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to 0
Context	configure service vprn string bgp aggregator-id-zero boolean
Tree	aggregator-id-zero
Description	When configured to true , the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes. When configured to false , the AS number and router ID are added to the AGGREGATOR path attribute.
Default	false

Introduced 16.0.R1
Platforms All

asn-4-byte *boolean*

Synopsis Advertise support for 4-byte ASNs
Context **configure service vprn string bgp asn-4-byte boolean**
Tree [asn-4-byte](#)
Default true
Introduced 16.0.R1
Platforms All

authentication-key *string*

Synopsis BGP authentication key for all peers
Context **configure service vprn string bgp authentication-key string**
Tree [authentication-key](#)
Description This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the **configure system security hash-control management-interface md-cli hash-algorithm** setting.
String Length 1 to 370
Introduced 16.0.R1
Platforms All

authentication-keychain *reference*

Synopsis TCP authentication keychain for the session
Context **configure service vprn string bgp authentication-keychain reference**
Tree [authentication-keychain](#)
Description This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference **configure system security keychains keychain string**
Introduced 16.0.R3
Platforms All

backup-path

Synopsis	Enter the backup-path context
Context	configure service vprn string bgp backup-path
Tree	backup-path
Description	<p>Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes.</p> <p>By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.</p>
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	configure service vprn string bgp backup-path ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure service vprn string bgp backup-path ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure service vprn string bgp backup-path label-ipv4 <i>boolean</i>

Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled unicast IPv6 routes
Context	configure service vprn <i>string</i> bgp backup-path label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	22.2.R1
Platforms	All

best-path-selection

Synopsis	Enter the best-path-selection context
Context	configure service vprn <i>string</i> bgp best-path-selection
Tree	best-path-selection
Introduced	16.0.R1
Platforms	All

always-compare-med

Synopsis	Enter the always-compare-med context
Context	configure service vprn <i>string</i> bgp best-path-selection always-compare-med
Tree	always-compare-med
Description	Commands in this context determine how the BGP decision process is affected by the MED path attribute.
Introduced	16.0.R1
Platforms	All

med-value *keyword*

Synopsis	Action for a missing MED attribute
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Context	configure service vprn string bgp best-path-selection always-compare-med med-value keyword
Tree	med-value
Default	off
Options	off, missing-med-zero, missing-med-infinity, on
Introduced	16.0.R1
Platforms	All

strict-as boolean

Synopsis	Compare MED only for routes from same neighbor AS
Context	configure service vprn string bgp best-path-selection always-compare-med strict-as boolean
Tree	strict-as
Description	When configured to true , the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS. When configured to false , the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs.
Default	true
Introduced	16.0.R1
Platforms	All

as-path-ignore

Synopsis	Enter the as-path-ignore context
Context	configure service vprn string bgp best-path-selection as-path-ignore
Tree	as-path-ignore
Description	Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families.
Introduced	16.0.R1
Platforms	All

ipv4 boolean

Synopsis	Ignore AS path length for unlabeled unicast IPv4 routes
Context	configure service vprn string bgp best-path-selection as-path-ignore ipv4 boolean

Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv6 routes
Context	configure service vprn string bgp best-path-selection as-path-ignore ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Ignore AS path length for labeled-unicast IPv4 routes
Context	configure service vprn string bgp best-path-selection as-path-ignore label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Ignore AS path length for labeled unicast IPv6 routes
Context	configure service vprn string bgp best-path-selection as-path-ignore label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	22.2.R1
Platforms	All

compare-origin-validation-state *boolean*

Synopsis	Allow comparison of origin validation states
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Context	configure service vprn string bgp best-path-selection compare-origin-validation-state boolean
Tree	compare-origin-validation-state
Default	false
Introduced	19.7.R1
Platforms	All

d-path-length-ignore boolean

Synopsis	Enable D-PATH length ignore
Context	configure service vprn string bgp best-path-selection d-path-length-ignore boolean
Tree	d-path-length-ignore

Description When configured to **true**, this command, enables the router to ignore the D-PATH domain segment length during best-path selection.

At the base router level (or VPRN BGP level for PE-CE routers), this command allows BGP to ignore the D-PATH domain segment length for best-path selection purposes. BGP ignores the D-PATH length when comparing two VPN routes or two IFL routes within the same RD. However, these VPN/IFL routes are processed in the main-BGP instance.

At the VPRN router level, this command allows the VPRN RTM to ignore the D-PATH domain segment length for best-path selection purposes (for routes in VPRN). The user can control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.

Best-path selection for EVPN-IFF routes against other owners (for example, EVPN-IFL or IPVPN) still relies on RTM preference. When EVPN-IFF RTM preference matches the RTM preference of another BGP owner, the existing RTM selection applies and D-PATH is not considered, irrespective of the **d-path-length-ignore** configuration.

When configured to **false**, this command disables the ability to ignore the D-PATH domain segment length.

Default	false
Introduced	21.10.R1
Platforms	All

deterministic-med boolean

Synopsis	Group paths based on AS before MED attribute comparison
Context	configure service vprn string bgp best-path-selection deterministic-med boolean
Tree	deterministic-med

Description When configured to **true**, BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to

select the overall best path. This process ensures that the best-path selection process is deterministic in all cases.

When configured to **false**, paths are not grouped and the overall best-path selection can depend on the order of route arrival.

Default	false
Introduced	16.0.R1
Platforms	All

ebgp-ibgp-equal

Synopsis	Enter the ebgp-ibgp-equal context
Context	configure service vprn string bgp best-path-selection ebgp-ibgp-equal
Tree	ebgp-ibgp-equal
Description	<p>Commands in this context allow BGP to ignore the difference between EBGP and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families.</p> <p>By default, the BGP decision process prefers an EBGP learned route over an IBGP learned route.</p>
Introduced	16.0.R1
Platforms	All

ipv4 boolean

Synopsis	Consider EBGP and IBGP IPv4 routes equal
Context	configure service vprn string bgp best-path-selection ebgp-ibgp-equal ipv4 boolean
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 boolean

Synopsis	Consider EBGP and IBGP IPv6 routes equal
Context	configure service vprn string bgp best-path-selection ebgp-ibgp-equal ipv6 boolean
Tree	ipv6

Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Consider EBGP and IBGP label-IPv4 routes equal
Context	configure service vprn <i>string</i> bgp best-path-selection ebgp-ibgp-equal label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Consider EBGP and IBGP label-IPv6 routes equal
Context	configure service vprn <i>string</i> bgp best-path-selection ebgp-ibgp-equal label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	22.2.R1
Platforms	All

ignore-nh-metric *boolean*

Synopsis	Ignore next-hop distance in best path selection
Context	configure service vprn <i>string</i> bgp best-path-selection ignore-nh-metric <i>boolean</i>
Tree	ignore-nh-metric
Description	When configured to true , BGP ignores the resolved distance to the BGP next hop in its route selection process. When configured to false , BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router BGP peers (in the router context) or IP prefix learned from VPRN BGP peers (in the vprn context).
Default	false
Introduced	16.0.R1

Platforms All

ignore-router-id

Synopsis Enable the **ignore-router-id** context

Context **configure service vprn string bgp best-path-selection ignore-router-id**

Tree [ignore-router-id](#)

Description Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGP paths from different EBGP peers when determining the best path for the specified address families.

By default, BGP selects the path with the lower router ID when it compares two paths from EBGP peers.

Introduced 16.0.R1

Platforms All

origin-invalid-unusable *boolean*

Synopsis Ignore routes with invalid origin validation state

Context **configure service vprn string bgp best-path-selection origin-invalid-unusable *boolean***

Tree [origin-invalid-unusable](#)

Default false

Introduced 19.7.R1

Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD

Context **configure service vprn string bgp bfd-liveness *boolean***

Tree [bfd-liveness](#)

Description When configured to **true**, BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations.

When configured to **false**, BFD is not enabled globally for all BGP sessions.

Default false

Introduced 16.0.R1

Platforms All

client-reflect *boolean*

Synopsis	Allow client reflection of routes by route reflector
Context	configure <i>service vprn string</i> bgp <i>client-reflect boolean</i>
Tree	<i>client-reflect</i>
Description	When configured to true , routes received from neighbors considered to be RR clients are reflected to other peers as expected. When configured to false , routes received from neighbors considered to be RR clients are not reflected to other clients.
Default	true
Introduced	16.0.R1
Platforms	All

cluster

Synopsis	Enter the cluster context
Context	configure <i>service vprn string</i> bgp <i>cluster</i>
Tree	<i>cluster</i>
Introduced	16.0.R1
Platforms	All

cluster-id *string*

Synopsis	Route reflector cluster ID
Context	configure <i>service vprn string</i> bgp <i>cluster cluster-id string</i>
Tree	<i>cluster-id</i>
Description	The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients.
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure <i>service vprn string</i> bgp <i>connect-retry number</i>
Tree	<i>connect-retry</i>

Description	This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer.
Range	1 to 65535
Default	120
Introduced	16.0.R1
Platforms	All

convergence

Synopsis	Enter the convergence context
Context	configure service vprn string bgp convergence
Tree	convergence
Introduced	19.7.R1
Platforms	All

family [family-type] keyword

Synopsis	Enter the family list instance
Context	configure service vprn string bgp convergence family keyword
Tree	family
Introduced	19.7.R1
Platforms	All

[family-type] keyword

Synopsis	Address family for which convergence selection applies
Context	configure service vprn string bgp convergence family keyword
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

max-wait-to-advertise *number*

Synopsis	Maximum wait time before advertising routes
Context	configure service vprn <i>string</i> bgp convergence <i>family keyword</i> max-wait-to-advertise <i>number</i>
Tree	max-wait-to-advertise
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

min-wait-to-advertise *number*

Synopsis	Minimum wait time before advertising routes
Context	configure service vprn <i>string</i> bgp convergence min-wait-to-advertise <i>number</i>
Tree	min-wait-to-advertise
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure service vprn <i>string</i> bgp damp-peer-oscillations
Tree	damp-peer-oscillations
Description	Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure service vprn <i>string</i> bgp damp-peer-oscillations error-interval <i>number</i>

Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

idle-hold-time

Synopsis	Enter the idle-hold-time context
Context	configure service vprn string bgp damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	16.0.R1
Platforms	All

initial-wait number

Synopsis	Time session remains in idle state after stabilization
Context	configure service vprn string bgp damp-peer-oscillations idle-hold-time initial-wait number
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait number

Synopsis	Maximum session idle time after repeated instability
Context	configure service vprn string bgp damp-peer-oscillations idle-hold-time max-wait number
Tree	max-wait
Range	1 to 2048
Default	60

Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each session failure
Context	configure service vprn <i>string</i> bgp damp-peer-oscillations idle-hold-time second-wait <i>number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure service vprn <i>string</i> bgp damping <i>boolean</i>
Tree	damping
Description	<p>When configured to true, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes.</p> <p>Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters:</p> <ul style="list-style-type: none"> • Half-life: 15 minutes • Max-suppress: 60 minutes • Suppress-threshold: 3000 • Reuse-threshold: 750 <p>When configured to false, BGP route damping for learned routes is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure service vprn string bgp default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGP
Context	configure service vprn string bgp default-label-preference ebgp number
Tree	ebgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure service vprn string bgp default-label-preference ibgp number
Tree	ibgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the default-preference context
Context	configure service vprn string bgp default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGp
Context	configure service vprn string bgp default-preference ebgp number
Tree	ebgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure service vprn string bgp default-preference ibgp number
Tree	ibgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

description string

Synopsis	Text description
Context	configure service vprn string bgp description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

domain-id string

Synopsis	Domain ID of received BGP route before readvertisement
Context	configure service vprn string bgp domain-id string
Tree	domain-id

Description	<p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <pre>Seg Len=1 / 65000:1:128</pre> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <pre>Seg Len=2 / 65000:2:70 / 65000:1:128</pre> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p>
Introduced	21.10.R1
Platforms	All

dynamic-neighbor-limit *number*

Synopsis	Max dynamic BGP sessions to accept from remote peers
Context	configure service vprn <i>string</i> bgp dynamic-neighbor-limit <i>number</i>
Tree	dynamic-neighbor-limit
Description	This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enter the ebgp-default-reject-policy context
Context	configure service vprn <i>string</i> bgp ebgp-default-reject-policy
Tree	ebgp-default-reject-policy

Introduced 19.5.R1
Platforms All

export *boolean*

Synopsis Enable default reject export policy for external peers
Context **configure service vpn string bgp ebgp-default-reject-policy export boolean**
Tree [export](#)
Default true
Introduced 19.5.R1
Platforms All

import *boolean*

Synopsis Enable default reject import policy for external peers
Context **configure service vpn string bgp ebgp-default-reject-policy import boolean**
Tree [import](#)
Default true
Introduced 19.5.R1
Platforms All

eibgp-loadbalance *boolean*

Synopsis Use ECMP over BGP VPN and BGP routes
Context **configure service vpn string bgp eibgp-loadbalance boolean**
Tree [eibgp-loadbalance](#)
Default false
Introduced 16.0.R1
Platforms All

enforce-first-as *boolean*

Synopsis Enforce the configured peer AS value in received routes
Context **configure service vpn string bgp enforce-first-as boolean**
Tree [enforce-first-as](#)

Description	<p>When configured to true for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the update-fault-tolerance command in the error-handling context is set to false) or the session is left up but the route is treated as withdrawn (if update-fault-tolerance is set to true).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When configured to false, received routes are not checked for compliance with the rule.</p>
Default	false
Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the error-handling context
Context	configure service vprn string bgp error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure service vprn string bgp error-handling update-fault-tolerance boolean
Tree	update-fault-tolerance
Description	<p>When configured to true, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When configured to false, most errors trigger a session reset.</p>
Default	false
Introduced	16.0.R1
Platforms	All

export

Synopsis	Enable the export context
Context	configure service vprn string bgp export

Tree	export
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Export policy name
Context	configure service vprn <i>string</i> bgp export policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enter the extended-nh-encoding context
Context	configure service vprn <i>string</i> bgp extended-nh-encoding
Tree	extended-nh-encoding
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable/disable family type ipv4.
Context	configure service vprn <i>string</i> bgp extended-nh-encoding ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

family

Synopsis	Enter the family context
Context	configure service vprn string bgp family
Tree	family
Description	Commands in this context specify the BGP address families supported by the base router BGP sessions.
Introduced	16.0.R1
Platforms	All

flow-ipv4 *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	configure service vprn string bgp family flow-ipv4 boolean
Tree	flow-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv6 *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	configure service vprn string bgp family flow-ipv6 boolean
Tree	flow-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	configure service vprn string bgp family ipv4 boolean
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure service vprn <i>string</i> bgp family ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	configure service vprn <i>string</i> bgp family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure service vprn <i>string</i> bgp family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	configure service vprn <i>string</i> bgp family mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure service vprn string bgp fast-external-failover <i>boolean</i>
Tree	fast-external-failover
Description	When configured to true , the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down. When configured to false , the BGP session remains up until the hold time expires.
Default	true
Introduced	16.0.R1
Platforms	All

flowspec

Synopsis	Enter the flowspec context
Context	configure service vprn string bgp flowspec
Tree	flowspec
Introduced	16.0.R1
Platforms	All

validate-dest-prefix *boolean*

Synopsis	Validate destination prefix in FlowSpec-IPv4/IPv6 route
Context	configure service vprn string bgp flowspec validate-dest-prefix <i>boolean</i>
Tree	validate-dest-prefix
Description	When configured to true , this command enables validation of received IPv4 and IPv6 FlowSpec routes that contain a destination-prefix subcomponent. A FlowSpec route with a destination-prefix subcomponent is considered invalid if both of the following are true: <ul style="list-style-type: none"> • it was originated outside the local AS of the receiving BGP router • the neighbor AS of the FlowSpec route does not match the neighbor AS of the best match BGP (unicast) route for the destination prefix or the neighbor AS of any longer match BGP (unicast) route for the destination prefix An invalid route is retained in the BGP but it is not used for filtering traffic or propagated to other BGP routers. When configured to false , destination-prefix validation is disabled.
Default	false

Introduced 16.0.R1
Platforms All

validate-redirect-ip *boolean*

Synopsis Validate the redirect-to-IPv4 action in FlowSpec route

Context **configure** [service vprn string](#) [bgp flowspec validate-redirect-ip](#) *boolean*

Tree [validate-redirect-ip](#)

Description When configured to **true**, this command enables procedures to validate the redirect-to-IPv4 action attached to FlowSpec-IPv4 routes that are received by the BGP instance.

A FlowSpec-IPv4 route is considered invalid and is not installed as a filter rule if the FlowSpec-IPv4 route is deemed to have originated from a different AS than the IP route that resolves the redirection IPv4 address. The originating AS of a FlowSpec route is determined from its AS path.

When configured to **false**, the validation check is disabled.

Default false

Introduced 16.0.R1

Platforms All

graceful-restart

Synopsis Enable the **graceful-restart** context

Context **configure** [service vprn string](#) [bgp graceful-restart](#)

Tree [graceful-restart](#)

Introduced 16.0.R1

Platforms All

gr-notification *boolean*

Synopsis Perform Graceful Restart procedures

Context **configure** [service vprn string](#) [bgp graceful-restart gr-notification](#) *boolean*

Tree [gr-notification](#)

Description When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.

When configured to **false**, NOTIFICATION messages are not supported.

Default	false
Introduced	16.0.R1
Platforms	All

long-lived

Synopsis	Enable the long-lived context
Context	configure service vprn string bgp graceful-restart long-lived
Tree	long-lived
Introduced	16.0.R1
Platforms	All

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	configure service vprn string bgp graceful-restart long-lived advertise-stale-to-all-neighbors boolean
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time
Context	configure service vprn string bgp graceful-restart long-lived advertised-stale-time number
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
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Context	configure service vprn <i>string</i> bgp graceful-restart long-lived family <i>keyword</i>
Tree	family
Introduced	16.0.R1
Platforms	All

[family-type] *keyword*

Synopsis	Address family type for LLGR
Context	configure service vprn <i>string</i> bgp graceful-restart long-lived family <i>keyword</i>
Tree	family
Options	ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	configure service vprn <i>string</i> bgp graceful-restart long-lived family <i>keyword</i> advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure service vprn <i>string</i> bgp graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure service vprn string bgp graceful-restart long-lived forwarding-bits-set keyword
Tree	forwarding-bits-set
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Default	none
Options	none, all, non-fwd
Introduced	16.0.R1
Platforms	All

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure service vprn string bgp graceful-restart long-lived helper-override-restart-time number
Tree	helper-override-restart-time
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure service vprn string bgp graceful-restart long-lived helper-override-stale-time number
Tree	helper-override-stale-time

Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure service vprn <i>string</i> bgp graceful-restart long-lived without-no-export <i>boolean</i>
Tree	without-no-export
Description	When configured to true , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0. When configured to false , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure service vprn <i>string</i> bgp graceful-restart restart-time <i>number</i>
Tree	restart-time
Range	0 to 4095
Default	120
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure service vprn <i>string</i> bgp graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

group [[group-name](#)] *string*

Synopsis	Enter the group list instance
Context	configure service vprn <i>string</i> bgp group <i>string</i>
Tree	group
Introduced	16.0.R1
Platforms	All

[[group-name](#)] *string*

Synopsis	BGP peer group name
Context	configure service vprn <i>string</i> bgp group <i>string</i>
Tree	group
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BGP group
Context	configure service vprn <i>string</i> bgp group <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

advertise-inactive *boolean*

Synopsis Advertise an inactive BGP route to peers

Context **configure** *service vprn string bgp group string advertise-inactive boolean*

Tree [advertise-inactive](#)

Description When configured to **true**, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.

- If the active route for the IP prefix is a BGP route, that route is advertised.
- If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.
- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced 16.0.R1

Platforms All

advertise-ipv6-next-hops

Synopsis Enable the **advertise-ipv6-next-hops** context

Context **configure** *service vprn string bgp group string advertise-ipv6-next-hops*

Tree [advertise-ipv6-next-hops](#)

Introduced 19.5.R1

Platforms All

ipv4 *boolean*

Synopsis Enable IPv4 routes to be advertised

Context **configure** *service vprn string bgp group string advertise-ipv6-next-hops ipv4 boolean*

Tree [ipv4](#)

Default false

Introduced 19.5.R1
Platforms All

aggregator-id-zero *boolean*

Synopsis Set router ID in the BGP AGGREGATOR attribute to zero
Context **configure** *service vprn string bgp group string aggregator-id-zero boolean*
Tree [aggregator-id-zero](#)
Introduced 16.0.R1
Platforms All

as-override *boolean*

Synopsis Replace the peer's ASN with the local ASN in AS Path
Context **configure** *service vprn string bgp group string as-override boolean*
Tree [as-override](#)
Description When configured to **true**, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.
This command should be used with caution, as it breaks BGP's loop detection mechanism.
When configured to **false**, no AS override is performed.
Default false
Introduced 16.0.R1
Platforms All

asn-4-byte *boolean*

Synopsis Advertise the use of 4-byte ASNs
Context **configure** *service vprn string bgp group string asn-4-byte boolean*
Tree [asn-4-byte](#)
Description When this command inherits a value of **true**, the use of 4-byte ASNs is supported.
When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.
When configured to **false**, this command disables the use of 4-byte ASNs.
Introduced 16.0.R1
Platforms All

authentication-key *string*

Synopsis	BGP authentication key for peers in the group
Context	configure service vprn <i>string</i> bgp group <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
Description	This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the configure system security hash-control management-interface md-cli hash-algorithm setting.
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure service vprn <i>string</i> bgp group <i>string</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure service vprn <i>string</i> bgp group <i>string</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BFD is removed from the associated protocol adjacency.</p>
Introduced	16.0.R1
Platforms	All

capability-negotiation *boolean*

Synopsis	Enable capability negotiation
Context	configure service vprn string bgp group string capability-negotiation boolean
Tree	capability-negotiation
Description	When configured to true , this command enables the exchange of capabilities. When configured to false and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer.
Default	true
Introduced	16.0.R1
Platforms	All

client-reflect *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
Context	configure service vprn string bgp group string client-reflect boolean
Tree	client-reflect
Description	When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true . When the command inherits a value of true , client reflection of routes is enabled. When configured to false , this command disables client reflection of routes.
Introduced	16.0.R1
Platforms	All

cluster

Synopsis	Enter the cluster context
Context	configure service vprn string bgp group string cluster
Tree	cluster
Introduced	16.0.R1
Platforms	All

cluster-id *string*

Synopsis	Route reflector cluster ID
Context	configure service vprn string bgp group string cluster cluster-id string

Tree	cluster-id
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure service vprn <i>string</i> bgp group <i>string</i> connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure service vprn <i>string</i> bgp group <i>string</i> damp-peer-oscillations
Tree	damp-peer-oscillations
Description	Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state. When unconfigured, command settings are inherited from the global-level configuration.
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure service vprn <i>string</i> bgp group <i>string</i> damp-peer-oscillations error-interval <i>number</i>
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30

Introduced 16.0.R1
Platforms All

idle-hold-time

Synopsis Enter the **idle-hold-time** context
Context **configure service vprn string bgp group string damp-peer-oscillations idle-hold-time**
Tree [idle-hold-time](#)
Introduced 16.0.R1
Platforms All

initial-wait number

Synopsis Time session remains in idle state after stabilization
Context **configure service vprn string bgp group string damp-peer-oscillations idle-hold-time initial-wait number**
Tree [initial-wait](#)
Range 0 to 2048
Default 0
Introduced 16.0.R1
Platforms All

max-wait number

Synopsis Maximum session idle time after repeated instability
Context **configure service vprn string bgp group string damp-peer-oscillations idle-hold-time max-wait number**
Tree [max-wait](#)
Range 1 to 2048
Default 60
Introduced 16.0.R1
Platforms All

second-wait number

Synopsis Time that doubles after each repeated session failure

Context	configure service vprn <i>string</i> bgp group <i>string</i> damp-peer-oscillations idle-hold-time second-wait <i>number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure service vprn <i>string</i> bgp group <i>string</i> damping <i>boolean</i>
Tree	damping
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure service vprn <i>string</i> bgp group <i>string</i> default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGp
Context	configure service vprn <i>string</i> bgp group <i>string</i> default-label-preference ebgp <i>number</i>
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure service vprn string bgp group string default-label-preference ibgp number
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the default-preference context
Context	configure service vprn string bgp group string default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGP
Context	configure service vprn string bgp group string default-preference ebgp number
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure service vprn string bgp group string default-preference ibgp number
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> bgp group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dynamic-neighbor

Synopsis	Enter the dynamic-neighbor context
Context	configure service vprn <i>string</i> bgp group <i>string</i> dynamic-neighbor
Tree	dynamic-neighbor
Description	Commands in this context configure dynamic BGP sessions for a peer group.
Introduced	16.0.R1
Platforms	All

interface [*interface-name*] *reference*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>string</i> bgp group <i>string</i> dynamic-neighbor interface <i>reference</i>
Tree	interface
Description	Commands in this context configure an unnumbered VPRN access IP interface for dynamic neighbors.

If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses.

The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions.

When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGP, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.

Introduced	22.10.R1
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Platforms All

[interface-name] *reference*

Synopsis Name of the dynamic neighbor interface

Context **configure** [service vprn string](#) [bgp group string](#) [dynamic-neighbor interface reference](#)

Tree [interface](#)

Reference **configure** [service vprn string](#) [interface string](#)

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms All

allowed-peer-as *string*

Synopsis Allowed peer AS value or range of acceptable values

Context **configure** [service vprn string](#) [bgp group string](#) [dynamic-neighbor interface reference](#)
[allowed-peer-as string](#)

Tree [allowed-peer-as](#)

Description This command specifies a singular allowed peer AS value or a range of acceptable values in the format *n1..n2*.

All values greater than or equal to *n1* and less than or equal to *n2* are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].

Max. Instances 32

Notes This element is ordered by the user.

Introduced 22.10.R1

Platforms All

max-sessions *number*

Synopsis Maximum number of dynamic sessions allowed

Context **configure** [service vprn string](#) [bgp group string](#) [dynamic-neighbor interface reference](#)
[max-sessions number](#)

Tree [max-sessions](#)

Description	This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements.
Range	1 to 255
Default	1
Introduced	22.10.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure service vprn string bgp group string dynamic-neighbor match
Tree	match
Introduced	19.5.R1
Platforms	All

prefix [[ip-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis	Enter the prefix list instance
Context	configure service vprn string bgp group string dynamic-neighbor match prefix (ipv4-prefix ipv6-prefix)
Tree	prefix
Introduced	19.5.R1
Platforms	All

[[ip-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis	Dynamic peer prefix for the group
Context	configure service vprn string bgp group string dynamic-neighbor match prefix (ipv4-prefix ipv6-prefix)
Tree	prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	configure <i>service vprn string bgp group string dynamic-neighbor match prefix (ipv4-prefix ipv6-prefix) allowed-peer-as string</i>
Tree	allowed-peer-as
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i> . All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].
Max. Instances	32
Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

dynamic-neighbor-limit *number*

Synopsis	Maximum dynamic BGP sessions to accept from remote peer
Context	configure <i>service vprn string bgp group string dynamic-neighbor-limit number</i>
Tree	dynamic-neighbor-limit
Description	This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer. When unconfigured, the setting is inherited from the BGP global-level configuration.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enable the ebgp-default-reject-policy context
Context	configure <i>service vprn string bgp group string ebgp-default-reject-policy</i>
Tree	ebgp-default-reject-policy
Introduced	19.5.R1
Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure service vprn <i>string</i> bgp group <i>string</i> ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	configure service vprn <i>string</i> bgp group <i>string</i> ebgp-default-reject-policy import <i>boolean</i>
Tree	import
Default	true
Introduced	19.5.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> enforce-first-as <i>boolean</i>
Tree	enforce-first-as
Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the error-handling context
Context	configure service vprn <i>string</i> bgp group <i>string</i> error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure service vprn <i>string</i> bgp group <i>string</i> error-handling update-fault-tolerance <i>boolean</i>
Tree	update-fault-tolerance
Description	<p>When configured to true, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, all errors trigger a session reset.</p>
Introduced	16.0.R1
Platforms	All

evpn-link-bandwidth

Synopsis	Enter the evpn-link-bandwidth context
Context	configure service vprn <i>string</i> bgp group <i>string</i> evpn-link-bandwidth
Tree	evpn-link-bandwidth
Introduced	22.7.R1
Platforms	All

add-to-received-bgp *number*

Synopsis	Weight added to received PE-CE BGP routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> evpn-link-bandwidth add-to-received-bgp <i>number</i>
Tree	add-to-received-bgp
Description	<p>This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set.</p> <p>For the load-balancing between EVPN-IFL and BGP PE-CE routes the configure service vprn bgp eibgp-loadbalance command must already be configured in the system.</p>
Range	1 to 128
Introduced	22.7.R1
Platforms	All

export

Synopsis	Enable the export context
Context	configure service vprn string bgp group string export
Tree	export
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Export policy name
Context	configure service vprn string bgp group string export policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enable the extended-nh-encoding context
Context	configure service vprn string bgp group string extended-nh-encoding
Tree	extended-nh-encoding
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable/disable family type ipv4.
Context	configure service vprn string bgp group string extended-nh-encoding ipv4 boolean
Tree	ipv4
Default	false

Introduced 19.5.R1
Platforms All

family

Synopsis Enable the **family** context
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family](#)
Tree [family](#)
Introduced 16.0.R1
Platforms All

flow-ipv4 *boolean*

Synopsis Advertise support for the flowspec-IPv4 address family
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family flow-ipv4](#) *boolean*
Tree [flow-ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

flow-ipv6 *boolean*

Synopsis Advertise support for the flowspec-IPv6 address family
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family flow-ipv6](#) *boolean*
Tree [flow-ipv6](#)
Default false
Introduced 16.0.R1
Platforms All

ipv4 *boolean*

Synopsis Add support for the IPv4 address family
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family ipv4](#) *boolean*
Tree [ipv4](#)
Default false

Introduced 16.0.R1
Platforms All

ipv6 *boolean*

Synopsis Advertise MP-BGP support for the IPv6 address family
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family ipv6](#) *boolean*
Tree [ipv6](#)
Default false
Introduced 16.0.R1
Platforms All

label-ipv4 *boolean*

Synopsis Advertise support for the label-IPv4 address family
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family label-ipv4](#) *boolean*
Tree [label-ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

mcast-ipv4 *boolean*

Synopsis Advertise support for the MCAST-IPv4 address family
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family mcast-ipv4](#) *boolean*
Tree [mcast-ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

mcast-ipv6 *boolean*

Synopsis Advertise support for the MCAST-IPv6 address family
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family mcast-ipv6](#) *boolean*
Tree [mcast-ipv6](#)

Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure service vprn <i>string</i> bgp group <i>string</i> fast-external-failover <i>boolean</i>
Tree	fast-external-failover
Description	<p>When this command inherits a value of true, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When configured to false, the BGP session remains up until the hold time expires.</p>
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart gr-notification <i>boolean</i>
Tree	gr-notification
Description	<p>When configured to true, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to false, NOTIFICATION messages are not supported.</p>
Default	false
Introduced	16.0.R1

Platforms All

long-lived

Synopsis Enable the **long-lived** context
Context **configure service vprn string bgp group string graceful-restart long-lived**
Tree [long-lived](#)
Introduced 16.0.R1
Platforms All

advertise-stale-to-all-neighbors *boolean*

Synopsis Advertise stale routes to all BGP peers
Context **configure service vprn string bgp group string graceful-restart long-lived advertise-stale-to-all-neighbors boolean**
Tree [advertise-stale-to-all-neighbors](#)
Default false
Introduced 16.0.R1
Platforms All

advertised-stale-time *number*

Synopsis Advertised long-lived stale time for LLGR routes
Context **configure service vprn string bgp group string graceful-restart long-lived advertised-stale-time number**
Tree [advertised-stale-time](#)
Range 0 to 16777215
Default 86400
Introduced 16.0.R1
Platforms All

family [*family-type*] *keyword*

Synopsis Enter the **family** list instance
Context **configure service vprn string bgp group string graceful-restart long-lived family keyword**
Tree [family](#)

Introduced	16.0.R1
Platforms	All

[family-type] *keyword*

Synopsis	Address family type for LLGR
Context	configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i>
Tree	family
Options	ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i> advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.

Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived forwarding-bits-set <i>keyword</i>
Tree	forwarding-bits-set
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Default	none
Options	none, all, non-fwd
Introduced	16.0.R1
Platforms	All

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived helper-override-restart-time <i>number</i>
Tree	helper-override-restart-time
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure service vprn string bgp group string graceful-restart long-lived helper-override-stale-time number
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure service vprn string bgp group string graceful-restart long-lived without-no-export boolean
Tree	without-no-export
Description	When configured to true , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0. When configured to false , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure service vprn string bgp group string graceful-restart restart-time number
Tree	restart-time

Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure service vprn string bgp group string graceful-restart stale-routes-time number
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the hold-time context
Context	configure service vprn string bgp group string hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

minimum-hold-time *number*

Synopsis	Minimum hold time between successive messages
Context	configure service vprn string bgp group string hold-time minimum-hold-time number
Tree	minimum-hold-time
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected. When unconfigured, the command value is inherited from the BGP global-level setting.
Range	0 3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	configure service vprn <i>string</i> bgp group <i>string</i> hold-time seconds <i>number</i>
Tree	seconds
Description	<p>This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.</p> <p>Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances.</p> <ul style="list-style-type: none"> • If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer. <p>When unconfigured, the command setting is inherited from the BGP global-level configuration.</p>
Range	0 3 to 65535
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the import context
Context	configure service vprn <i>string</i> bgp group <i>string</i> import
Tree	import
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	configure service vprn <i>string</i> bgp group <i>string</i> import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
String Length	1 to 255
Max. Instances	15

Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	configure <i>service vprn string bgp group string initial-send-delay-zero boolean</i>
Tree	<i>initial-send-delay-zero</i>
Description	<p>When configured to true, BGP updates are sent as soon as the session comes up.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.</p>
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure <i>service vprn string bgp group string keepalive number</i>
Tree	<i>keepalive</i>
Description	<p>This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires.</p> <p>This value is generally one-third of the hold time interval configured in the hold-time seconds context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value:</p> <ul style="list-style-type: none"> • If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value. • If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval. • If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer. <p>When unconfigured, the command inherits the BGP global-level setting.</p>

Range	0 to 21845
Introduced	16.0.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure service vprn <i>string</i> bgp group <i>string</i> label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

link-bandwidth

Synopsis	Enter the link-bandwidth context
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth
Tree	link-bandwidth
Description	<p>Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes.</p> <p>When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.</p>
Introduced	16.0.R3
Platforms	All

accept-from-ebgp

Synopsis	Enter the accept-from-ebgp context
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth accept-from-ebgp
Tree	accept-from-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth accept-from-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth accept-from-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth accept-from-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

add-to-received-ebgp

Synopsis	Enter the add-to-received-ebgp context
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp
Introduced	16.0.R3
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R3
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

aggregate-used-paths

Synopsis	Enter the aggregate-used-paths context
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth aggregate-used-paths
Tree	aggregate-used-paths
Introduced	16.0.R4

Platforms All

ipv4 *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure service vprn** *string* **bgp group** *string* **link-bandwidth aggregate-used-paths** **ipv4** *boolean*

Tree [ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

ipv6 *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure service vprn** *string* **bgp group** *string* **link-bandwidth aggregate-used-paths** **ipv6** *boolean*

Tree [ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

label-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes

Context **configure service vprn** *string* **bgp group** *string* **link-bandwidth aggregate-used-paths** **label-ipv4** *boolean*

Tree [label-ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

send-to-ebgp

Synopsis Enter the **send-to-ebgp** context

Context **configure service vprn** *string* **bgp group** *string* **link-bandwidth send-to-ebgp**

Tree	send-to-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 boolean

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 boolean

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 boolean

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

local-address (*ipv4-address-no-zone | ipv6-address-no-zone | interface-name*)

Synopsis	Local IP address used when communicating with BGP peers
Context	configure service vprn <i>string bgp group string local-address</i> (<i>ipv4-address-no-zone ipv6-address-no-zone interface-name</i>)
Tree	local-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the local-as context
Context	configure service vprn <i>string bgp group string local-as</i>
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure service vprn <i>string bgp group string local-as as-number number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	configure service vprn <i>string bgp group string local-as prepend-global-as boolean</i>
Tree	prepend-global-as
Description	When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to false , the global ASN is not included in the AS_PATH attribute.
Default	true

Introduced 16.0.R1
Platforms All

private *boolean*

Synopsis Hide the local ASN in sent paths learned from peering
Context **configure** *service vprn string bgp group string local-as private boolean*
Tree *private*
Description When configured to **true**, the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions.
When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default false
Introduced 16.0.R1
Platforms All

local-preference *number*

Synopsis Default local preference if not in incoming routes
Context **configure** *service vprn string bgp group string local-preference number*
Tree *local-preference*
Range 0 to 4294967295
Introduced 16.0.R1
Platforms All

loop-detect *keyword*

Synopsis Strategy for loop detection in the AS path
Context **configure** *service vprn string bgp group string loop-detect keyword*
Tree *loop-detect*
Options drop-peer, ignore-loop, off, discard-route
Introduced 16.0.R1
Platforms All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	configure service vprn <i>string</i> bgp group <i>string</i> loop-detect-threshold <i>number</i>
Tree	loop-detect-threshold
Range	0 to 15
Introduced	16.0.R6
Platforms	All

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure service vprn <i>string</i> bgp group <i>string</i> med-out (<i>number</i> <i>keyword</i>)
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

min-route-advertisement *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	configure service vprn <i>string</i> bgp group <i>string</i> min-route-advertisement <i>number</i>
Tree	min-route-advertisement
Range	1 to 255
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the monitor context
Context	configure service vprn <i>string</i> bgp group <i>string</i> monitor
Tree	monitor
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	configure service vprn <i>string</i> bgp group <i>string</i> monitor admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	configure service vprn <i>string</i> bgp group <i>string</i> monitor all-stations <i>boolean</i>
Tree	all-stations
Description	<p>When configured to true, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.</p> <p>When configured to false, the command is not used to indicate the stations which can receive BMP messages. The station command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.</p>
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the route-monitoring context
Context	configure service vprn <i>string</i> bgp group <i>string</i> monitor route-monitoring
Tree	route-monitoring
Introduced	16.0.R1
Platforms	All

post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
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Context	configure service vprn <i>string</i> bgp group <i>string</i> monitor route-monitoring post-policy <i>boolean</i>
Tree	post-policy
Default	false
Introduced	16.0.R1
Platforms	All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	configure service vprn <i>string</i> bgp group <i>string</i> monitor route-monitoring pre-policy <i>boolean</i>
Tree	pre-policy
Default	false
Introduced	16.0.R1
Platforms	All

station [[station-name](#)] *reference*

Synopsis	Add a list entry for station
Context	configure service vprn <i>string</i> bgp group <i>string</i> monitor station <i>reference</i>
Tree	station
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[station-name] *reference*

Synopsis	BMP monitoring station
Context	configure service vprn <i>string</i> bgp group <i>string</i> monitor station <i>reference</i>
Tree	station
Reference	configure bmp station <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multihop *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	configure service vprn string bgp group string multihop <i>number</i>
Tree	multihop
Range	1 to 255
Introduced	16.0.R1
Platforms	All

multipath-eligible *boolean*

Synopsis	Allow routes from group peers in multipath eligibility
Context	configure service vprn string bgp group string multipath-eligible <i>boolean</i>
Tree	multipath-eligible
Default	false
Introduced	19.5.R1
Platforms	All

next-hop-self *boolean*

Synopsis	Advertise routes with local address as next-hop address
Context	configure service vprn string bgp group string next-hop-self <i>boolean</i>
Tree	next-hop-self
Default	false
Introduced	16.0.R1
Platforms	All

origin-validation

Synopsis	Enter the origin-validation context
Context	configure service vprn string bgp group string origin-validation
Tree	origin-validation
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable/disable family type ipv4.
Context	configure service vprn <i>string</i> bgp group <i>string</i> origin-validation ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> origin-validation ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure service vprn <i>string</i> bgp group <i>string</i> origin-validation label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	19.7.R1
Platforms	All

passive *boolean*

Synopsis	Enable passive mode for BGP communication
Context	configure service vprn <i>string</i> bgp group <i>string</i> passive <i>boolean</i>
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

path-mtu-discovery *boolean*

Synopsis	Enable Path MTU Discovery
Context	configure service vprn string bgp group string path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Description	<p>When configured to true, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to true, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to false and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p>
Introduced	16.0.R1
Platforms	All

peer-as *number*

Synopsis	Peer AS number
Context	configure service vprn string bgp group string peer-as <i>number</i>
Tree	peer-as
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	configure service vprn string bgp group string peer-ip-tracking <i>boolean</i>
Tree	peer-ip-tracking
Description	<p>When configured to true, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol</p>

is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, peer tracking is disabled.

Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	configure service vprn <i>string</i> bgp group <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

prefix-limit [[family](#)] *keyword*

Synopsis	Enter the prefix-limit list instance
Context	configure service vprn <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i>
Tree	prefix-limit
Introduced	16.0.R1
Platforms	All

[family] *keyword*

Synopsis	Address family to which the limit applies
Context	configure service vprn <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i>
Tree	prefix-limit
Options	ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

idle-timeout *number*

Synopsis	Time BGP peering remains idle before reconnecting
Context	configure service vprn <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> idle-timeout <i>number</i>
Tree	idle-timeout
Range	1 to 1024
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	configure service vprn <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	configure service vprn <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> maximum <i>number</i>
Tree	maximum
Description	This command configures the maximum number of BGP routes that can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	configure service vprn <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> post-import <i>boolean</i>
Tree	post-import
Default	false

Introduced 16.0.R1
Platforms All

threshold *number*

Synopsis Percentage threshold that triggers a warning message
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [prefix-limit](#) *keyword* **threshold** *number*
Tree [threshold](#)
Range 1 to 100
Default 90
Introduced 16.0.R1
Platforms All

remove-private

Synopsis Enable the **remove-private** context
Context **configure** [service vprn](#) *string* [bgp group](#) *string* **remove-private**
Tree [remove-private](#)
Introduced 16.0.R1
Platforms All

limited *boolean*

Synopsis Remove private ASNs up to first public ASN encountered
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [remove-private](#) **limited** *boolean*
Tree [limited](#)
Default false
Introduced 16.0.R1
Platforms All

replace *boolean*

Synopsis Replace private ASN with global ASN before advertising
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [remove-private](#) **replace** *boolean*
Tree [replace](#)

Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	configure service vprn <i>string</i> bgp group <i>string</i> remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

send-communities

Synopsis	Enter the send-communities context
Context	configure service vprn <i>string</i> bgp group <i>string</i> send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	configure service vprn <i>string</i> bgp group <i>string</i> send-communities extended <i>boolean</i>
Tree	extended
Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to false, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	configure service vprn <i>string</i> bgp group <i>string</i> send-communities large <i>boolean</i>
Tree	large
Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to false, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	configure service vprn <i>string</i> bgp group <i>string</i> send-communities standard <i>boolean</i>
Tree	standard
Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP standard communities are sent to peers in the Communities attribute.</p> <p>When configured to false, all standard communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

send-default

Synopsis	Enable the send-default context
Context	configure service vprn <i>string</i> bgp group <i>string</i> send-default
Tree	send-default
Introduced	19.7.R1
Platforms	All

export-policy *reference*

Synopsis	Export policy name
Context	configure service vprn string bgp group string send-default export-policy reference
Tree	export-policy
Reference	configure policy-options policy-statement string
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Generate and advertise an IPv4 default route (0/0)
Context	configure service vprn string bgp group string send-default ipv4 boolean
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Generate and advertise an IPv6 default route (::/0)
Context	configure service vprn string bgp group string send-default ipv6 boolean
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure service vprn string bgp group string split-horizon boolean
Tree	split-horizon
Description	When configured to true , this command enables the use of split-horizon. This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.

Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the use of split-horizon is disabled.

Introduced	16.0.R1
Platforms	All

static-group *boolean*

Synopsis	Use group for static peers
Context	configure <i>service vprn string bgp group string static-group boolean</i>
Tree	<i>static-group</i>
Default	true
Introduced	16.0.R1
Platforms	All

tcp-mss (*number | keyword*)

Synopsis	TCP maximum segment size override
Context	configure <i>service vprn string bgp group string tcp-mss (number keyword)</i>
Tree	<i>tcp-mss</i>
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	configure <i>service vprn string bgp group string third-party-nexthop boolean</i>
Tree	<i>third-party-nexthop</i>
Description	<p>When configured to true, this command enables the router to send third-party next hop to EBGp peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGp peer and advertised to another EBGp peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	configure <i>service vprn string bgp group string ttl-security number</i>
Tree	<i>ttl-security</i>
Description	This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	BGP peer type
Context	configure <i>service vprn string bgp group string type keyword</i>
Tree	<i>type</i>
Default	no-type
Options	no-type, internal, external
Introduced	16.0.R1

Platforms All

hold-time

Synopsis Enter the **hold-time** context
Context **configure service vprn string bgp hold-time**
Tree **hold-time**
Introduced 16.0.R1
Platforms All

minimum-hold-time *number*

Synopsis Minimum hold time between successive messages
Context **configure service vprn string bgp hold-time minimum-hold-time number**
Tree **minimum-hold-time**
Description This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.
Range 0 | 3 to 65535
Default 0
Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis Maximum time BGP waits between successive messages
Context **configure service vprn string bgp hold-time seconds number**
Tree **seconds**
Description This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.
Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances.

- If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.
- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.

Range	0 3 to 65535
Default	90
Introduced	16.0.R1
Platforms	All

ibgp-multipath *boolean*

Synopsis	Enable IBGP multipath load balancing
Context	configure service vprn <i>string</i> bgp ibgp-multipath <i>boolean</i>
Tree	ibgp-multipath
Description	When configured to true , this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops. When configured to false , this command disables IBGP multipath load balancing.
Default	false
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the import context
Context	configure service vprn <i>string</i> bgp import
Tree	import
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Import policy name
Context	configure service vprn <i>string</i> bgp import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
String Length	1 to 255
Max. Instances	15
Min. Instances	1

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as session comes up
Context	configure service vprn <i>string</i> bgp initial-send-delay-zero <i>boolean</i>
Tree	initial-send-delay-zero
Default	false
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure service vprn <i>string</i> bgp keepalive <i>number</i>
Tree	keepalive
Range	0 to 21845
Default	30
Introduced	16.0.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure service vprn <i>string</i> bgp label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Default	170
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the local-as context
Context	configure service vprn string bgp local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure service vprn string bgp local-as as-number number
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global AS when advertising routes to BGP peer
Context	configure service vprn string bgp local-as prepend-global-as boolean
Tree	prepend-global-as
Description	When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to false , the global ASN is hidden in paths announced to the EBGP peer.
Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure service vprn string bgp local-as private boolean
Tree	private
Description	When configured to true , the local ASN is hidden in paths learned from the peering.

When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.

Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure service vprn string bgp local-preference number
Tree	local-preference
Max. Range	0 to 4294967295
Default	100
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure service vprn string bgp loop-detect keyword
Tree	loop-detect
Default	ignore-loop
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	configure service vprn string bgp loop-detect-threshold number
Tree	loop-detect-threshold
Range	0 to 15
Default	0
Introduced	16.0.R6
Platforms	All

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure service vprn <i>string</i> bgp med-out (<i>number</i> <i>keyword</i>)
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

min-route-advertisement *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	configure service vprn <i>string</i> bgp min-route-advertisement <i>number</i>
Tree	min-route-advertisement
Range	1 to 255
Default	30
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the monitor context
Context	configure service vprn <i>string</i> bgp monitor
Tree	monitor
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	configure service vprn <i>string</i> bgp monitor admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
Platforms All

all-stations *boolean*

Synopsis Send BMP messages to all configured stations

Context **configure service vprn string bgp monitor all-stations boolean**

Tree [all-stations](#)

Description When configured to **true**, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.

When configured to **false**, the command is not used to indicate the stations which can receive BMP messages. The **station** command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.

Default false

Introduced 16.0.R1

Platforms All

route-monitoring

Synopsis Enter the **route-monitoring** context

Context **configure service vprn string bgp monitor route-monitoring**

Tree [route-monitoring](#)

Introduced 16.0.R1

Platforms All

post-policy *boolean*

Synopsis Allow post-policy route-monitoring messages to be sent

Context **configure service vprn string bgp monitor route-monitoring post-policy boolean**

Tree [post-policy](#)

Default false

Introduced 16.0.R1

Platforms All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	configure service vprn <i>string</i> bgp monitor route-monitoring pre-policy <i>boolean</i>
Tree	pre-policy
Default	false
Introduced	16.0.R1
Platforms	All

station [[station-name](#)] *reference*

Synopsis	Add a list entry for station
Context	configure service vprn <i>string</i> bgp monitor station <i>reference</i>
Tree	station
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[[station-name](#)] *reference*

Synopsis	BMP monitoring station
Context	configure service vprn <i>string</i> bgp monitor station <i>reference</i>
Tree	station
Reference	configure bmp station <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multihop *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	configure service vprn <i>string</i> bgp multihop <i>number</i>
Tree	multihop
Description	This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGP peer multiple hops away. This command applies only to EBGP.

Range	1 to 255
Introduced	16.0.R1
Platforms	All

multipath

Synopsis	Enter the multipath context
Context	configure service vprn string bgp multipath
Tree	multipath
Introduced	16.0.R1
Platforms	All

ebgp number

Synopsis	Maximum multipaths per prefix for EBGp learned routes
Context	configure service vprn string bgp multipath ebgp number
Tree	ebgp
Range	1 to 64
Introduced	16.0.R1
Platforms	All

family [family-type] keyword

Synopsis	Enter the family list instance
Context	configure service vprn string bgp multipath family keyword
Tree	family
Description	Commands in this context set ECMP multipath parameters that apply only to the specified label unicast address family.

When multipath is enabled, traffic to the destination is load-shared across a set of paths (BGP routes) that the BGP decision process considers equal to the best path. The distribution of traffic over the multiple paths may or may not be equal. The distribution is based on weights derived from the Link Bandwidth Extended Community.

For more information about the criteria a non-best route must meet to qualify as a multipath, see "BGP route installation in the route table" in the *7450 ESS 7750 SR 7950 XRS VSR Unicast Routing Protocols User Guide*.

Introduced	19.5.R1
Platforms	All

[family-type] keyword

Synopsis	Address family type for the multipath selection
Context	configure service vprn string bgp multipath family keyword
Tree	family
Options	ipv4, ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Maximum multipaths when best path is EBGp learned route
Context	configure service vprn string bgp multipath family keyword ebgp number
Tree	ebgp
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGp learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an EBGp learned route, and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Maximum multipaths when best path is IBGP learned route
Context	configure service vprn string bgp multipath family keyword ibgp number
Tree	ibgp
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

max-paths *number*

Synopsis	Maximum number of multipaths per prefix or NLRI
Context	configure service vprn <i>string</i> bgp multipath family <i>keyword</i> max-paths <i>number</i>
Tree	max-paths
Description	This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the family command. Consider the following when configuring this command: <ul style="list-style-type: none"> • If the best path is an EBGP-learned route and the ebgp command is configured, the limit configured in the ebgp command overrides the limit configured in this command. • If the best path is an IBGP-learned route and the ibgp command is configured, the limit configured in the ibgp command overrides the limit configured in this command. • If the best path is an EBGP-learned route and the ebgp command is not configured, and this command is configured to 1, multipaths are disabled. • If the best path is an IBGP-learned route and the ibgp command is not configured, and this command is configured to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	configure service vprn <i>string</i> bgp multipath family <i>keyword</i> restrict <i>keyword</i>
Tree	restrict
Default	same-as-path-length
Options	same-as-path-length, same-neighbor-as, exact-as-path
Introduced	19.5.R1
Platforms	All

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	configure service vprn <i>string</i> bgp multipath family <i>keyword</i> unequal-cost <i>boolean</i>
Tree	unequal-cost
Description	When configured to true , BGP ignores differences in the next-hop cost when determining eligible multipaths.

Default	false
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Maximum multipaths per prefix for IBGP learned routes
Context	configure service vprn <i>string</i> bgp multipath ibgp <i>number</i>
Tree	ibgp
Range	1 to 64
Introduced	16.0.R1
Platforms	All

max-paths *number*

Synopsis	Maximum multipaths per prefix
Context	configure service vprn <i>string</i> bgp multipath max-paths <i>number</i>
Tree	max-paths
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	configure service vprn <i>string</i> bgp multipath restrict <i>keyword</i>
Tree	restrict
Default	same-as-path-length
Options	same-as-path-length, same-neighbor-as, exact-as-path
Introduced	16.0.R1
Platforms	All

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	configure service vprn <i>string</i> bgp multipath unequal-cost <i>boolean</i>
Tree	unequal-cost
Default	false
Introduced	19.5.R1
Platforms	All

neighbor [**ip-address**] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Enter the neighbor list instance
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address of the BGP peer router
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BGP neighbor
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	<p>When configured to true, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none">• If the active route for the IP prefix is a BGP route, that route is advertised.• If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.• If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session. <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the advertisement of inactive BGP routes to other BGP peers is disabled.</p>
Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enable the advertise-ipv6-next-hops context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 routes to be advertised
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops ipv4 <i>boolean</i>

Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	configure service vprn <i>string</i> bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) aggregator-id-zero <i>boolean</i>
Tree	aggregator-id-zero
Introduced	16.0.R1
Platforms	All

as-override *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	configure service vprn <i>string</i> bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) as-override <i>boolean</i>
Tree	as-override
Description	<p>When configured to true, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). This command cannot be explicitly configured to false.</p> <p>When the command inherits a value of false, no AS override is performed.</p>
Introduced	16.0.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	configure service vprn <i>string</i> bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) asn-4-byte <i>boolean</i>
Tree	asn-4-byte
Introduced	16.0.R1

Platforms All

authentication-key *string*

Synopsis BGP authentication key

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **authentication-key** *string*

Tree [authentication-key](#)

String Length 1 to 370

Introduced 16.0.R1

Platforms All

authentication-keychain *reference*

Synopsis TCP authentication keychain for the session

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **authentication-keychain** *reference*

Tree [authentication-keychain](#)

Description This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.

Reference **configure system security keychains** **keychain** *string*

Introduced 16.0.R3

Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **bfd-liveness** *boolean*

Tree [bfd-liveness](#)

Description When configured to **true**, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, BFD is removed from the associated protocol adjacency.

Introduced 16.0.R1
Platforms All

capability-negotiation *boolean*

Synopsis Enable capability negotiation
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **capability-negotiation boolean**
Tree [capability-negotiation](#)
Introduced 16.0.R1
Platforms All

client-reflect *boolean*

Synopsis Allow cluster RR to advertise routes to its clients
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **client-reflect boolean**
Tree [client-reflect](#)
Introduced 16.0.R1
Platforms All

cluster

Synopsis Enter the **cluster** context
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **cluster**
Tree [cluster](#)
Introduced 16.0.R1
Platforms All

cluster-id *string*

Synopsis Route reflector cluster ID
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **cluster cluster-id string**
Tree [cluster-id](#)
Introduced 16.0.R1

Platforms All

connect-retry *number*

Synopsis BGP connect retry timer value

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **connect-retry** *number*

Tree [connect-retry](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

damp-peer-oscillations

Synopsis Enable the **damp-peer-oscillations** context

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **damp-peer-oscillations**

Tree [damp-peer-oscillations](#)

Introduced 16.0.R1

Platforms All

error-interval *number*

Synopsis Time after a reset that the session must be error-free

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **damp-peer-oscillations error-interval** *number*

Tree [error-interval](#)

Description This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.

Range 0 to 2048

Default 30

Introduced 16.0.R1

Platforms All

idle-hold-time

Synopsis	Enter the idle-hold-time context
Context	configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	16.0.R1
Platforms	All

initial-wait number

Synopsis	Time session remains in idle state after stabilization
Context	configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) damp-peer-oscillations idle-hold-time initial-wait number
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait number

Synopsis	Maximum session idle time after repeated instability
Context	configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) damp-peer-oscillations idle-hold-time max-wait number
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

second-wait number

Synopsis	Time that doubles after each repeated session failure
Context	configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) damp-peer-oscillations idle-hold-time second-wait number
Tree	second-wait

Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damping <i>boolean</i>
Tree	damping
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGp
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference ebgp <i>number</i>
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) default-label-preference ibgp number
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the default-preference context
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGP
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) default-preference ebgp number
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) default-preference ibgp number
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1

Platforms All

description *string*

Synopsis Text description

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

ebgp-default-reject-policy

Synopsis Enable the **ebgp-default-reject-policy** context

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **ebgp-default-reject-policy**

Tree [ebgp-default-reject-policy](#)

Introduced 19.5.R1

Platforms All

export *boolean*

Synopsis Enable default reject export policy for external peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **ebgp-default-reject-policy export** *boolean*

Tree [export](#)

Default true

Introduced 19.5.R1

Platforms All

import *boolean*

Synopsis Enable default reject import policy for external peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **ebgp-default-reject-policy import** *boolean*

Tree [import](#)

Default	true
Introduced	19.5.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) enforce-first-as <i>boolean</i>
Tree	enforce-first-as
Description	<p>When configured to true for an EBGp session, all routes received from an EBGp peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the update-fault-tolerance command in the error-handling context is set to false) or the session is left up but the route is treated as withdrawn (if update-fault-tolerance is set to true).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, received routes are not checked for compliance with the rule.</p>
Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the error-handling context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) error-handling update-fault-tolerance <i>boolean</i>

Tree	update-fault-tolerance
Description	<p>When configured to true, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, all errors trigger a session reset.</p>
Introduced	16.0.R1
Platforms	All

evpn-link-bandwidth

Synopsis	Enter the evpn-link-bandwidth context
Context	configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) evpn-link-bandwidth
Tree	evpn-link-bandwidth
Introduced	22.7.R1
Platforms	All

add-to-received-bgp *number*

Synopsis	Weight added to received PE-CE BGP routes
Context	configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) evpn-link-bandwidth add-to-received-bgp number
Tree	add-to-received-bgp
Description	<p>This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set.</p> <p>For the load-balancing between EVPN-IFL and BGP PE-CE routes the configure service vprn bgp eibgp-loadbalance command must already be configured in the system.</p>
Range	1 to 128
Introduced	22.7.R1
Platforms	All

export

Synopsis	Enable the export context
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Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) export
Tree	export
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Export policy name
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) export policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enable the extended-nh-encoding context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding
Tree	extended-nh-encoding
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable/disable family type ipv4.
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding ipv4 <i>boolean</i>
Tree	ipv4
Default	false

Introduced 19.5.R1
Platforms All

family

Synopsis Enable the **family** context
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **family**
Tree **family**
Introduced 16.0.R1
Platforms All

flow-ipv4 boolean

Synopsis Advertise support for the flowspec-IPv4 address family
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **family flow-ipv4 boolean**
Tree **flow-ipv4**
Default false
Introduced 16.0.R1
Platforms All

flow-ipv6 boolean

Synopsis Advertise support for the flowspec-IPv6 address family
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **family flow-ipv6 boolean**
Tree **flow-ipv6**
Default false
Introduced 16.0.R1
Platforms All

ipv4 boolean

Synopsis Add support for the IPv4 address family
Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **family ipv4 boolean**

Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure service vprn <i>string</i> bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) family ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	configure service vprn <i>string</i> bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure service vprn <i>string</i> bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) fast-external-failover <i>boolean</i>
Tree	fast-external-failover
Description	<p>When this command inherits a value of true, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When configured to false, the BGP session remains up until the hold time expires.</p>
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart gr-notification <i>boolean</i>

Tree	gr-notification
Description	When configured to true , the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error. When configured to false , NOTIFICATION messages are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

long-lived

Synopsis	Enable the long-lived context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived
Tree	long-lived
Introduced	16.0.R1
Platforms	All

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i>
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400

Introduced 16.0.R1
Platforms All

family [family-type] keyword

Synopsis Enter the **family** list instance
Context **configure service vprn string bgp neighbor** (ipv4-address-with-zone | ipv6-address-with-zone) **graceful-restart long-lived family keyword**
Tree **family**
Introduced 16.0.R1
Platforms All

[family-type] keyword

Synopsis Address family type for LLGR
Context **configure service vprn string bgp neighbor** (ipv4-address-with-zone | ipv6-address-with-zone) **graceful-restart long-lived family keyword**
Tree **family**
Options ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

advertised-stale-time number

Synopsis LLGR stale routes time for family override
Context **configure service vprn string bgp neighbor** (ipv4-address-with-zone | ipv6-address-with-zone) **graceful-restart long-lived family keyword advertised-stale-time number**
Tree **advertised-stale-time**
Description This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.
This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range 0 to 16777215
Default 86400
Introduced 16.0.R1

Platforms All

helper-override-stale-time *number*

Synopsis Locally-configured stale routes override time

Context **configure service vpn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **graceful-restart long-lived family** *keyword* **helper-override-stale-time** *number*

Tree [helper-override-stale-time](#)

Description This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.

Range 0 to 16777216

Default 16777216

Introduced 16.0.R1

Platforms All

forwarding-bits-set *keyword*

Synopsis BGP LLGR forwarding-bit behavior for address family

Context **configure service vpn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **graceful-restart long-lived** **forwarding-bits-set** *keyword*

Tree [forwarding-bits-set](#)

Description This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.

This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).

Default none

Options none, all, non-fw

Introduced 16.0.R1

Platforms All

helper-override-restart-time *number*

Synopsis Locally-configured override for restart time

Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-restart-time <i>number</i>
Tree	helper-override-restart-time
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived without-no-export <i>boolean</i>
Tree	without-no-export
Description	When configured to true , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0. When configured to false , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale

routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.

Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart restart-time <i>number</i>
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Neighbor to group
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) group reference

Tree	group
Reference	configure service vprn string bgp group string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the hold-time context
Context	configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

minimum-hold-time *number*

Synopsis	Minimum time BGP waits between successive messages
Context	configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) hold-time minimum-hold-time number
Tree	minimum-hold-time
Range	0 3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Maximum hold time between successive messages
Context	configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) hold-time seconds number
Tree	seconds
Description	<p>The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection.</p> <p>Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances:</p>

- If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.
- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.

When unconfigured, the command setting is inherited from the BGP group-level configuration.

Range	0 3 to 65535
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the import context
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) import
Tree	import
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string | string*)

Synopsis	Route policy name
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) import policy (<i>policy-expr-string string</i>)
Tree	policy
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) initial-send-delay-zero <i>boolean</i>
Tree	initial-send-delay-zero
Description	When configured to true , BGP updates are sent as soon as the session comes up. When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false . When this command inherits a value of false , BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) keepalive <i>number</i>
Tree	keepalive
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

link-bandwidth

Synopsis	Enter the link-bandwidth context
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Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth
Tree	link-bandwidth
Introduced	16.0.R3
Platforms	All

accept-from-ebgp

Synopsis	Enable the accept-from-ebgp context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp
Tree	accept-from-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 boolean

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp ipv4 boolean
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 boolean

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp ipv6 boolean
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

add-to-received-ebgp

Synopsis	Enable the add-to-received-ebgp context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp
Introduced	16.0.R3
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R3
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R3

Platforms All

label-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth add-to-received-ebgp label-ipv4** *boolean*

Tree [label-ipv4](#)

Default false

Introduced 16.0.R3

Platforms All

aggregate-used-paths

Synopsis Enable the **aggregate-used-paths** context

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth aggregate-used-paths**

Tree [aggregate-used-paths](#)

Introduced 16.0.R4

Platforms All

ipv4 *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth aggregate-used-paths ipv4** *boolean*

Tree [ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

ipv6 *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth aggregate-used-paths ipv6** *boolean*

Tree [ipv6](#)

Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths label-ipv4 boolean
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

send-to-ebgp

Synopsis	Enable the send-to-ebgp context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv4 boolean
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
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Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

Synopsis	Local IP address used when communicating with BGP peers
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>interface-name</i>)
Tree	local-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the local-as context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as prepend-global-as <i>boolean</i>
Tree	prepend-global-as
Description	When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to false , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as private <i>boolean</i>
Tree	private
Description	When configured to true , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-preference <i>number</i>
Tree	local-preference
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect <i>keyword</i>
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect-threshold <i>number</i>
Tree	loop-detect-threshold
Range	0 to 15
Introduced	16.0.R6
Platforms	All

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) med-out (<i>number</i> <i>keyword</i>)
Tree	med-out
Max. Range	0 to 4294967295

Options	igp-cost
Introduced	16.0.R1
Platforms	All

min-route-advertisement *number*

Synopsis	Minimum interval between successive prefix updates
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) min-route-advertisement number
Tree	min-route-advertisement
Range	1 to 255
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the monitor context
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) monitor
Tree	monitor
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) monitor admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor all-stations <i>boolean</i>
Tree	all-stations
Description	When configured to true , this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to false , the command is not used to indicate the stations which can receive BMP messages. The station command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the route-monitoring context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor route-monitoring
Tree	route-monitoring
Introduced	16.0.R1
Platforms	All

post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor route-monitoring post-policy <i>boolean</i>
Tree	post-policy
Default	false
Introduced	16.0.R1
Platforms	All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
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Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor route-monitoring pre-policy <i>boolean</i>
Tree	pre-policy
Default	false
Introduced	16.0.R1
Platforms	All

station [[station-name](#)] *reference*

Synopsis	Add a list entry for station
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor station <i>reference</i>
Tree	station
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[station-name] *reference*

Synopsis	BMP monitoring station
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor station <i>reference</i>
Tree	station
Reference	configure bmp station <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multihop *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) multihop <i>number</i>
Tree	multihop
Range	1 to 255

Introduced	16.0.R1
Platforms	All

multipath-eligible *boolean*

Synopsis	Allow routes from this peer in multipath eligibility
Context	configure service vpn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) multipath-eligible <i>boolean</i>
Tree	multipath-eligible
Introduced	19.5.R1
Platforms	All

next-hop-self *boolean*

Synopsis	Advertise routes with local address as next-hop address
Context	configure service vpn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-self <i>boolean</i>
Tree	next-hop-self
Description	<p>When configured to true, this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address.</p> <p>Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the configure router bgp rr-vpn-forwarding command should also be configured.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, protocol standard behavior is applied to determine whether to set next-hop-self in advertised routes.</p>
Introduced	16.0.R1
Platforms	All

origin-validation

Synopsis	Enable the origin-validation context
Context	configure service vpn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation
Tree	origin-validation
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable/disable family type ipv4.
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	19.7.R1
Platforms	All

passive *boolean*

Synopsis	Use passive mode for BGP communication
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) passive <i>boolean</i>
Tree	passive

Introduced	16.0.R1
Platforms	All

path-mtu-discovery *boolean*

Synopsis	Enable path MTU discovery
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Description	<p>When configured to true, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to true, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to false and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p>
Introduced	16.0.R1
Platforms	All

peer-as *number*

Synopsis	Peer AS number
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-as <i>number</i>
Tree	peer-as
Description	<p>This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer.</p> <p>For EBGP peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router.</p> <p>For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.</p>
Range	1 to 4294967295
Introduced	16.0.R1

Platforms All

peer-creation-type *keyword*

Synopsis Peer creation type

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **peer-creation-type** *keyword*

Tree [peer-creation-type](#)

Default static

Options static, dynamic, dynamic-if-remote, dynamic-if-local

Introduced 16.0.R1

Platforms All

peer-ip-tracking *boolean*

Synopsis Enable BGP peer tracking

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **peer-ip-tracking** *boolean*

Tree [peer-ip-tracking](#)

Description When configured to **true**, this command enables BGP peer tracking.

Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, peer tracking is disabled.

Introduced 16.0.R1

Platforms All

preference *number*

Synopsis Route preference for routes learned from all peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **preference** *number*

Tree [preference](#)

Description This command configures the route preference for routes learned from the configured peers.

The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.

When unconfigured, the command setting is inherited from the group-level configuration.

Range	1 to 255
Introduced	16.0.R1
Platforms	All

prefix-limit [*family*] *keyword*

Synopsis	Enter the prefix-limit list instance
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) prefix-limit keyword
Tree	prefix-limit
Introduced	16.0.R1
Platforms	All

[family] *keyword*

Synopsis	Address family to which the limit applies
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) prefix-limit keyword
Tree	prefix-limit
Options	ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

idle-timeout *number*

Synopsis	Time which BGP peering remains idle before reconnecting
Context	configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) prefix-limit keyword idle-timeout number
Tree	idle-timeout
Description	This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer. When unconfigured, the command inherits the value from the group-level configuration.

Range	1 to 1024
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> maximum <i>number</i>
Tree	maximum
Description	This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> post-import <i>boolean</i>
Tree	post-import
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the remove-private context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private limited <i>boolean</i>
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private replace <i>boolean</i>
Tree	replace

Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

send-communities

Synopsis	Enter the send-communities context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities extended <i>boolean</i>
Tree	extended
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to false, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities large <i>boolean</i>
Tree	large
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to false, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities standard <i>boolean</i>
Tree	standard
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP standard communities are sent to peers in the Communities attribute.</p> <p>When configured to false, all standard communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

send-default

Synopsis	Enable the send-default context
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default
Tree	send-default
Introduced	19.7.R1
Platforms	All

export-policy *reference*

Synopsis	Export policy name
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) split-horizon <i>boolean</i>
Tree	split-horizon

Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the use of split-horizon is disabled.</p>
Introduced	16.0.R1
Platforms	All

tcp-mss (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) tcp-mss (<i>number</i> <i>keyword</i>)
Tree	tcp-mss
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) third-party-nexthop <i>boolean</i>
Tree	third-party-nexthop

Introduced 16.0.R1
Platforms All

ttl-security *number*

Synopsis Minimum TTL value for an incoming BGP packet

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **ttl-security** *number*

Tree [ttl-security](#)

Description This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.

When unconfigured, the command inherits the value of the group-level setting.

Range 1 to 255

Introduced 16.0.R1

Platforms All

type *keyword*

Synopsis BGP peer type

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **type** *keyword*

Tree [type](#)

Options no-type, internal, external

Introduced 16.0.R1

Platforms All

next-hop-resolution

Synopsis Enter the **next-hop-resolution** context

Context **configure service vprn** *string* **bgp next-hop-resolution**

Tree [next-hop-resolution](#)

Introduced 16.0.R1

Platforms All

policy reference

Synopsis	Policy that filters routes for BGP next-hop resolution
Context	configure service vprn <i>string</i> bgp next-hop-resolution policy reference
Tree	policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

use-bgp-routes *boolean*

Synopsis	Use BGP routes to resolve BGP next hops
Context	configure service vprn <i>string</i> bgp next-hop-resolution use-bgp-routes <i>boolean</i>
Tree	use-bgp-routes
Description	<p>When configured to true, BGP routes resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route.</p> <p>This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN).</p> <p>When configured to false, BGP next hops are not resolved.</p>
Default	false
Introduced	19.10.R1
Platforms	All

path-mtu-discovery *boolean*

Synopsis	Enable Path MTU Discovery
Context	configure service vprn <i>string</i> bgp path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Description	<p>When configured to true, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to true, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p>

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Default	false
Introduced	16.0.R1
Platforms	All

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	configure service vprn <i>string</i> bgp peer-ip-tracking <i>boolean</i>
Tree	peer-ip-tracking
Default	false
Introduced	16.0.R1
Platforms	All

peer-tracking-policy *reference*

Synopsis	Policy for BGP peer tracking on router instance
Context	configure service vprn <i>string</i> bgp peer-tracking-policy <i>reference</i>
Tree	peer-tracking-policy
Description	<p>This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled.</p> <p>When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.</p> <p>Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	configure service vprn <i>string</i> bgp preference <i>number</i>

Tree	preference
Description	This command configures the route preference for routes learned from the configured peers. The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.
Range	1 to 255
Default	170
Introduced	16.0.R1
Platforms	All

rapid-withdrawal *boolean*

Synopsis	Send BGP withdrawal UPDATE messages immediately
Context	configure service vprn <i>string</i> bgp rapid-withdrawal <i>boolean</i>
Tree	rapid-withdrawal
Description	When configured to true , UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger. When configured to false , withdrawal processing continues with the normal behavior.
Default	false
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the remove-private context
Context	configure service vprn <i>string</i> bgp remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure service vprn <i>string</i> bgp remove-private limited <i>boolean</i>

Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure service vprn <i>string</i> bgp remove-private replace <i>boolean</i>
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if AS-PATH contains eBGP peer's ASN
Context	configure service vprn <i>string</i> bgp remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

rib-management

Synopsis	Enter the rib-management context
Context	configure service vprn <i>string</i> bgp rib-management
Tree	rib-management
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>string</i> bgp rib-management ipv4

Tree	ipv4
Introduced	16.0.R1
Platforms	All

leak-import

Synopsis	Enter the leak-import context
Context	configure service vprn string bgp rib-management ipv4 leak-import
Tree	leak-import
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure service vprn string bgp rib-management ipv4 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the route-table-import context
Context	configure service vprn string bgp rib-management ipv4 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure service vprn <i>string</i> bgp rib-management ipv4 route-table-import policy-name reference
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure service vprn <i>string</i> bgp rib-management ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

leak-import

Synopsis	Enter the leak-import context
Context	configure service vprn <i>string</i> bgp rib-management ipv6 leak-import
Tree	leak-import
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure service vprn <i>string</i> bgp rib-management ipv6 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the route-table-import context
Context	configure service vprn <i>string</i> bgp rib-management ipv6 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure service vprn <i>string</i> bgp rib-management ipv6 route-table-import policy-name <i>reference</i>
Tree	policy-name
Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs. When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.

Aggregate routes are always imported into each RIB, independent of the specified policy.

Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.

When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure service vprn <i>string</i> bgp rib-management label-ipv4
Tree	label-ipv4
Introduced	16.0.R1
Platforms	All

leak-import

Synopsis	Enter the leak-import context
Context	configure service vprn <i>string</i> bgp rib-management label-ipv4 leak-import
Tree	leak-import
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure service vprn <i>string</i> bgp rib-management label-ipv4 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255

Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the route-table-import context
Context	configure service vprn string bgp rib-management label-ipv4 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure service vprn string bgp rib-management label-ipv4 route-table-import policy-name <i>reference</i>
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement string
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure service vprn string bgp rib-management label-ipv6
Tree	label-ipv6
Introduced	22.2.R1
Platforms	All

leak-import

Synopsis	Enter the leak-import context
Context	configure service vprn string bgp rib-management label-ipv6 leak-import
Tree	leak-import
Introduced	22.2.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure service vprn string bgp rib-management label-ipv6 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	22.2.R1
Platforms	All

router-id *string*

Synopsis	Router ID for the BGP instance in the AS
Context	configure service vprn string bgp router-id string

Tree	router-id
Description	<p>This command specifies the router ID to be used with the BGP instance.</p> <p>Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID.</p> <p>When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address.</p>
Introduced	16.0.R1
Platforms	All

send-communities

Synopsis	Enter the send-communities context
Context	configure service vprn <i>string</i> bgp send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	configure service vprn <i>string</i> bgp send-communities extended <i>boolean</i>
Tree	extended
Default	true
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	configure service vprn <i>string</i> bgp send-communities large <i>boolean</i>
Tree	large
Default	true
Introduced	16.0.R1
Platforms	All

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	configure service vprn <i>string</i> bgp send-communities standard <i>boolean</i>
Tree	standard
Default	true
Introduced	16.0.R1
Platforms	All

send-default

Synopsis	Enter the send-default context
Context	configure service vprn <i>string</i> bgp send-default
Tree	send-default
Introduced	19.7.R1
Platforms	All

export-policy *reference*

Synopsis	Export policy name
Context	configure service vprn <i>string</i> bgp send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	configure service vprn <i>string</i> bgp send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	configure service vprn <i>string</i> bgp send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure service vprn <i>string</i> bgp split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When configured to false, the use of split-horizon is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size override
Context	configure service vprn <i>string</i> bgp tcp-mss <i>number</i>
Tree	tcp-mss
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p>

TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.

Range	384 to 9746
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	configure <i>service vprn string</i> bgp third-party-nexthop <i>boolean</i>
Tree	third-party-nexthop
Description	<p>When configured to true, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When configured to false, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Default	false
Introduced	16.0.R1
Platforms	All

bgp-evpn

Synopsis	Enter the bgp-evpn context
Context	configure <i>service vprn string</i> bgp-evpn
Tree	bgp-evpn
Introduced	20.10.R1
Platforms	All

mpls [*bgp-instance*] *number*

Synopsis	Enter the mpls list instance
Context	configure <i>service vprn string</i> bgp-evpn mpls <i>number</i>
Tree	mpls
Introduced	20.10.R1

Platforms All

[bgp-instance] number

Synopsis BGP instance ID
Context **configure service vprn string bgp-evpn mpls number**
Tree [mpls](#)
Range 1
Notes This element is part of a list key.
Introduced 20.10.R1
Platforms All

admin-state keyword

Synopsis Administrative state of BGP-EVPN MPLS
Context **configure service vprn string bgp-evpn mpls number admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 20.10.R1
Platforms All

auto-bind-tunnel

Synopsis Enter the **auto-bind-tunnel** context
Context **configure service vprn string bgp-evpn mpls number auto-bind-tunnel**
Tree [auto-bind-tunnel](#)
Description Commands in this context configure the automatic binding parameters of a BGP-EVPN service using tunnels to MP-BGP peers.
Introduced 20.10.R1
Platforms All

allow-flex-algo-fallback boolean

Synopsis Enable flexible algorithm fallback

Context	configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel allow-flex-algo-fallback <i>boolean</i>
Tree	allow-flex-algo-fallback
Description	When configured to true , a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available. When configured to false , the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.
Default	false
Introduced	20.10.R3
Platforms	All

ecmp *number*

Synopsis	Maximum ECMP routes allowed
Context	configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel ecmp <i>number</i>
Tree	ecmp
Range	1 to 32
Default	1
Introduced	20.10.R1
Platforms	All

enforce-strict-tunnel-tagging *boolean*

Synopsis	Allow enforcement of strict tunnel tagging
Context	configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel enforce-strict-tunnel-tagging <i>boolean</i>
Tree	enforce-strict-tunnel-tagging
Default	false
Introduced	20.10.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution method for tunnel selection
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Context	configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution keyword
Tree	resolution
Default	none
Options	none, filter, any
Introduced	20.10.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter
Tree	resolution-filter
Description	Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-EVPN routes within the automatic binding of the BGP-EVPN MPLS service to tunnels to MP-BGP peers.
Introduced	20.10.R1
Platforms	All

bgp boolean

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter bgp boolean
Tree	bgp
Description	When configured to true , BGP searches the BGP LSP for the address of the BGP next hop. When configured to false , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.
Default	false
Introduced	20.10.R1
Platforms	All

ldp boolean

Synopsis	Use LDP tunneling for next-hop resolution
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Context	configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter ldp boolean
Tree	ldp
Description	When configured to true , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop. When configured to false , LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

mpls-fwd-policy boolean

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter mpls-fwd-policy boolean
Tree	mpls-fwd-policy
Description	When configured to true , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop. When configured to false , the MPLS forwarding policy is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

rib-api boolean

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter rib-api boolean
Tree	rib-api
Description	When configured to true , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service. When configured to false , the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

rsvp boolean

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter rsvp boolean
Tree	rsvp
Description	<p>When configured to true, BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to false, the RSVP LSP is not used for next-hop resolution.</p>
Default	false
Introduced	20.10.R1
Platforms	All

sr-isis boolean

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-isis boolean
Tree	sr-isis
Description	<p>When configured to true, BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.</p> <p>When configured to false, IS-IS tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	20.10.R1
Platforms	All

sr-ospf boolean

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-ospf boolean
Tree	sr-ospf

Description	<p>When configured to true, BGP uses an OSPF tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF instance.</p> <p>When configured to false, OSPF tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	20.10.R1
Platforms	All

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure service vpn <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-ospf3 <i>boolean</i>
Tree	sr-ospf3
Description	<p>When configured to true, BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF3 instance.</p> <p>When configured to false, OSPF3 tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	20.10.R1
Platforms	All

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure service vpn <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	<p>When configured to true, this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.</p> <p>When configured to false, SR policies are not used for next-hop resolution.</p>
Default	false
Introduced	20.10.R1

Platforms All

sr-te *boolean*

Synopsis Use SR-TE tunneling for next-hop resolution

Context **configure** *service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-te boolean*

Tree [sr-te](#)

Description When configured to **true**, BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.
The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.
When configured to **false**, SR-TE tunneling is not used for next-hop resolution.

Default false

Introduced 20.10.R1

Platforms All

udp *boolean*

Synopsis Use MPLS over UDP tunneling for next-hop resolution

Context **configure** *service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter udp boolean*

Tree [udp](#)

Description When configured to **true**, BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.
When configured to **false**, MPLS over UDP tunneling is not used for next-hop resolution.

Default false

Introduced 20.10.R1

Platforms All

default-route-tag *string*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Default route tag

Context	configure service vprn string bgp-evpn mpls number default-route-tag string
Tree	default-route-tag
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none">• If a service is configured with both default-route-tag X and proxy-arp evpn-route-tag Y, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement.• If a given IP-prefix route is tagged in the route-table with tag A and the R-VPLS, in which the route is advertised, uses B as the default-route-tag, then EVPN keeps tag A when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	20.10.R1
Platforms	All

domain-id string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Domain ID of received BGP route before readvertisement
Context	configure service vprn string bgp-evpn mpls number domain-id string
Tree	domain-id
Description	<p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p>

Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

Introduced 21.10.R1
Platforms All

dynamic-egress-label-limit *boolean*

Synopsis Enables dynamic egress label limit

Context **configure service vprn string bgp-evpn mpls number dynamic-egress-label-limit boolean**

Tree **dynamic-egress-label-limit**

Description When configured to **true**, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.

For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.

For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.

When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.

Default false

Introduced 22.2.R1

Platforms All

evi *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis EVPN instance ID

Context **configure service vprn string bgp-evpn mpls number evi number**

Tree **evi**

Description	This command configures the EVI that identifies the BGP EVPN instance in a VPRN (for the EVPN-IFL model) that is associated with the Layer 3 Ethernet segment. This configuration is required on the PEs attached to the Ethernet segment and on the remote PEs that need to create ES destinations to the MH Layer 3 Ethernet segment.
Range	1 to 16777215
Introduced	22.10.R1
Platforms	All

evpn-link-bandwidth

Synopsis	Enter the evpn-link-bandwidth context
Context	configure service vprn string bgp-evpn mpls number evpn-link-bandwidth
Tree	evpn-link-bandwidth
Introduced	22.7.R1
Platforms	All

advertise

Synopsis	Enable the advertise context
Context	configure service vprn string bgp-evpn mpls number evpn-link-bandwidth advertise
Tree	advertise
Introduced	22.7.R1
Platforms	All

max-dynamic-weight *number*

Synopsis	Maximum dynamic weight of the route
Context	configure service vprn string bgp-evpn mpls number evpn-link-bandwidth advertise max-dynamic-weight number
Tree	max-dynamic-weight
Description	This command configures the maximum weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service. If weight dynamic is configured, the actual advertised weight is the minimum of the number of BGP PE-CE paths for the prefix and the configured maximum weight.
Range	1 to 128
Default	128
Introduced	22.7.R1

Platforms All

weight (*number* | *keyword*)

Synopsis Weight of the route

Context **configure service vprn** *string* **bgp-evpn mpls** *number* **evpn-link-bandwidth advertise weight** (*number* | *keyword*)

Tree **weight**

Description This command configures the weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service.
If set to **dynamic**, the weight is dynamically set based on the number of BGP PE-CE paths for the IP-Prefix that is advertised in an EVPN IP-Prefix route.

Range 1 to 128

Default dynamic

Options dynamic

Introduced 22.7.R1

Platforms All

weighted-ecmp *boolean*

Synopsis Enable weighted ECMP

Context **configure service vprn** *string* **bgp-evpn mpls** *number* **evpn-link-bandwidth weighted-ecmp** *boolean*

Tree **weighted-ecmp**

Description When configured to **true**, the router supports the processing of the EVPN link bandwidth extended community when installing an ECMP set for an EVPN IP-Prefix route in the VPRN route table.
Flows to an IP Prefix received with a weight and a zero ESI value are sprayed according to the weight. If the EVPN IP-Prefix route received with the weight has a non-zero ESI, the weight is divided into the number of PEs attached to the Ethernet Segment (and rounded up if the result is not an integer).
The command also enables the weighted ECMP functionality for BGP CEs that are configured with an **evpn-link-bandwidth add-to-received-bgp** weight.
When configured to **false**, the router disables the processing of the EVPN link bandwidth extended community.

Default false

Introduced 22.7.R1

Platforms All

route-distinguisher (*string* | *keyword*)

Synopsis	Route distinguisher
Context	configure service vpn <i>string</i> bgp-evpn mpls <i>number</i> route-distinguisher (<i>string</i> <i>keyword</i>)
Tree	route-distinguisher
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to.
Options	auto-rd
Introduced	20.10.R1
Platforms	All

send-tunnel-encap

Synopsis	Enter the send-tunnel-encap context
Context	configure service vpn <i>string</i> bgp-evpn mpls <i>number</i> send-tunnel-encap
Tree	send-tunnel-encap
Introduced	20.10.R1
Platforms	All

mpls *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS encapsulation
Context	configure service vpn <i>string</i> bgp-evpn mpls <i>number</i> send-tunnel-encap mpls <i>boolean</i>
Tree	mpls
Default	true
Introduced	20.10.R1
Platforms	All

mpls-over-udp *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS over UDP encapsulation
Context	configure service vprn string bgp-evpn mpls number send-tunnel-encap mpls-over-udp boolean
Tree	mpls-over-udp
Default	false
Introduced	20.10.R1
Platforms	All

vrf-export

Synopsis	Enable the vrf-export context
Context	configure service vprn string bgp-evpn mpls number vrf-export
Tree	vrf-export
Introduced	20.10.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	configure service vprn string bgp-evpn mpls number vrf-export policy (policy-expr-string string)
Tree	policy
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	20.10.R1
Platforms	All

vrf-import

Synopsis	Enable the vrf-import context
Context	configure service vprn string bgp-evpn mpls number vrf-import
Tree	vrf-import
Introduced	20.10.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	configure service vprn string bgp-evpn mpls number vrf-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String Length	1 to 255
Max. Instances	15

Min. Instances	1
Notes	This element is ordered by the user.
Introduced	20.10.R1
Platforms	All

vrf-target

Synopsis	Enter the vrf-target context
Context	configure service vprn string bgp-evpn mpls number vrf-target
Tree	vrf-target
Description	<p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p>
Introduced	20.10.R1
Platforms	All

community *string*

Synopsis	Extended BGP community
Context	configure service vprn string bgp-evpn mpls number vrf-target community string
Tree	community
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length	10 to 28
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	20.10.R1
Platforms	All

export-community *string*

Synopsis	Communities sent to remote PE neighbors
Context	configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> vrf-target export-community <i>string</i>
Tree	export-community
String Length	10 to 28
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	20.10.R1
Platforms	All

import-community *string*

Synopsis	Communities accepted from remote PE neighbors
Context	configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> vrf-target import-community <i>string</i>
Tree	import-community
String Length	10 to 28
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	20.10.R1
Platforms	All

segment-routing-v6 [[bgp-instance](#)] *number*

Synopsis	Enter the segment-routing-v6 list instance
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i>
Tree	segment-routing-v6
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[bgp-instance] *number*

Synopsis	BGP instance
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i>
Tree	segment-routing-v6
Range	1

Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of segment routing over IPv6
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-route-tag *string*

Synopsis	Default route tag
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> default-route-tag <i>string</i>
Tree	default-route-tag
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

domain-id string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Domain ID of received BGP route before readvertisement
Context	configure service vprn string bgp-evpn segment-routing-v6 number domain-id string
Tree	domain-id
Description	<p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

evi number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	EVI information
Context	configure service vprn string bgp-evpn segment-routing-v6 number evi number
Tree	evi

Description	This command configures the EVI that identifies the BGP EVPN instance in a VPRN (for the EVPN-IFL model) or an R-VPLS (for the EVPN-IFF model) that is associated with the Layer 3 Ethernet segment. This configuration is required on the PEs attached to the Ethernet segment and on the remote PEs that need to create ES destinations to the MH Layer 3 Ethernet segment.
Range	1 to 16777215
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

resolution *keyword*

Synopsis	Resolution options for routes
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> resolution <i>keyword</i>
Tree	resolution
Default	route-table
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-distinguisher (*string* | *keyword*)

Synopsis	Route distinguisher
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> route-distinguisher (<i>string</i> <i>keyword</i>)
Tree	route-distinguisher
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify the VPN to which the route belongs. Alternatively, the system can automatically generate an RD based on the BGP automatic RD range configured at the configure service system level.
Options	auto-rd
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address *string*

Synopsis	Source IPv6 address
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Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> source-address <i>string</i>
Tree	source-address
Description	<p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the router "base" segment-routing segment-routing-v6 source-address context.</p> <p>A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.</p>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6

Synopsis	Enter the srv6 context
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6
Tree	srv6
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-locator *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6 default-locator <i>string</i>
Tree	default-locator
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

instance *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Segment Routing IPv6 instance
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6 <i>instance reference</i>
Tree	instance
Reference	configure service vprn <i>string</i> segment-routing-v6 <i>number</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-export

Synopsis	Enable the vrf-export context
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> vrf-export
Tree	vrf-export
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> vrf-export policy (policy-expr-string string)
Tree	policy
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-import

Synopsis	Enable the vrf-import context
Context	configure service vprn string bgp-evpn segment-routing-v6 number vrf-import
Tree	vrf-import
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	configure service vprn string bgp-evpn segment-routing-v6 number vrf-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String Length	1 to 255
Max. Instances	15

Min. Instances	1
Notes	This element is ordered by the user.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-target

Synopsis	Enter the vrf-target context
Context	configure service vprn string bgp-evpn segment-routing-v6 number vrf-target
Tree	vrf-target
Description	<p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

community string

Synopsis	Extended BGP community
Context	configure service vprn string bgp-evpn segment-routing-v6 number vrf-target community string
Tree	community
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length	10 to 28
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

export-community *string*

Synopsis	Communities sent to remote PE neighbors
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> vrf-target export-community <i>string</i>
Tree	export-community
String Length	10 to 28
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

import-community *string*

Synopsis	Communities accepted from remote PE neighbors
Context	configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> vrf-target import-community <i>string</i>
Tree	import-community
String Length	10 to 28
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

bgp-ipvpn

Synopsis	Enter the bgp-ipvpn context
Context	configure service vprn <i>string</i> bgp-ipvpn
Tree	bgp-ipvpn
Introduced	21.2.R1
Platforms	All

mpls

Synopsis	Enter the mpls context
Context	configure service vprn <i>string</i> bgp-ipvpn mpls
Tree	mpls

Introduced	21.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP-IPVPN MPLS
Context	configure service vpn <i>string</i> bgp-ipvpn mpls admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.2.R1
Platforms	All

auto-bind-tunnel

Synopsis	Enter the auto-bind-tunnel context
Context	configure service vpn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel
Tree	auto-bind-tunnel
Description	Commands in this context configure the automatic binding parameters of a BGP-IPVPN service using tunnels to MP-BGP peers.
Introduced	21.2.R1
Platforms	All

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure service vpn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel allow-flex-algo-fallback <i>boolean</i>
Tree	allow-flex-algo-fallback
Description	<p>When configured to true, a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to false, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	21.2.R1

Platforms All

ecmp *number*

Synopsis Maximum ECMP routes allowed

Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [mpls](#) [auto-bind-tunnel](#) **ecmp** *number*

Tree [ecmp](#)

Description This command configures the maximum number of tunnels that can be used as ECMP next hops for the VPRN. This value overrides the ECMP value configured at the **configure service vprn** context level.

Range 1 to 32

Default 1

Introduced 21.2.R1

Platforms All

enforce-strict-tunnel-tagging *boolean*

Synopsis Allow enforcement of strict tunnel tagging

Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [mpls](#) [auto-bind-tunnel](#) **enforce-strict-tunnel-tagging** *boolean*

Tree [enforce-strict-tunnel-tagging](#)

Description When configured to **true**, the system must only consider LSPs marked with an administrative tag for next-hop resolution.
When configured to **false**, tagged RSVP and SR-TE LSPs are considered first. The system then uses untagged LSPs of other types.

Default false

Introduced 21.2.R1

Platforms All

resolution *keyword*

Synopsis Resolution method for tunnel selection

Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [mpls](#) [auto-bind-tunnel](#) **resolution** *keyword*

Tree [resolution](#)

Default none

Options none, filter, any

Introduced	21.2.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure service vprn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter
Tree	resolution-filter
Description	Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-IPVPN routes within the automatic binding of the BGP-IPVPN MPLS service to tunnels to MP-BGP peers.
Introduced	21.2.R1
Platforms	All

bgp boolean

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure service vprn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter bgp boolean
Tree	bgp
Description	When configured to true , BGP searches the BGP LSP for the address of the BGP next hop. When configured to false , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.
Default	true
Introduced	21.2.R1
Platforms	All

gre boolean

Synopsis	Use GRE tunneling for next-hop resolution
Context	configure service vprn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter gre boolean
Tree	gre
Description	When configured to true , this command enables setting the tunnel type for the auto bind tunnel.

When configured to **false**, this command disables setting the tunnel type for the auto bind tunnel.

Default	false
Introduced	21.2.R1
Platforms	All

ldp boolean

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure service vpn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter ldp boolean
Tree	ldp
Description	When configured to true , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop. When configured to false , LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

mpls-fwd-policy boolean

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	configure service vpn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter mpls-fwd-policy boolean
Tree	mpls-fwd-policy
Description	When configured to true , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop. When configured to false , the MPLS forwarding policy is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

rib-api boolean

Synopsis	Use RIB API gRPC service for next-hop resolution
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Context	configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter rib-api <i>boolean</i>
Tree	rib-api
Description	When configured to true , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service. When configured to false , the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter rsvp <i>boolean</i>
Tree	rsvp
Description	When configured to true , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID. When configured to false , the RSVP LSP is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-isis <i>boolean</i>
Tree	sr-isis
Description	When configured to true , BGP uses an IS-IS tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance. When configured to false , IS-IS tunneling is not used for next-hop resolution.

Default	false
Introduced	21.2.R1
Platforms	All

sr-ospf boolean

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure service vprn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-ospf boolean
Tree	sr-ospf
Description	<p>When configured to true, BGP uses an OSPF tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF instance.</p> <p>When configured to false, OSPF tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	21.2.R1
Platforms	All

sr-ospf3 boolean

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure service vprn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-ospf3 boolean
Tree	sr-ospf3
Description	<p>When configured to true, BGP uses an OSPFv3 tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPFv3 instance.</p> <p>When configured to false, OSPFv3 tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	21.2.R1
Platforms	All

sr-policy boolean

Synopsis	Use SR policies for next-hop resolution
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Context	configure service vprn <i>string</i> bgp-ipvprn mpls auto-bind-tunnel resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	When configured to true , SR policies are used to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route. When configured to false , SR policies are not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure service vprn <i>string</i> bgp-ipvprn mpls auto-bind-tunnel resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Description	When configured to true , BGP uses an SR-TE tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID. When configured to false , SR-TE tunneling is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	configure service vprn <i>string</i> bgp-ipvprn mpls auto-bind-tunnel resolution-filter udp <i>boolean</i>
Tree	udp
Description	When configured to true , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop. When configured to false , MPLS over UDP tunneling is not used for next-hop resolution.
Default	false

Introduced	21.2.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Allow weighted load-balancing
Context	configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel weighted-ecmp <i>boolean</i>
Tree	weighted-ecmp
Description	<p>When configured to true, this command enables weighted ECMP for packets using tunnels that a VPRN automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.</p> <p>When configured to false, this command disables weighted ECMP for next-hop tunnel selection.</p>
Default	false
Introduced	21.2.R1
Platforms	All

domain-id *string*

Synopsis	Domain ID of received BGP route before readvertisement
Context	configure service vprn <i>string</i> bgp-ipvpn mpls domain-id <i>string</i>
Tree	domain-id
Description	<p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p>

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

Introduced	21.10.R1
Platforms	All

dynamic-egress-label-limit *boolean*

Synopsis	Enables dynamic egress label limit
Context	configure service vprn <i>string</i> bgp-ipvpn mpls dynamic-egress-label-limit <i>boolean</i>
Tree	dynamic-egress-label-limit
Description	<p>When configured to true, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> <p>When configured to false this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.</p>
Default	false
Introduced	22.2.R1
Platforms	All

route-distinguisher (*string* | *keyword*)

Synopsis	Route distinguisher
Context	configure service vprn <i>string</i> bgp-ipvpn mpls route-distinguisher (<i>string</i> <i>keyword</i>)
Tree	route-distinguisher
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to.
Options	auto-rd
Introduced	21.2.R1
Platforms	All

vrf-export

Synopsis	Enable the vrf-export context
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Context	configure service vprn <i>string</i> bgp-ipvpn mpls vrf-export
Tree	vrf-export
Introduced	21.2.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	configure service vprn <i>string</i> bgp-ipvpn mpls vrf-export policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

vrf-import

Synopsis	Enable the vrf-import context
Context	configure service vprn <i>string</i> bgp-ipvpn mpls vrf-import
Tree	vrf-import
Introduced	21.2.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	configure service vprn <i>string</i> bgp-ipvpn mpls vrf-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

vrf-target

Synopsis	Enter the vrf-target context
Context	configure service vprn <i>string</i> bgp-ipvpn mpls vrf-target
Tree	vrf-target
Description	<p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p>

Introduced 21.2.R1
Platforms All

community *string*

Synopsis Extended BGP community
Context **configure** [service](#) [vprn](#) *string* [bgp-ipvpn](#) [mpls](#) [vrf-target](#) [community](#) *string*
Tree [community](#)
Description This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length 10 to 28
Notes The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced 21.2.R1
Platforms All

export-community *string*

Synopsis Communities sent to remote PE neighbors
Context **configure** [service](#) [vprn](#) *string* [bgp-ipvpn](#) [mpls](#) [vrf-target](#) [export-community](#) *string*
Tree [export-community](#)
String Length 10 to 28
Notes The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced 21.2.R1
Platforms All

import-community *string*

Synopsis Communities accepted from remote PE neighbors
Context **configure** [service](#) [vprn](#) *string* [bgp-ipvpn](#) [mpls](#) [vrf-target](#) [import-community](#) *string*
Tree [import-community](#)
String Length 10 to 28
Notes The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced 21.2.R1

Platforms All

segment-routing-v6 [[bgp-instance](#)] *number*

Synopsis Enter the **segment-routing-v6** list instance
Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [segment-routing-v6](#) *number*
Tree [segment-routing-v6](#)
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[bgp-instance] *number*

Synopsis BGP instance
Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [segment-routing-v6](#) *number*
Tree [segment-routing-v6](#)
Range 1
Notes This element is part of a list key.
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis Administrative state of segment routing over IPv6
Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) [segment-routing-v6](#) *number* [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-route-tag *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	configure <i>service vpn</i> <i>string</i> <i>bgp-ipvpn segment-routing-v6 number</i> default-route-tag <i>string</i>
Tree	<i>default-route-tag</i>
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none">• If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

domain-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Domain ID of received BGP route before readvertisement
Context	configure <i>service vpn</i> <i>string</i> <i>bgp-ipvpn segment-routing-v6 number</i> domain-id <i>string</i>
Tree	<i>domain-id</i>
Description	<p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The</p>

VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

resolution *keyword*

Synopsis	Resolution options for routes
Context	configure service vprn string bgp-ipvpn segment-routing-v6 number resolution keyword
Tree	resolution
Default	route-table
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-distinguisher (*string | keyword*)

Synopsis	Route distinguisher
Context	configure service vprn string bgp-ipvpn segment-routing-v6 number route-distinguisher (string keyword)
Tree	route-distinguisher
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify the VPN to which the route belongs. Alternatively, the system can automatically generate an RD based on the BGP automatic RD range configured at the configure service system level.
Options	auto-rd

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address *string*

Synopsis	Source IPv6 address
Context	configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> source-address <i>string</i>
Tree	source-address
Description	<p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the router "base" segment-routing segment-routing-v6 source-address context.</p> <p>A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6

Synopsis	Enter the srv6 context
Context	configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> srv6
Tree	srv6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-locator *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> srv6 default-locator <i>string</i>
Tree	default-locator
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

instance *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Segment Routing IPv6 instance

Context **configure** [service](#) [vprn](#) *string* [bgp-ipvpn](#) [segment-routing-v6](#) *number* [srv6](#) *instance reference*

Tree [instance](#)

Reference **configure** [service](#) [vprn](#) *string* [segment-routing-v6](#) *number*

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-export

Synopsis Enable the **vrf-export** context

Context **configure** [service](#) [vprn](#) *string* [bgp-ipvpn](#) [segment-routing-v6](#) *number* [vrf-export](#)

Tree [vrf-export](#)

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

policy (*policy-expr-string* | *string*)

Synopsis Policy name

Context **configure** [service](#) [vprn](#) *string* [bgp-ipvpn](#) [segment-routing-v6](#) *number* [vrf-export](#) [policy](#) (*policy-expr-string* | *string*)

Tree [policy](#)

Description This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).

Each referenced object is either a policy logical expression or the name of a single policy.

Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.

Only the first policy can have the maximum length and the rest can be up to 64 characters.

Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-import

Synopsis	Enable the vrf-import context
Context	configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-import
Tree	vrf-import
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy

Description This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).

Each referenced object is either a policy logical expression or the name of a single policy.

Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.

Only the first policy can have the maximum length and the rest can be up to 64 characters.

Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-target

Synopsis	Enter the vrf-target context
Context	configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-target
Tree	vrf-target
Description	<p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

community string

Synopsis	Extended BGP community
Context	configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-target community string
Tree	community
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length	10 to 28
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

export-community *string*

Synopsis	Communities sent to remote PE neighbors
Context	configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> vrf-target export-community <i>string</i>
Tree	export-community
String Length	10 to 28
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

import-community *string*

Synopsis	Communities accepted from remote PE neighbors
Context	configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> vrf-target import-community <i>string</i>
Tree	import-community
String Length	10 to 28
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

bgp-shared-queue

Synopsis	Enable the bgp-shared-queue context
Context	configure service vprn <i>string</i> bgp-shared-queue
Tree	bgp-shared-queue
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Committed information rate for shared queue
Context	configure service vprn <i>string</i> bgp-shared-queue cir (<i>number</i> <i>keyword</i>)

Tree	cir
Range	0 to 100000000
Default	4000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Peak information rate for shared queue
Context	configure service vpn <i>string</i> bgp-shared-queue pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	4000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

bgp-vpn-backup

Synopsis	Enter the bgp-vpn-backup context
Context	configure service vpn <i>string</i> bgp-vpn-backup
Tree	bgp-vpn-backup
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Allow BGP-VPN to be used as backup for IPv4 prefixes
Context	configure service vpn <i>string</i> bgp-vpn-backup ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1

Platforms All

ipv6 *boolean*

Synopsis Allow BGP-VPN to be used as backup for IPv6 prefixes
Context **configure service vprn** *string* **bgp-vpn-backup ipv6** *boolean*
Tree [ipv6](#)
Default false
Introduced 16.0.R1
Platforms All

carrier-carrier-vpn *boolean*

Synopsis Allow VPRN service to support a Carrier Supporting Carrier model
Context **configure service vprn** *string* **carrier-carrier-vpn** *boolean*
Tree [carrier-carrier-vpn](#)
Default false
Introduced 16.0.R1
Platforms All

class-forwarding *boolean*

Synopsis Allow packet forwarding based on forwarding class
Context **configure service vprn** *string* **class-forwarding** *boolean*
Tree [class-forwarding](#)
Default false
Introduced 19.10.R1
Platforms All

confederation

Synopsis Enter the **confederation** context
Context **configure service vprn** *string* **confederation**
Tree [confederation](#)
Introduced 16.0.R1

Platforms All

confed-as-num *number*

Synopsis Confederation number within an autonomous system
Context **configure service vprn string confederation confed-as-num number**
Tree [confed-as-num](#)
Range 1 to 4294967295
Introduced 16.0.R1
Platforms All

members [[as-number](#)] *number*

Synopsis Add a list entry for **members**
Context **configure service vprn string confederation members number**
Tree [members](#)
Max. Instances 256
Introduced 16.0.R1
Platforms All

[as-number] *number*

Synopsis Confederation AS number
Context **configure service vprn string confederation members number**
Tree [members](#)
Range 1 to 4294967295
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

customer *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	configure service vprn <i>string</i> customer <i>reference</i>
Tree	customer
Reference	configure service customer <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

d-path-length-ignore *boolean*

Synopsis	Enable D-PATH length ignore
Context	configure service vprn <i>string</i> d-path-length-ignore <i>boolean</i>
Tree	d-path-length-ignore
Description	<p>When configured to true, this command makes the VPRN RTM ignore the D-PATH domain segment length for best path selection purposes (for routes in the VPRN). This allows the user to control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.</p> <p>When configured to false, this command does not ignore the D-PATH domain segment length.</p>
Default	false
Introduced	21.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dhcp-server

Synopsis	Enter the dhcp-server context
Context	configure service vprn string dhcp-server
Tree	dhcp-server
Introduced	16.0.R1
Platforms	All

dhcpv4 [name] string

Synopsis	Enter the dhcpv4 list instance
Context	configure service vprn string dhcp-server dhcpv4 string
Tree	dhcpv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	DHCP server name
Context	configure service vprn string dhcp-server dhcpv4 string
Tree	dhcpv4
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the DHCP server
Context	configure service vprn string dhcp-server dhcpv4 string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	When configured to true , the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.

When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover partner-down-delay <i>number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease

duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.

Range	0 to 86399
Default	86399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover peer <i>reference</i>
Tree	peer
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover peer <i>reference</i> sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-renews *boolean*

Synopsis	Send FORCERENEW messages to force renewals of leases
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> force-renews <i>boolean</i>
Tree	force-renews
Description	When configured to true , FORCERENEW messages are enabled for DHCP.
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-hold

Synopsis Enter the **lease-hold** context

Context **configure service vpn string dhcp-server dhcpv4 string lease-hold**

Tree [lease-hold](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

additional-scenarios

Synopsis Enter the **additional-scenarios** context

Context **configure service vpn string dhcp-server dhcpv4 string lease-hold additional-scenarios**

Tree [additional-scenarios](#)

Description Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

internal-lease-ipsec *boolean*

Synopsis Apply the lease hold timer to local IPsec clients

Context **configure service vpn string dhcp-server dhcpv4 string lease-hold additional-scenarios internal-lease-ipsec *boolean***

Tree [internal-lease-ipsec](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicited-release *boolean*

Synopsis Apply lease hold timer for solicited releases

Context **configure service vpn string dhcp-server dhcpv4 string lease-hold additional-scenarios solicited-release *boolean***

Tree [solicited-release](#)

Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time number

Synopsis	Lease hold time
Context	configure service vprn string dhcp-server dhcpv4 string lease-hold time number
Tree	time
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool [pool-name] string

Synopsis	Enter the pool list instance
Context	configure service vprn string dhcp-server dhcpv4 string pool string
Tree	pool
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[pool-name] string

Synopsis	DHCP server pool name
Context	configure service vprn string dhcp-server dhcpv4 string pool string
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	When configured to true , the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.

When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover partner-down-delay <i>number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease

duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.

Range	0 to 86399
Default	86399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover peer <i>reference</i>
Tree	peer
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover peer reference sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lease-time *number*

Synopsis	Maximum lease time
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> max-lease-time <i>number</i>

Tree	max-lease-time
Range	10 to 315446399
Default	864000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-lease-time *number*

Synopsis	Minimum lease time
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> min-lease-time <i>number</i>
Tree	min-lease-time
Range	10 to 315446399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free

Synopsis	Enter the minimum-free context
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free absolute <i>number</i>
Tree	absolute
Range	0 to 255

Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Description	When configured to true , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to false , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free percent <i>number</i>
Tree	percent
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nak-non-matching-subnet *boolean*

Synopsis	Send NAK if no match for request address pool range
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> nak-non-matching-subnet <i>boolean</i>

Tree	nak-non-matching-subnet
Description	When configured to true , a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK. When configured to false or unconfigured, the system drops the DHCP packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

offer-time *number*

Synopsis	Time interval during which a DHCP offer remains valid
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> offer-time <i>number</i>
Tree	offer-time
Range	10 to 600
Default	60
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** **service** **vprn** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **options** **option** (*number* | *keyword*)

Tree **option**

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** **service** **vprn** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **options** **option** (*number* | *keyword*) **ascii-string** *string*

Tree **ascii-string**

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis DHCP option as time duration

Context **configure** **service** **vprn** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **options** **option** (*number* | *keyword*) **duration** *number*

Tree **duration**

Range 10 to 315446399

Units seconds

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option.
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i>
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis DHCP option as NetBIOS node type
Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* [options](#) [option](#) (*number* | *keyword*) **netbios-node-type** *keyword*
Tree [netbios-node-type](#)
Options b-node, p-node, m-node, h-node
Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet [[ipv4-prefix](#)] *string*

Synopsis Enter the **subnet** list instance
Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* **subnet** *string*
Tree [subnet](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[ipv4-prefix](#)] *string*

Synopsis IPv4 prefix for the subnet
Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* **subnet** *string*
Tree [subnet](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-range [[start](#)] *string* [end](#) *string*

Synopsis Enter the **address-range** list instance

Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> address-range <i>string</i> end <i>string</i>
Tree	address-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[start] *string*

Synopsis	Lower bound of the IP address range
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> address-range <i>string</i> end <i>string</i>
Tree	address-range
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the IP address range
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> address-range <i>string</i> end <i>string</i>
Tree	address-range
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover-control-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
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Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> address-range <i>string</i> end <i>string</i> failover-control-type <i>keyword</i>
Tree	failover-control-type
Default	local
Options	local, remote, access-driven
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis	Prevent new lease assignment from this subnet
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> drain <i>boolean</i>
Tree	drain
Description	When configured to true , new leases cannot be assigned and existing leases are kept up until they are released. When configured to false , the subnet is active and new leases can be assigned.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-addresses [**start**] *string* **end** *string*

Synopsis	Add a list entry for exclude-addresses
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> exclude-addresses <i>string</i> end <i>string</i>
Tree	exclude-addresses
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[start] *string*

Synopsis	Lower bound of the IP address range
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> exclude-addresses <i>string</i> end <i>string</i>
Tree	exclude-addresses

Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end string

Synopsis	Upper bound of the IP address range
Context	configure service vprn string dhcp-server dhcpv4 string pool string subnet string exclude-addresses string end string
Tree	exclude-addresses
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-declined number

Synopsis	Maximum number of declined addresses allowed
Context	configure service vprn string dhcp-server dhcpv4 string pool string subnet string maximum-declined number
Tree	maximum-declined
Max. Range	0 to 4294967295
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free

Synopsis	Enter the minimum-free context
Context	configure service vprn string dhcp-server dhcpv4 string pool string subnet string minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> minimum-free absolute <i>number</i>
Tree	absolute
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> minimum-free event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Description	When configured to true , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to false , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> minimum-free percent <i>number</i>
Tree	percent
Range	0 to 100

Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure service vprn string dhcp-server dhcpv4 string pool string subnet string options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] (*number | keyword*)

Synopsis	Enter the option list instance
Context	configure service vprn string dhcp-server dhcpv4 string pool string subnet string options option (number keyword)
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number | keyword*)

Synopsis	DHCP option to send identification strings to client
Context	configure service vprn string dhcp-server dhcpv4 string pool string subnet string options option (number keyword)
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure service vprn string dhcp-server dhcpv4 string pool string subnet string options option (number keyword) ascii-string string
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option as time duration
Context	configure service vprn string dhcp-server dhcpv4 string pool string subnet string options option (number keyword) duration number
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure service vprn string dhcp-server dhcpv4 string pool string subnet string options option (number keyword) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options option (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i>
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options option (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i>
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-selection

Synopsis	Enter the pool-selection context
Context	configure service vprn string dhcp-server dhcpv4 string pool-selection
Tree	pool-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-gi-address

Synopsis	Enable the use-gi-address context
Context	configure service vprn string dhcp-server dhcpv4 string pool-selection use-gi-address
Tree	use-gi-address
Description	<p>Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address.</p> <p>A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	GI address-matching scope
Context	configure service vprn string dhcp-server dhcpv4 string pool-selection use-gi-address scope keyword
Tree	scope
Default	subnet
Options	subnet, pool
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure service vprn string dhcp-server dhcpv4 string pool-selection use-pool-from-client
Tree	use-pool-from-client
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	configure service vprn string dhcp-server dhcpv4 string pool-selection use-pool-from-client delimiter string
Tree	delimiter
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database for authentication
Context	configure service vprn string dhcp-server dhcpv4 string user-db reference
Tree	user-db
Reference	configure subscriber-mgmt local-user-db string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-identification *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
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Context	configure service vprn string dhcp-server dhcpv4 string user-identification keyword
Tree	user-identification
Options	mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcpv6 [name] string

Synopsis	Enter the dhcpv6 list instance
Context	configure service vprn string dhcp-server dhcpv6 string
Tree	dhcpv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	DHCP server name
Context	configure service vprn string dhcp-server dhcpv6 string
Tree	dhcpv6
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the DHCP server
Context	configure service vprn string dhcp-server dhcpv6 string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-provisioned *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Auto-provision the pools of this server
Context	configure service vprn <i>string dhcp-server dhcpv6 string auto-provisioned boolean</i>
Tree	auto-provisioned
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the defaults context
Context	configure service vprn <i>string dhcp-server dhcpv6 string defaults</i>
Tree	defaults
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure service vprn <i>string dhcp-server dhcpv6 string defaults options</i>
Tree	options
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [[number](#)] (*number | keyword*)

Synopsis	Enter the option list instance
Context	configure service vprn <i>string dhcp-server dhcpv6 string defaults options option (number keyword)</i>
Tree	option
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i>
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults preferred-lifetime <i>number</i>
Tree	preferred-lifetime
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime. Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Default	3600
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-time *number*

Synopsis	Rebind time for the lease
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Context	configure service vprn string dhcp-server dhcpv6 string defaults rebind-time number
Tree	rebind-time
Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Default	2880
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-time number

Synopsis	Renew time for the lease
Context	configure service vprn string dhcp-server dhcpv6 string defaults renew-time number
Tree	renew-time
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 604800
Default	1800

Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	Time for the lease to remain valid
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults valid-lifetime <i>number</i>
Tree	valid-lifetime
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Default	86400
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure service vprn string dhcp-server dhcpv6 string failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure service vprn string dhcp-server dhcpv6 string failover admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure service vprn string dhcp-server dhcpv6 string failover ignore-mclt-on-takeover boolean
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> failover partner-down-delay <i>number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Default	86399
Units	seconds

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] *reference*

Synopsis Enter the **peer** list instance
Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv6](#) *string* [failover](#) [peer](#) *reference*
Tree [peer](#)
Max. Instances 1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] *reference*

Synopsis IP address of the failover peer
Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv6](#) *string* [failover](#) [peer](#) *reference*
Tree [peer](#)
Reference **configure** [redundancy](#) [multi-chassis](#) [peer](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tag that identifies synchronizing server or pool pairs
Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv6](#) *string* [failover](#) [peer](#) *reference* [sync-tag](#) *string*
Tree [sync-tag](#)
String Length 1 to 32
Notes This element is mandatory.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-rapid-commit *boolean*

Synopsis	Ignore Rapid Commit option
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> ignore-rapid-commit <i>boolean</i>
Tree	ignore-rapid-commit
Description	When configured to true , the server ignores the Rapid Commit option sent by the client and uses the regular message exchange.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-id-mapping *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Map hosts within interface-to-prefix combinations
Context	configure service vprn string dhcp-server dhcpv6 string interface-id-mapping boolean
Tree	interface-id-mapping
Description	When configured to true , this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-hold

Synopsis	Enter the lease-hold context
Context	configure service vprn string dhcp-server dhcpv6 string lease-hold
Tree	lease-hold
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

additional-scenarios

Synopsis	Enter the additional-scenarios context
Context	configure service vprn string dhcp-server dhcpv6 string lease-hold additional-scenarios
Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold additional-scenarios internal-lease-ipsec <i>boolean</i>
Tree	internal-lease-ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold additional-scenarios solicited-release <i>boolean</i>
Tree	solicited-release
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Lease hold time
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold time <i>number</i>
Tree	time
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-query *boolean*

Synopsis	Handle and reply to lease query messages
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-query <i>boolean</i>
Tree	lease-query

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool [*pool-name*] *string*

Synopsis	Enter the pool list instance
Context	configure <i>service vprn string dhcp-server dhcpv6 string pool string</i>
Tree	<i>pool</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[pool-name] *string*

Synopsis	DHCP server pool name
Context	configure <i>service vprn string dhcp-server dhcpv6 string pool string</i>
Tree	<i>pool</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix

Synopsis	Enter the delegated-prefix context
Context	configure <i>service vprn string dhcp-server dhcpv6 string pool string delegated-prefix</i>
Tree	<i>delegated-prefix</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis	Prefix length for pool if unspecified by client
Context	configure <i>service vprn string dhcp-server dhcpv6 string pool string delegated-prefix length number</i>

Tree	length
Range	48 to 127
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum number

Synopsis	Maximum delegated prefix length for this pool
Context	configure service vprn string dhcp-server dhcpv6 string pool string delegated-prefix maximum number
Tree	maximum
Range	48 to 127
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum number

Synopsis	Minimum delegated prefix length for this pool
Context	configure service vprn string dhcp-server dhcpv6 string pool string delegated-prefix minimum number
Tree	minimum
Range	48 to 127
Default	48
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure service vprn string dhcp-server dhcpv6 string pool string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-prefix [ipv6-prefix] *string*

Synopsis Add a list entry for **exclude-prefix**
Context **configure service vpn string dhcp-server dhcpv6 string pool string exclude-prefix string**
Tree **exclude-prefix**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-prefix] *string*

Synopsis IPv6 prefix to be excluded from available pool prefixes
Context **configure service vpn string dhcp-server dhcpv6 string pool string exclude-prefix string**
Tree **exclude-prefix**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis Enter the **failover** context
Context **configure service vpn string dhcp-server dhcpv6 string pool string failover**
Tree **failover**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the failover mechanism
Context **configure service vpn string dhcp-server dhcpv6 string pool string failover admin-state keyword**
Tree **admin-state**
Default disable
Options enable, disable

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure <i>service vprn string dhcp-server dhcpv6 string pool string failover partner-down-delay number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Default	86399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure <i>service vprn string dhcp-server dhcpv6 string pool string failover peer reference</i>
Tree	peer
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[address](#)] *reference*

Synopsis	IP address of the failover peer
Context	configure <i>service vprn string dhcp-server dhcpv6 string pool string failover peer reference</i>

Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover peer <i>reference</i> sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Default	120
Units	seconds

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis Enter the **options** context
Context **configure service vprn string dhcp-server dhcpv6 string pool string options**
Tree [options](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] (*number | keyword*)

Synopsis Enter the **option** list instance
Context **configure service vprn string dhcp-server dhcpv6 string pool string options option**
(*number | keyword*)
Tree [option](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number | keyword*)

Synopsis DHCP option to send as identification string
Context **configure service vprn string dhcp-server dhcpv6 string pool string options option**
(*number | keyword*)
Tree [option](#)
Range 1 to 65535
Options dns-server, domain-name
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis DHCP option specified as an ASCII string

Context	configure service vprn string dhcp-server dhcpv6 string pool string options option (<i>number</i> <i>keyword</i>) ascii-string string
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure service vprn string dhcp-server dhcpv6 string pool string options option (<i>number</i> <i>keyword</i>) domain-string string
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	configure service vprn string dhcp-server dhcpv6 string pool string options option (<i>number</i> <i>keyword</i>) duration number
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
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Context	configure service vprn string dhcp-server dhcpv6 string pool string options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string string

Synopsis	DHCP option specified as hexadecimal string
Context	configure service vprn string dhcp-server dhcpv6 string pool string options option (<i>number</i> <i>keyword</i>) hex-string string
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address string

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure service vprn string dhcp-server dhcpv6 string pool string options option (<i>number</i> <i>keyword</i>) ipv6-address string
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix [ipv6-prefix] string

Synopsis	Enter the prefix list instance
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Context **configure service vprn string dhcp-server dhcpv6 string pool string prefix string**
Tree **prefix**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-prefix] string

Synopsis IPv6 prefix to be excluded from available pool prefixes
Context **configure service vprn string dhcp-server dhcpv6 string pool string prefix string**
Tree **prefix**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drain boolean

Synopsis No new leases can be assigned
Context **configure service vprn string dhcp-server dhcpv6 string pool string prefix string drain boolean**
Tree **drain**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover-control-type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Failover control type for this range
Context **configure service vprn string dhcp-server dhcpv6 string pool string prefix string failover-control-type keyword**
Tree **failover-control-type**
Default local
Options local, remote, access-driven

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis Enter the **options** context
Context **configure service vprn string dhcp-server dhcpv6 string pool string prefix string options**
Tree [options](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] (*number | keyword*)

Synopsis Enter the **option** list instance
Context **configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (*number | keyword*)**
Tree [option](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number | keyword*)

Synopsis DHCP option to send as identification string
Context **configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (*number | keyword*)**
Tree [option](#)
Range 1 to 65535
Options dns-server, domain-name
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis DHCP option specified as an ASCII string

Context	configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (<i>number</i> <i>keyword</i>) <i>ascii-string string</i>
Tree	<i>ascii-string</i>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (<i>number</i> <i>keyword</i>) <i>domain-string string</i>
Tree	<i>domain-string</i>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (<i>number</i> <i>keyword</i>) <i>duration number</i>
Tree	<i>duration</i>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
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Context	configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (number keyword) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string string

Synopsis	DHCP option specified as hexadecimal string
Context	configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (number keyword) hex-string string
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address string

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (number keyword) ipv6-address string
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime number

Synopsis	Time this lease remains preferred
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Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> preferred-lifetime <i>number</i>
Tree	preferred-lifetime
Description	<p>This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.</p> <p>Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Default	3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length-threshold [**prefix-length**] *number*

Synopsis	Enter the prefix-length-threshold list instance
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-length-threshold <i>number</i>
Tree	prefix-length-threshold
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[prefix-length] *number*

Synopsis	Delegated prefix length for pool thresholds
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-length-threshold <i>number</i>
Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis Minimum number of free prefixes for this prefix length
Context **configure** *service vprn string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number absolute number*
Tree *absolute*
Range 1 to 4294967295
Notes The following elements are part of a choice: **absolute** or **percent**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis Generate a notification when this pool is depleted
Context **configure** *service vprn string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number event-when-depleted boolean*
Tree *event-when-depleted*
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis Minimum percentage of free prefixes for prefix length
Context **configure** *service vprn string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number percent number*
Tree *percent*
Range 1 to 100
Notes The following elements are part of a choice: **absolute** or **percent**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-type

Synopsis	Enter the prefix-type context
Context	configure service vprn string dhcp-server dhcpv6 string pool string prefix string prefix-type
Tree	prefix-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd boolean



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-PD prefixes from this prefix pool
Context	configure service vprn string dhcp-server dhcpv6 string pool string prefix string prefix-type pd boolean
Tree	pd
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-host boolean



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-NA or SLAAC prefixes from this prefix pool
Context	configure service vprn string dhcp-server dhcpv6 string pool string prefix string prefix-type wan-host boolean
Tree	wan-host
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-time *number*

Synopsis	Rebind time for the lease
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> rebind-time <i>number</i>
Tree	rebind-time
Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Default	2880
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-time *number*

Synopsis	Renew time for the lease
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> renew-time <i>number</i>
Tree	renew-time
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or</p>

equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

Range	0 to 604800
Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis Time for the lease to remain valid

Context **configure** *service vprn string dhcp-server dhcpv6 string pool string prefix string valid-lifetime number*

Tree *valid-lifetime*

Description This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.

Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).

Range	300 to 315446399
Default	86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length-threshold [*prefix-length*] *number*

Synopsis Enter the **prefix-length-threshold** list instance

Context **configure** *service vprn string dhcp-server dhcpv6 string pool string prefix-length-threshold number*

Tree *prefix-length-threshold*

Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[prefix-length] *number*

Synopsis	Delegated prefix length for pool thresholds
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i>
Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i> event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free-percent *number*

Synopsis	Percentage of free prefixes for this prefix length
Context	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i> minimum-free-percent <i>number</i>
Tree	minimum-free-percent
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-selection

Synopsis	Enter the pool-selection context
Context	configure service vprn string dhcp-server dhcpv6 string pool-selection
Tree	pool-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-link-address

Synopsis	Enable the use-link-address context
Context	configure service vprn string dhcp-server dhcpv6 string pool-selection use-link-address
Tree	use-link-address
Description	This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scope keyword

Synopsis	Scope of the IP address selection
Context	configure service vprn string dhcp-server dhcpv6 string pool-selection use-link-address scope keyword
Tree	scope
Default	subnet
Options	subnet, pool
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure service vprn string dhcp-server dhcpv6 string pool-selection use-pool-from-client
Tree	use-pool-from-client

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis Delimiter to combine primary and secondary pool names
Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [pool-selection use-pool-from-client](#) **delimiter** *string*
Tree [delimiter](#)
Description This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length 1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis Enter the **server-id** context
Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* **server-id**
Tree [server-id](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-enterprise

Synopsis Enter the **duid-enterprise** context
Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [server-id](#) **duid-enterprise**
Tree [duid-enterprise](#)
Notes The following elements are part of a choice: **duid-enterprise** or **duid-link-local**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis DUID enterprise server ID specified as an ASCII string

Context	configure service vprn string dhcp-server dhcpv6 string server-id duid-enterprise ascii-string string
Tree	ascii-string
String Length	1 to 58
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string string

Synopsis	DUID enterprise server ID specified as a hex string
Context	configure service vprn string dhcp-server dhcpv6 string server-id duid-enterprise hex-string string
Tree	hex-string
String Length	1 to 118
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-link-local

Synopsis	Derive DUID server ID from a system link-layer address
Context	configure service vprn string dhcp-server dhcpv6 string server-id duid-link-local
Tree	duid-link-local
Notes	The following elements are part of a choice: duid-enterprise or duid-link-local .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-identification keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	configure service vprn string dhcp-server dhcpv6 string user-identification keyword

Tree	user-identification
Options	mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enable the dns context
Context	configure service vprn string dns
Tree	dns
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DNS
Context	configure service vprn string dns admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

default-domain *string*

Synopsis	Domain name added in DNS retries
Context	configure service vprn string dns default-domain string
Tree	default-domain
Description	This command configures the DNS domain name to be added in DNS retries when a DNS query is not replied or an empty DNS reply is received. The name can contain only alphabetical characters (A-Z), numeric characters (0-9), the minus sign (-), and the period (.).
String Length	1 to 255
Introduced	20.2.R1
Platforms	All

ipv4-source-address (*keyword | ipv4-unicast-address*)

Synopsis	Source address to contact an IPv4 DNS server
Context	configure service vprn string dns ipv4-source-address (<i>keyword ipv4-unicast-address</i>)
Tree	ipv4-source-address
Default	use-interface-ip
Options	use-interface-ip
Introduced	16.0.R1
Platforms	All

ipv6-source-address (*keyword | ipv6-unicast-address*)

Synopsis	Source address to contact an IPv6 DNS server
Context	configure service vprn string dns ipv6-source-address (<i>keyword ipv6-unicast-address</i>)
Tree	ipv6-source-address
Default	use-interface-ip
Options	use-interface-ip
Introduced	16.0.R1
Platforms	All

server (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	DNS server used for DNS name resolution
Context	configure service vprn string dns server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	server
Max. Instances	3
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ecmp number

Synopsis	Maximum equal-cost routes for routing table instance
Context	configure service vprn string ecmp number

Tree	ecmp
Description	<p>This command configures ECMP and defines the number of routes for path sharing. For example, the value 2 means that two equal-cost routes are used for cost sharing.</p> <p>ECMP can be used only for routes learned with the same preference and the same protocol.</p> <p>When more ECMP routes are available at the best preference than the number specified with this command, the lowest next-hop IP-address algorithm is used to select the routes.</p> <p>If this command is configured to 1, ECMP path sharing is disabled.</p>
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

ecmp-unequal-cost *boolean*

Synopsis	Enable ECMP unequal cost capability
Context	configure service vprn <i>string</i> ecmp-unequal-cost <i>boolean</i>
Tree	ecmp-unequal-cost
Default	false
Introduced	19.7.R1
Platforms	All

entropy-label *boolean*

Synopsis	Use entropy label
Context	configure service vprn <i>string</i> entropy-label <i>boolean</i>
Tree	entropy-label
Description	<p>When configured to true, this command enables the use of entropy labels.</p> <p>The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the configure router mpls or configure router mpls lsp context.</p> <p>This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP.</p>

The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured.

When configured to **false**, this command disables the use of entropy labels.

Default	false
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service vprn string eth-cfm
Tree	eth-cfm
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

export-inactive-bgp *boolean*

Synopsis	Export preferred BGP route even if inactive
Context	configure service vprn string export-inactive-bgp boolean
Tree	export-inactive-bgp
Description	<p>When configured to true, the preferred BGP route learned by a VPRN is exported as the VPN-IP route even if it is inactive in the route table because a preferred BGP VPRN route from another PE is present. This overrides the default state in which the VPRN cannot export an inactive BGP route. For the BGP route to be exported, the VRF export policy must accept it. This command applies to both MPLS VPN and SRv6 VPN routes. In SRv6 VPN routes the advertised instruction is an End.DT, while in MPLS VPN routes the advertised label is a per-next-hop label. This “best-external” type of route advertisement is useful in active/standby multi-homing scenarios because it ensures that all PEs know about the backup path provided by the standby PE.</p> <p>When configured to false, the preferred BGP route is not exported if it is inactive.</p>
Default	false
Introduced	16.0.R1
Platforms	All

fib-priority *keyword*

Synopsis	FIB priority for VPRN BGP routes
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Context	configure service vprn string fib-priority keyword
Tree	fib-priority
Default	standard
Options	standard, high
Introduced	16.0.R1
Platforms	All

firewall

Synopsis	Enter the firewall context
Context	configure service vprn string firewall
Tree	firewall
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

domain [**name**] *string*

Synopsis	Enter the domain list instance
Context	configure service vprn string firewall domain string
Tree	domain
Max. Instances	1024
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Firewall domain name
Context	configure service vprn string firewall domain string
Tree	domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the firewall domain
Context	configure service vprn <i>string</i> firewall domain <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv6-server

Synopsis	Enter the dhcpv6-server context
Context	configure service vprn <i>string</i> firewall domain <i>string</i> dhcpv6-server
Tree	dhcpv6-server
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server name
Context	configure service vprn <i>string</i> firewall domain <i>string</i> dhcpv6-server name <i>string</i>
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router name
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Context	configure service vprn string firewall domain string dhcpv6-server router-instance string
Tree	router-instance
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group for this domain
Context	configure service vprn string firewall domain string nat-group reference
Tree	nat-group
Reference	configure isa nat-group number
Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [**ip-prefix**] *string*

Synopsis	Enter the prefix list instance
Context	configure service vprn string firewall domain string prefix string
Tree	prefix
Max. Instances	4096
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-prefix] *string*

Synopsis	IP prefix and prefix length for the domain firewall
Context	configure service vprn string firewall domain string prefix string
Tree	prefix

Description	This command configures a prefix for which firewall functionality applies within the domain. Prefixes cannot be shared or duplicated across multiple domains in the same routing context. A domain can contain multiple prefixes.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> firewall domain <i>string</i> prefix <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN GW group used for NAT
Context	configure service vprn <i>string</i> firewall domain <i>string</i> wlan-gw-group <i>reference</i>
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

flowspec

Synopsis	Enter the flowspec context
Context	configure service vprn <i>string</i> flowspec
Tree	flowspec
Introduced	16.0.R1

Platforms All

filter-cam-type *keyword*

Synopsis Filter policy type for FlowSpec embedding

Context **configure** **service** **vprn** *string* **flowspec** **filter-cam-type** *keyword*

Tree **filter-cam-type**

Description This command specifies the filter type that is required to embed FlowSpec entries. The filter type defines the match criteria that are available in the filter policy.

Default normal

Options normal, packet-length

Introduced 20.7.R1

Platforms All

ip-filter-max-size *number*

Synopsis Maximum number of flowspec rule entries in IPv4 filter

Context **configure** **service** **vprn** *string* **flowspec** **ip-filter-max-size** *number*

Tree **ip-filter-max-size**

Description This command configures the maximum number of IPv4 flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).

The sum of the maximum-size value and the highest offset in any IPv4 filter that embeds IPv4 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.

The maximum size can be adjusted up or down at any time. If the current number of IPv4 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.

Range 0 to 262143

Default 512

Introduced 16.0.R1

Platforms All

ipv6-filter-max-size *number*

Synopsis Maximum number of flowspec rule entries in IPv6 filter

Context	configure service vprn <i>string</i> flowspec ipv6-filter-max-size <i>number</i>
Tree	ipv6-filter-max-size
Description	<p>This command configures the maximum number of IPv6 flowspec routes or rules that can be embedded into an ingress IPv6 filter policy for a specified routing instance. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p> <p>The sum of the maximum-size value and the highest offset in any IPv6 filter that embeds IPv6 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of IPv6 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.</p>
Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

grt-leaking

Synopsis	Enter the grt-leaking context
Context	configure service vprn <i>string</i> grt-leaking
Tree	grt-leaking
Introduced	16.0.R1
Platforms	All

allow-local-management *boolean*

Synopsis	Enable management traffic
Context	configure service vprn <i>string</i> grt-leaking allow-local-management <i>boolean</i>
Tree	allow-local-management
Description	<p>When configured to true, this command enables the support of specific management protocols over VPRN interfaces that terminate on Base routing context IPv4 and IPv6 interface addresses, including Base loopback and system addresses.</p> <p>This command does not control the support for management protocols terminating on VPRN interfaces directly.</p>
Default	false
Introduced	16.0.R1

Platforms All

export-grt

Synopsis Enter the **export-grt** context
Context **configure service vprn string grt-leaking export-grt**
Tree **export-grt**
Introduced 16.0.R1
Platforms All

policy-name (*policy-expr-string* | *string*)

Synopsis Route policy name or policy logical expression
Context **configure service vprn string grt-leaking export-grt policy-name** (*policy-expr-string* | *string*)
Tree **policy-name**
String Length 1 to 255
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

export-limit *number*

Synopsis Maximum number of routes exported from VRF to GRT
Context **configure service vprn string grt-leaking export-limit number**
Tree **export-limit**
Range 0 to 1000
Default 5
Introduced 16.0.R1
Platforms All

export-v6-limit *number*

Synopsis Maximum number of IPv6 routes exported from VPRN to GRT

Context	configure service vprn <i>string</i> grt-leaking export-v6-limit <i>number</i>
Tree	export-v6-limit
Range	0 to 1000
Default	5
Introduced	16.0.R1
Platforms	All

grt-lookup *boolean*

Synopsis	Enable global route table lookup
Context	configure service vprn <i>string</i> grt-leaking grt-lookup <i>boolean</i>
Tree	grt-lookup
Default	false
Introduced	16.0.R1
Platforms	All

import-grt

Synopsis	Enter the import-grt context
Context	configure service vprn <i>string</i> grt-leaking import-grt
Tree	import-grt
Introduced	16.0.R4
Platforms	All

policy-name (*policy-expr-string* | *string*)

Synopsis	Route policy name or policy logical expression
Context	configure service vprn <i>string</i> grt-leaking import-grt policy-name (<i>policy-expr-string</i> <i>string</i>)
Tree	policy-name
String Length	1 to 255
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4

Platforms All

gsmp

Synopsis Enter the **gsmp** context
Context **configure service vprn string gsmp**
Tree **gsmp**
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of GSMP
Context **configure service vprn string gsmp admin-state keyword**
Tree **admin-state**
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

group [*name*] *string*

Synopsis Enter the **group** list instance
Context **configure service vprn string gsmp group string**
Tree **group**
Max. Instances 1024
Introduced 16.0.R1
Platforms All

[*name*] *string*

Synopsis GSMP group name
Context **configure service vprn string gsmp group string**
Tree **group**
String Length 1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the GSMP group
Context	configure service vprn <i>string</i> gsmp group <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

ancp

Synopsis	Enter the ancp context
Context	configure service vprn <i>string</i> gsmp group <i>string</i> ancp
Tree	ancp
Introduced	16.0.R1
Platforms	All

dynamic-topology-discovery *boolean*

Synopsis	Enable the ANCP dynamic topology discovery capability
Context	configure service vprn <i>string</i> gsmp group <i>string</i> ancp dynamic-topology-discovery <i>boolean</i>
Tree	dynamic-topology-discovery
Default	true
Introduced	16.0.R1
Platforms	All

oam *boolean*

Synopsis	Enable GSMP ANCP OAM capability at startup of GSMP connection
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Context	configure service vprn <i>string</i> gsmp group <i>string</i> ancp oam <i>boolean</i>
Tree	oam
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> gsmp group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

hold-multiplier *number*

Synopsis	Hold-multiplier for the GSMP connections in this group
Context	configure service vprn <i>string</i> gsmp group <i>string</i> hold-multiplier <i>number</i>
Tree	hold-multiplier
Range	1 to 100
Default	3
Introduced	16.0.R1
Platforms	All

idle-filter *boolean*

Synopsis	Filter ANCP messages from IDLE DSL lines
Context	configure service vprn <i>string</i> gsmp group <i>string</i> idle-filter <i>boolean</i>
Tree	idle-filter
Default	false
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Keepalive value for the GSMP connections in this group
Context	configure service vprn <i>string</i> gsmp group <i>string</i> keepalive <i>number</i>
Tree	keepalive
Range	1 to 25
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

neighbor [*remote-address*] *string*

Synopsis	Enter the neighbor list instance
Context	configure service vprn <i>string</i> gsmp group <i>string</i> neighbor <i>string</i>
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[remote-address] *string*

Synopsis	GSMP neighbor remote IP address
Context	configure service vprn <i>string</i> gsmp group <i>string</i> neighbor <i>string</i>
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the GSMP neighbor
Context	configure service vprn <i>string</i> gsmp group <i>string</i> neighbor <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description
Context **configure** [service vprn](#) *string* [gsmp group](#) *string* [neighbor](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

local-address *string*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Restrict connections to this local address only within the service running ANCP
Context **configure** [service vprn](#) *string* [gsmp group](#) *string* [neighbor](#) *string* [local-address](#) *string*
Tree [local-address](#)
Introduced 16.0.R1
Platforms All

priority-marking



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **priority-marking** context
Context **configure** [service vprn](#) *string* [gsmp group](#) *string* [neighbor](#) *string* [priority-marking](#)
Tree [priority-marking](#)
Introduced 16.0.R1
Platforms All

dscp *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DSCP that is used while remarking the in profile packets
Context	configure service vprn <i>string</i> gsmp group <i>string</i> neighbor <i>string</i> priority-marking dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

prec *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precedence priority marking
Context	configure service vprn <i>string</i> gsmp group <i>string</i> neighbor <i>string</i> priority-marking prec <i>number</i>
Tree	prec
Range	0 to 7
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

persistence *boolean*

Synopsis	Store DSL line information when the GSMP connection terminates
Context	configure service vprn <i>string</i> gsmp group <i>string</i> persistence <i>boolean</i>
Tree	persistence

Default	false
Introduced	16.0.R1
Platforms	All

gtp

Synopsis	Enter the gtp context
Context	configure service vprn string gtp
Tree	gtp
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

s11

Synopsis	Enter the s11 context
Context	configure service vprn string gtp s11
Tree	s11
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface [[interface-name](#)] *reference*

Synopsis	Enter the interface list instance
Context	configure service vprn string gtp s11 interface reference
Tree	interface
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[interface-name](#)] *reference*

Synopsis	Interface name
Context	configure service vprn string gtp s11 interface reference
Tree	interface
Reference	configure service vprn string interface string
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn-policy *reference*

Synopsis Access Point Name (APN) policy for the S11 interface
Context **configure** [service vprn](#) *string* [gtp s11 interface reference](#) [apn-policy reference](#)
Tree [apn-policy](#)
Reference **configure** [subscriber-mgmt gtp apn-policy](#) *string*
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis Enter the **peer-profile-map** context
Context **configure** [service vprn](#) *string* [gtp s11 peer-profile-map](#)
Tree [peer-profile-map](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [[peer-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **prefix** list instance
Context **configure** [service vprn](#) *string* [gtp s11 peer-profile-map prefix](#) (*ipv4-prefix* | *ipv6-prefix*)
Tree [prefix](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[peer-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix and prefix length of the subnet
Context **configure** [service vprn](#) *string* [gtp s11 peer-profile-map prefix](#) (*ipv4-prefix* | *ipv6-prefix*)
Tree [prefix](#)
Notes This element is part of a list key.
Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis Peer profile used for peers in this prefix

Context **configure service vprn** *string* **gtp s11 peer-profile-map prefix** (*ipv4-prefix* | *ipv6-prefix*)
peer-profile reference

Tree **peer-profile**

Reference **configure subscriber-mgmt gtp peer-profile** *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upf-data-endpoint

Synopsis Enable the **upf-data-endpoint** context

Context **configure service vprn** *string* **gtp upf-data-endpoint**

Tree **upf-data-endpoint**

Description Commands in this context configure a GTP-U service endpoint used by BNG CUPS FWA sessions.

Introduced 21.2.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*

Synopsis FPE used to encapsulate and decapsulate GTP-U traffic

Context **configure service vprn** *string* **gtp upf-data-endpoint fpe reference**

Tree **fpe**

Reference **configure fwd-path-ext fpe** *number*

Notes This element is mandatory.

Introduced 21.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *reference*

Synopsis	Interface on which the GTP-U packets terminate
Context	configure service vprn <i>string</i> gtp upf-data-endpoint <i>interface reference</i>
Tree	interface
Reference	configure service vprn <i>string</i> interface <i>string</i>
Notes	This element is mandatory.
Introduced	21.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uplink

Synopsis	Enable the uplink context
Context	configure service vprn <i>string</i> gtp uplink
Tree	uplink
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn *string*

Synopsis	Network Identifier part of APN
Context	configure service vprn <i>string</i> gtp uplink apn <i>string</i>
Tree	apn
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pdn-type *keyword*

Synopsis	Default 3GPP PDN in GTP
Context	configure service vprn <i>string</i> gtp uplink pdn-type <i>keyword</i>
Tree	pdn-type
Default	ipv4
Options	ipv4, ipv6, ipv4v6
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis Enter the **peer-profile-map** context
Context **configure service vprn string gtp uplink peer-profile-map**
Tree [peer-profile-map](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [[peer-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis Enter the **prefix** list instance
Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#))**
Tree [prefix](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[peer-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis IP prefix and prefix length of the subnet
Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#))**
Tree [prefix](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis Peer profile name
Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#))**
[peer-profile reference](#)
Tree [peer-profile](#)
Reference **configure subscriber-mgmt gtp peer-profile string**
Notes This element is mandatory.

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hash-label *boolean*

Synopsis Include hash label
Context **configure** [service vprn](#) *string* [hash-label](#) *boolean*
Tree [hash-label](#)
Default false
Introduced 16.0.R1
Platforms All

igmp

Synopsis Enable the **igmp** context
Context **configure** [service vprn](#) *string* [igmp](#)
Tree [igmp](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of IGMP
Context **configure** [service vprn](#) *string* [igmp](#) [admin-state](#) *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

forwarding-group-interface [forwarding-service](#) *string* [group-interface-name](#) *reference*

Synopsis Enter the **forwarding-group-interface** list instance
Context **configure** [service vprn](#) *string* [igmp](#) [forwarding-group-interface](#) [forwarding-service](#) *string* [group-interface-name](#) *reference*
Tree [forwarding-group-interface](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forwarding-service *string*

Synopsis Forwarding service for a subscriber interface in a retailer context
Context **configure** [service vprn](#) *string* [igmp forwarding-group-interface](#) [forwarding-service](#) *string* [group-interface-name](#) *reference*
Tree [forwarding-group-interface](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis Group interface name
Context **configure** [service vprn](#) *string* [igmp forwarding-group-interface](#) [forwarding-service](#) *string* [group-interface-name](#) *reference*
Tree [forwarding-group-interface](#)
Reference **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of IGMP
Context **configure** [service vprn](#) *string* [igmp forwarding-group-interface](#) [forwarding-service](#) *string* [group-interface-name](#) *reference* [admin-state](#) *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference import-policy reference
Tree	import-policy
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	configure policy-options policy-statement string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference maximum-number-group-sources number
Tree	maximum-number-group-sources
Description	<p>This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.</p>
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference maximum-number-groups number
Tree	maximum-number-groups
Range	1 to 16000

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis Maximum number of sources that are allowed per group
Context **configure** [service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference maximum-number-sources number](#)
Tree [maximum-number-sources](#)
Range 1 to 1000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis Enter the **mcac** context
Context **configure** [service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference mcac](#)
Tree [mcac](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis Enter the **bandwidth** context
Context **configure** [service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference mcac bandwidth](#)
Tree [bandwidth](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels
Context **configure** [service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference mcac bandwidth mandatory \(number | keyword\)](#)
Tree [mandatory](#)

Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name reference mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name reference mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name reference mcac policy <i>reference</i>
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.

Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	configure mcac policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for IGMP queries
Context	configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-source-address <i>string</i>
Tree	query-source-address
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> sub-hosts-only <i>boolean</i>
Tree	sub-hosts-only

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP protocol version
Context	configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> version <i>keyword</i>
Tree	version
Default	3
Options	1, 2, 3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-if-query-source-address *string*

Synopsis	Default query-source address for all group interfaces
Context	configure service vprn <i>string</i> igmp group-if-query-source-address <i>string</i>
Tree	group-if-query-source-address
Introduced	16.0.R1
Platforms	All

group-interface [[group-interface-name](#)] *reference*

Synopsis	Enter the group-interface list instance
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Context	configure service vprn string igmp group-interface reference
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[group-interface-name] reference

Synopsis	Group interface name
Context	configure service vprn string igmp group-interface reference
Tree	group-interface
Reference	configure service vprn string subscriber-interface string group-interface string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of IGMP
Context	configure service vprn string igmp group-interface reference admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy reference

Synopsis	Import policy that filters IGMP packets
Context	configure service vprn string igmp group-interface reference import-policy reference
Tree	import-policy
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>

Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure service vprn <i>string</i> igmp group-interface <i>reference</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure service vprn <i>string</i> igmp group-interface <i>reference</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure service vprn <i>string</i> igmp group-interface <i>reference</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis Enter the **mcac** context

Context **configure service vprn string igmp group-interface reference mcac**

Tree **mcac**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis Enter the **bandwidth** context

Context **configure service vprn string igmp group-interface reference mcac bandwidth**

Tree **bandwidth**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number | keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure service vprn string igmp group-interface reference mcac bandwidth mandatory (*number | keyword*)**

Tree **mandatory**

Range 0 to 2147483647

Default unlimited

Options unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number | keyword*)

Synopsis Maximum allowed bandwidth

Context **configure service vprn string igmp group-interface reference mcac bandwidth total (*number | keyword*)**

Tree **total**

Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure service vprn <i>string</i> igmp group-interface <i>reference</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure service vprn <i>string</i> igmp group-interface <i>reference</i> mcac policy <i>reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis Time between two consecutive host-query messages
Context **configure** [service](#) [vprn](#) *string* [igmp](#) [group-interface](#) *reference* [query-interval](#) *number*
Tree [query-interval](#)
Range 2 to 1024
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis Time between group-specific query messages
Context **configure** [service](#) [vprn](#) *string* [igmp](#) [group-interface](#) *reference* [query-last-member-interval](#) *number*
Tree [query-last-member-interval](#)
Range 1 to 1023
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis Time to wait for a response to the host-query messages
Context **configure** [service](#) [vprn](#) *string* [igmp](#) [group-interface](#) *reference* [query-response-interval](#) *number*
Tree [query-response-interval](#)
Range 1 to 1023
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis Source address for IGMP queries
Context **configure** [service](#) [vprn](#) *string* [igmp](#) [group-interface](#) *reference* [query-source-address](#) *string*

Tree	query-source-address
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure service vpn <i>string</i> igmp group-interface <i>reference</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	configure service vpn <i>string</i> igmp group-interface <i>reference</i> sub-hosts-only <i>boolean</i>
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	configure service vpn <i>string</i> igmp group-interface <i>reference</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP protocol version
Context	configure service vprn <i>string</i> igmp group-interface <i>reference</i> version <i>keyword</i>
Tree	version
Default	3
Options	1, 2, 3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [[ip-interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>string</i> igmp interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[ip-interface-name] *string*

Synopsis	IP interface name
Context	configure service vprn <i>string</i> igmp interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure service vprn <i>string</i> igmp interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

import-policy *reference*

Synopsis Import policy that filters IGMP packets

Context **configure** [service vpn](#) *string* [igmp interface](#) *string* **import-policy** *reference*

Tree [import-policy](#)

Description This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.

When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).

Reference **configure** [policy-options policy-statement](#) *string*

Introduced 16.0.R1

Platforms All

maximum-number-group-sources *number*

Synopsis Maximum number of group sources for this interface

Context **configure** [service vpn](#) *string* [igmp interface](#) *string* **maximum-number-group-sources** *number*

Tree [maximum-number-group-sources](#)

Description This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range 1 to 32000

Introduced 16.0.R1

Platforms All

maximum-number-groups *number*

Synopsis Maximum number of groups for this interface

Context **configure** [service vpn](#) *string* [igmp interface](#) *string* **maximum-number-groups** *number*

Tree [maximum-number-groups](#)

Range 1 to 16000

Introduced 16.0.R1
Platforms All

maximum-number-sources *number*

Synopsis Maximum number of sources that are allowed per group
Context **configure** [service vprn string igmp interface string maximum-number-sources number](#)
Tree [maximum-number-sources](#)
Range 1 to 1000
Introduced 16.0.R1
Platforms All

mcac

Synopsis Enter the **mcac** context
Context **configure** [service vprn string igmp interface string mcac](#)
Tree [mcac](#)
Introduced 16.0.R1
Platforms All

bandwidth

Synopsis Enter the **bandwidth** context
Context **configure** [service vprn string igmp interface string mcac bandwidth](#)
Tree [bandwidth](#)
Introduced 16.0.R1
Platforms All

mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels
Context **configure** [service vprn string igmp interface string mcac bandwidth mandatory \(number | keyword\)](#)
Tree [mandatory](#)
Range 0 to 2147483647
Default unlimited

Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure service vprn <i>string</i> igmp interface <i>string</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure service vprn <i>string</i> igmp interface <i>string</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the mc-constraints context
Context	configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

level [*level-id*] *number*

Synopsis	Enter the level list instance
Context	configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Introduced	16.0.R1
Platforms	All

[level-id] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints level <i>number</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [*number-lag-port-down*] *number*

Synopsis	Enter the number-down list instance
Context	configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down

Introduced 16.0.R1
Platforms All

[number-lag-port-down] number

Synopsis Number of ports that are down in this LAG link
Context **configure** [service vprn string igmp interface string mcac mc-constraints number-down number](#)
Tree [number-down](#)
Range 1 to 64
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

level number

Synopsis Level ID to associate with number of down LAG ports
Context **configure** [service vprn string igmp interface string mcac mc-constraints number-down number level number](#)
Tree [level](#)
Description This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range 1 to 8
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

use-lag-port-weight boolean

Synopsis Use LAG port weight in calculating MCAC constraints
Context **configure** [service vprn string igmp interface string mcac mc-constraints use-lag-port-weight boolean](#)
Tree [use-lag-port-weight](#)
Description When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.

Default	false
Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	Multicast CAC policy name
Context	configure service vprn string igmp interface string mcac policy reference
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none">• subscriber level and redirected interface when redirection is configured• subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy string
Introduced	16.0.R1
Platforms	All

query-interval number

Synopsis	Time between two consecutive host-query messages
Context	configure service vprn string igmp interface string query-interval number
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vprn <i>string</i> igmp interface <i>string</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vprn <i>string</i> igmp interface <i>string</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

redundant-mcast *boolean*

Synopsis	Use interface as a redundant-pair member for multicast
Context	configure service vprn <i>string</i> igmp interface <i>string</i> redundant-mcast <i>boolean</i>
Tree	redundant-mcast
Default	false
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure service vprn <i>string</i> igmp interface <i>string</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure service vprn string igmp interface string ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range **start string end string**

Synopsis	Enter the group-range list instance
Context	configure service vprn string igmp interface string ssm-translate group-range start string end string
Tree	group-range
Introduced	16.0.R1
Platforms	All

start string

Synopsis	Lower bound of the IP address group range
Context	configure service vprn string igmp interface string ssm-translate group-range start string end string
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end string

Synopsis	Upper bound of the IP address group range
Context	configure service vprn string igmp interface string ssm-translate group-range start string end string
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure service vprn <i>string</i> igmp interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i>
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure service vprn <i>string</i> igmp interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

static

Synopsis	Enter the static context
Context	configure service vprn <i>string</i> igmp interface <i>string</i> static
Tree	static
Introduced	16.0.R1
Platforms	All

group [[group-address](#)] *string*

Synopsis	Enter the group list instance
Context	configure service vprn <i>string</i> igmp interface <i>string</i> static group <i>string</i>
Tree	group
Introduced	16.0.R1
Platforms	All

[group-address] *string*

Synopsis	Group address of static IGMP multicast channel
Context	configure service vprn string igmp interface string static group string
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure service vprn string igmp interface string static group string source string
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure service vprn string igmp interface string static group string source string
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	configure service vprn string igmp interface string static group string starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .

Introduced 16.0.R2
Platforms All

group-range *start string end string step string*

Synopsis Enter the **group-range** list instance
Context **configure service vprn string igmp interface string static group-range start string end string step string**
Tree **group-range**
Introduced 16.0.R1
Platforms All

start string

Synopsis IP address for the start of the static group range
Context **configure service vprn string igmp interface string static group-range start string end string step string**
Tree **group-range**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

end string

Synopsis IP address for the end of the static group range
Context **configure service vprn string igmp interface string static group-range start string end string step string**
Tree **group-range**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

step string

Synopsis Step interval in the group-range address

Context	configure service vprn string igmp interface string static group-range start string end string step string
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [**source-address**] *string*

Synopsis	Add a list entry for source
Context	configure service vprn string igmp interface string static group-range start string end string step string source string
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure service vprn string igmp interface string static group-range start string end string step string source string
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	configure service vprn string igmp interface string static group-range start string end string step string starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	configure service vprn <i>string</i> igmp interface <i>string</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	All

version *keyword*

Synopsis	IGMP protocol version
Context	configure service vprn <i>string</i> igmp interface <i>string</i> version <i>keyword</i>
Tree	version
Default	3
Options	1, 2, 3
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vprn <i>string</i> igmp query-interval <i>number</i>
Tree	query-interval
Description	This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1.
Range	2 to 1024
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
----------	--

Context	configure service vprn string igmp query-last-member-interval number
Tree	query-last-member-interval
Description	This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group.
Range	1 to 1023
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

query-response-interval number

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vprn string igmp query-response-interval number
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

robust-count number

Synopsis	Number of retries after expected message loss
Context	configure service vprn string igmp robust-count number
Tree	robust-count
Description	This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, the robust-count can be increased.
Range	2 to 10
Default	2
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure service vprn string igmp ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range **start string end string**

Synopsis	Enter the group-range list instance
Context	configure service vprn string igmp ssm-translate group-range start string end string
Tree	group-range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the IP address group range
Context	configure service vprn string igmp ssm-translate group-range start string end string
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the IP address group range
Context	configure service vprn string igmp ssm-translate group-range start string end string
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure service vprn <i>string</i> igmp ssm-translate group-range start string end string source string
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure service vprn <i>string</i> igmp ssm-translate group-range start string end string source string
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

igmp-host-tracking

Synopsis	Enter the igmp-host-tracking context
Context	configure service vprn <i>string</i> igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP host tracking
Context	configure service vprn <i>string</i> igmp-host-tracking admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis Time that the system continues to track inactive hosts
Context **configure service vprn** *string igmp-host-tracking expiry-time number*
Tree [expiry-time](#)
Range 1 to 65535
Default 260
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-nh-metric *boolean*

Synopsis Ignore next hop metric
Context **configure service vprn** *string ignore-nh-metric boolean*
Tree [ignore-nh-metric](#)
Default false
Introduced 16.0.R1
Platforms All

interface [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance
Context **configure service vprn** *string interface string*
Tree [interface](#)
Introduced 16.0.R1
Platforms All

[interface-name] *string*

Synopsis Interface name
Context **configure service vprn** *string interface string*
Tree [interface](#)

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service vprn <i>string</i> interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

cflowd-parameters

Synopsis	Enter the cflowd-parameters context
Context	configure service vprn <i>string</i> interface <i>string</i> cflowd-parameters
Tree	cflowd-parameters
Introduced	16.0.R1
Platforms	All

sampling [[sampling-type](#)] *keyword*

Synopsis	Enter the sampling list instance
Context	configure service vprn <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i>
Tree	sampling
Introduced	16.0.R1
Platforms	All

[[sampling-type](#)] *keyword*

Synopsis	Traffic sampling type
Context	configure service vprn <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i>

Tree	sampling
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	configure service vprn <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> direction <i>keyword</i>
Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Default	ingress-only
Options	ingress-only, egress-only, both
Introduced	16.0.R1
Platforms	All

sample-profile (*keyword* | *number*)

Synopsis	Sample profile ID
Context	configure service vprn <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> sample-profile (<i>keyword</i> <i>number</i>)
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	All

type *keyword*

Synopsis	Type of cflowd analysis
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Context	configure service vprn string interface string cflowd-parameters sampling keyword type keyword
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

cpu-protection reference

Synopsis	CPU protection policy
Context	configure service vprn string interface string cpu-protection reference
Tree	cpu-protection
Reference	configure system security cpu-protection policy number
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description string

Synopsis	Text description
Context	configure service vprn string interface string description string
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dynamic-tunnel-redundant-nexthop string

Synopsis	Redundant next-hop address for the dynamic IPsec tunnel
Context	configure service vprn string interface string dynamic-tunnel-redundant-nexthop string
Tree	dynamic-tunnel-redundant-nexthop
Description	This command specifies the redundant next-hop address on a public or private IPsec interface (with public or private tunnel SAP) for a dynamic IPsec tunnel. The next-hop address is used by a standby node to shunt traffic to a master if it receives the address. The next-hop address is resolved in the routing table of a corresponding service.

Notes	The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop).
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis	Enter the hold-time context
Context	configure <i>service vprn string interface string hold-time</i>
Tree	<i>hold-time</i>
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>service vprn string interface string hold-time ipv4</i>
Tree	<i>ipv4</i>
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the down context
Context	configure <i>service vprn string interface string hold-time ipv4 down</i>
Tree	<i>down</i>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
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Context	configure service vprn <i>string</i> interface <i>string</i> hold-time ipv4 down init-only <i>boolean</i>
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service vprn <i>string</i> interface <i>string</i> hold-time ipv4 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the up context
Context	configure service vprn <i>string</i> interface <i>string</i> hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service vprn <i>string</i> interface <i>string</i> hold-time ipv4 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds

Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the down context
Context	configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6 down init-only <i>boolean</i>
Tree	init-only
Description	This command applies the delay only when when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the up context
Context	configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

if-attribute

Synopsis	Enter the if-attribute context
Context	configure service vprn <i>string</i> interface <i>string</i> if-attribute
Tree	if-attribute

Introduced 16.0.R1
Platforms All

admin-group *reference*

Synopsis Administrative group name for the interface
Context **configure** [service vprn](#) *string* [interface](#) *string* [if-attribute](#) [admin-group](#) *reference*
Tree [admin-group](#)
Reference **configure** [routing-options](#) [if-attribute](#) [admin-group](#) *string*
Max. Instances 32
Introduced 16.0.R1
Platforms All

srlg-group [[name](#)] *reference*

Synopsis Add a list entry for **srlg-group**
Context **configure** [service vprn](#) *string* [interface](#) *string* [if-attribute](#) [srlg-group](#) *reference*
Tree [srlg-group](#)
Introduced 16.0.R1
Platforms All

[[name](#)] *reference*

Synopsis SRLG name
Context **configure** [service vprn](#) *string* [interface](#) *string* [if-attribute](#) [srlg-group](#) *reference*
Tree [srlg-group](#)
Reference **configure** [routing-options](#) [if-attribute](#) [srlg-group](#) *string*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

ingress

Synopsis Enter the **ingress** context

Context	configure service vprn <i>string</i> interface <i>string</i> ingress
Tree	ingress
Introduced	19.7.R1
Platforms	All

destination-class-lookup *boolean*

Synopsis	Enable BGP destination class lookup
Context	configure service vprn <i>string</i> interface <i>string</i> ingress destination-class-lookup <i>boolean</i>
Tree	destination-class-lookup
Description	When configured to true , the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the destination-class match criterion for an IP filter policy to filter egress traffic based on BGP destination classes. When configured to false , destination class lookup is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

policy-accounting *reference*

Synopsis	Ingress policy accounting template name
Context	configure service vprn <i>string</i> interface <i>string</i> ingress policy-accounting <i>reference</i>
Tree	policy-accounting
Reference	configure routing-options policy-accounting policy-acct-template <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-stats *boolean*

Synopsis	Collect ingress statistics
Context	configure service vprn <i>string</i> interface <i>string</i> ingress-stats <i>boolean</i>
Tree	ingress-stats
Default	false
Introduced	16.0.R1
Platforms	All

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	configure service vpn <i>string</i> interface <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	All

ipsec

Synopsis	Enable the ipsec context
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec
Tree	ipsec
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

ip-exception *reference*

Synopsis	IP exception filter
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ip-exception <i>reference</i>
Tree	ip-exception
Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.

Reference	configure filter ip-exception <i>string</i>
Introduced	22.7.R1
Platforms	VSR

ipsec-tunnel [[name](#)] *string*

Synopsis	Enter the ipsec-tunnel list instance
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i>
Tree	ipsec-tunnel
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	22.7.R1
Platforms	VSR

[name] *string*

Synopsis	IPsec tunnel name
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i>
Tree	ipsec-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

bfd



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the bfd context
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> bfd
Tree	bfd
Introduced	22.7.R1
Platforms	VSR

bfd-designate *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> bfd bfd-designate <i>boolean</i>
Tree	bfd-designate
Default	false
Introduced	22.7.R1
Platforms	VSR

bfd-liveness



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the bfd-liveness context
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> bfd bfd-liveness
Tree	bfd-liveness
Description	Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.

BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.

Introduced 22.7.R1
Platforms VSR

dest-ip *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Destination address used for the BFD session
Context **configure** *service vprn string interface string ipsec ipsec-tunnel string bfd bfd-liveness dest-ip string*
Tree *dest-ip*
Notes This element is mandatory.
Introduced 22.7.R1
Platforms VSR

interface *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the interface used by the BFD session
Context **configure** *service vprn string interface string ipsec ipsec-tunnel string bfd bfd-liveness interface string*
Tree *interface*
String Length 1 to 32
Notes This element is mandatory.
Introduced 22.7.R1
Platforms VSR

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure <i>service vprn string interface string ipsec ipsec-tunnel string bfd bfd-liveness service-name string</i>
Tree	<i>service-name</i>
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

clear-df-bit *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	configure <i>service vprn string interface string ipsec ipsec-tunnel string clear-df-bit boolean</i>
Tree	<i>clear-df-bit</i>
Description	When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	22.7.R1
Platforms	VSR

copy-traffic-class-upon-decapsulation *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
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Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> copy-traffic-class-upon-decapsulation <i>boolean</i>
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	22.7.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp-generation context
Context	configure service vprn string interface string ipsec ipsec-tunnel string icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	22.7.R1
Platforms	VSR

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the frag-required context
Context	configure service vprn string interface string ipsec ipsec-tunnel string icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	configure service vprn string interface string ipsec ipsec-tunnel string icmp-generation frag-required admin-state keyword

Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Default	enable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Default	10
Units	seconds
Introduced	22.7.R1
Platforms	VSR

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count

Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure <i>service vprn string interface string ipsec ipsec-tunnel string icmp6-generation</i>
Tree	<i>icmp6-generation</i>
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	22.7.R1
Platforms	VSR

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure <i>service vprn string interface string ipsec ipsec-tunnel string icmp6-generation packet-too-big</i>
Tree	<i>packet-too-big</i>
Description	<p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the configure router interface ipsec ipsec-tunnel ip-mtu command for the interface.</p>
Introduced	22.7.R1

Platforms VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big interval <i>number</i>
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Introduced	22.7.R1
Platforms	VSR

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

key-exchange



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key-exchange context
Context	configure service vprn string interface string ipsec ipsec-tunnel string key-exchange
Tree	key-exchange
Introduced	22.7.R1
Platforms	VSR

dynamic



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the dynamic context
Context	configure service vprn string interface string ipsec ipsec-tunnel string key-exchange dynamic
Tree	dynamic
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	22.7.R1
Platforms	VSR

auto-establish *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	configure service vprn string interface string ipsec ipsec-tunnel string key-exchange dynamic auto-establish <i>boolean</i>
Tree	auto-establish
Default	false
Introduced	22.7.R1
Platforms	VSR

cert



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the cert context
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	22.7.R1
Platforms	VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>string</i>
Introduced	22.7.R1
Platforms	VSR

status-verify



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the status-verify context
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	22.7.R1
Platforms	VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Default	revoked
Options	revoked, good
Introduced	22.7.R1
Platforms	VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify primary <i>keyword</i>
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Default	crI
Options	crI, ocsp
Introduced	22.7.R1
Platforms	VSR

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify secondary <i>keyword</i>
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Default	none
Options	none, crI, ocsp

Introduced 22.7.R1
Platforms VSR

trust-anchor-profile *reference*

Synopsis Trust anchor profile name
Context **configure** [service vprn string interface string ipsec ipsec-tunnel string key-exchange dynamic cert trust-anchor-profile reference](#)
Tree [trust-anchor-profile](#)
Reference **configure** [ipsec trust-anchor-profile string](#)
Introduced 22.7.R1
Platforms VSR

id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context
Context **configure** [service vprn string interface string ipsec ipsec-tunnel string key-exchange dynamic id](#)
Tree [id](#)
Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

Introduced 22.7.R1
Platforms VSR

fqdn *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id fqdn <i>string</i>
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ipv4 *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id ipv4 <i>string</i>
Tree	ipv4
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ike-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ike-policy <i>reference</i>
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The ipsec-transport-mode-profile configuration only supports IKEv2.
Reference	configure ipsec ike-policy <i>number</i>
Introduced	22.7.R1
Platforms	VSR

ipsec-transform *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ipsec-transform <i>reference</i>
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>
Max. Instances	4
Introduced	22.7.R1
Platforms	VSR

pre-shared-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic pre-shared-key <i>string</i>
Tree	pre-shared-key
String Length	1 to 115
Introduced	22.7.R1
Platforms	VSR

manual



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the manual context
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual
Tree	manual
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	22.7.R1
Platforms	VSR

keys [[security-association](#)] *number direction keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the keys list instance
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number direction keyword</i>
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.
Introduced	22.7.R1
Platforms	VSR

[**security-association**] *number*

Synopsis	SA entry ID
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

direction *keyword*

Synopsis	Direction of the IPsec tunnel
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

authentication-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 130

Introduced 22.7.R1
Platforms VSR

encryption-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Key used for the encryption algorithm
Context **configure** [service vpn](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [key-exchange manual keys](#) *number* [direction](#) *keyword* [encryption-key](#) *string*
Tree [encryption-key](#)
String Length 1 to 66
Introduced 22.7.R1
Platforms VSR

ipsec-transform *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Transform entry used by manual SAs
Context **configure** [service vpn](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [key-exchange manual keys](#) *number* [direction](#) *keyword* [ipsec-transform](#) *reference*
Tree [ipsec-transform](#)
Reference **configure** [ipsec ipsec-transform](#) *number*
Notes This element is mandatory.
Introduced 22.7.R1
Platforms VSR

spi number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> spi <i>number</i>
Tree	spi
Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

local-gateway-address-override (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> local-gateway-address-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-gateway-address-override
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	22.7.R1
Platforms	VSR

max-history-key-records



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the max-history-key-records context
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	22.7.R1
Platforms	VSR

esp number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> max-history-key-records esp <i>number</i>
Tree	esp
Range	1 to 48
Introduced	22.7.R1
Platforms	VSR

ike number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> max-history-key-records ike <i>number</i>
Tree	ike

Range	1 to 3
Introduced	22.7.R1
Platforms	VSR

pmtu-discovery-aging *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Default	900
Units	seconds
Introduced	22.7.R1
Platforms	VSR

private-sap *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private SAP ID
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> private-sap <i>number</i>
Tree	private-sap
Range	0 to 4094
Notes	This element is mandatory.

Introduced 22.7.R1
Platforms VSR

private-service *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Private service name
Context **configure** [service vprn string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [private-service string](#)
Tree [private-service](#)
Description This command configures the private service name.
If unconfigured, the private service is the service where the secured interface resides.
String Length 1 to 64
Introduced 22.7.R1
Platforms VSR

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis TCP maximum segment size (MSS) adjustment
Context **configure** [service vprn string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [private-tcp-mss-adjust number](#)
Tree [private-tcp-mss-adjust](#)
Description This command specifies the TCP MSS to adjust for the tunnel on the private side.
When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range 512 to 9000
Units bytes

Introduced 22.7.R1
Platforms VSR

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable propagation of the path MTU to IPv4 hosts
Context **configure** *service vprn string interface string ipsec ipsec-tunnel string propagate-pmtu-v4 boolean*
Tree [propagate-pmtu-v4](#)
Description When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default true
Introduced 22.7.R1
Platforms VSR

propagate-pmtu-v6 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable propagation of the path MTU to IPv6 hosts
Context **configure** *service vprn string interface string ipsec ipsec-tunnel string propagate-pmtu-v6 boolean*
Tree [propagate-pmtu-v6](#)
Description When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default true
Introduced 22.7.R1
Platforms VSR

public-tcp-mss-adjust (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	22.7.R1
Platforms	VSR

remote-gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> remote-gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	remote-gateway-address
Introduced	22.7.R1
Platforms	VSR

replay-window *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
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Context	configure service vpn <i>string interface string ipsec ipsec-tunnel string replay-window number</i>
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 64 128 256 512
Units	packets
Introduced	22.7.R1
Platforms	VSR

security-policy



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the security-policy context
Context	configure service vpn <i>string interface string ipsec ipsec-tunnel string security-policy</i>
Tree	security-policy
Description	Commands in this context specify a security policy used by the tunnel.
Introduced	22.7.R1
Platforms	VSR

id number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security policy ID for use by the tunnel
Context	configure service vpn <i>string interface string ipsec ipsec-tunnel string security-policy id number</i>
Tree	id
Max. Range	0 to 4294967295
Introduced	22.7.R1
Platforms	VSR

strict-match *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> security-policy strict-match <i>boolean</i>
Tree	strict-match
Description	<p>When configured to true, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p>
Default	false
Introduced	22.7.R1
Platforms	VSR

ipv6-exception *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	configure service vpn <i>string</i> interface <i>string</i> ipsec ipv6-exception <i>reference</i>
Tree	ipv6-exception
Description	<p>This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.</p>
Reference	configure filter ipv6-exception <i>string</i>
Introduced	22.7.R1
Platforms	VSR

public-sap *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Public SAP ID
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec public-sap <i>number</i>
Tree	public-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

tunnel-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID
Context	configure service vprn <i>string</i> interface <i>string</i> ipsec tunnel-group <i>reference</i>
Tree	tunnel-group
Reference	configure isa tunnel-group <i>number</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

addresses

Synopsis	Enter the addresses context
Context	configure service vprn string interface string ipv4 addresses
Tree	addresses
Introduced	16.0.R1
Platforms	All

address [ipv4-address] string

Synopsis	Enter the address list instance
Context	configure service vprn string interface string ipv4 addresses address string
Tree	address
Introduced	16.0.R1
Platforms	All

[ipv4-address] string

Synopsis	IPv4 address for the interface
Context	configure service vprn string interface string ipv4 addresses address string
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

prefix-length number

Synopsis	IPv4 address prefix length
Context	configure service vprn string interface string ipv4 addresses address string prefix-length number
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 allow-directed-broadcasts <i>boolean</i>
Tree	allow-directed-broadcasts
Default	false
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 bfd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1

Platforms All

multiplier *number*

Synopsis Number of consecutive BFD messages missed from the peer

Context **configure** *service vprn string interface string ipv4 bfd multiplier number*

Tree [multiplier](#)

Description This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.

Range 1 to 20

Default 3

Introduced 16.0.R1

Platforms All

receive *number*

Synopsis BFD receive interval over this interface

Context **configure** *service vprn string interface string ipv4 bfd receive number*

Tree [receive](#)

Description This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 16.0.R1

Platforms All

transmit-interval *number*

Synopsis BFD transmit interval over this interface

Context **configure** *service vprn string interface string ipv4 bfd transmit-interval number*

Tree [transmit-interval](#)

Description This command configures the transmit intervals.

On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Local termination point for the BFD session
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 bfd type <i>keyword</i>
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Default	auto
Options	cpm-np, auto, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dhcp

Synopsis	Enter the dhcp context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

gi-address *string*

Synopsis	GI address for the DHCP relay
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp gi-address <i>string</i>
Tree	gi-address
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	All

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp lease-populate

Tree	lease-populate
Introduced	16.0.R1
Platforms	All

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases allowed
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp lease-populate max-leases <i>number</i>
Tree	max-leases
Range	0 to 511999
Introduced	16.0.R1
Platforms	All

option-82

Synopsis	Enter the option-82 context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 action <i>keyword</i>
Tree	action
Default	keep
Options	replace, drop, keep
Introduced	16.0.R1
Platforms	All

circuit-id

Synopsis	Enter the circuit-id context
Context	configure service vprn string interface string ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	All

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	configure service vprn string interface string ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

ifindex

Synopsis	Use the interface index for the circuit ID
Context	configure service vprn string interface string ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the circuit ID
Context	configure service vprn string interface string ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1

Platforms All

sap-id

Synopsis Use the SAP ID

Context **configure** [service vprn string](#) [interface string](#) [ipv4 dhcp option-82 circuit-id sap-id](#)

Tree [sap-id](#)

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms All

vlan-ascii-tuple

Synopsis Include the VLAN ID and dot1p bits in the ASCII tuple

Context **configure** [service vprn string](#) [interface string](#) [ipv4 dhcp option-82 circuit-id vlan-ascii-tuple](#)

Tree [vlan-ascii-tuple](#)

Description When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.
When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms All

remote-id

Synopsis Enter the **remote-id** context

Context **configure** [service vprn string](#) [interface string](#) [ipv4 dhcp option-82 remote-id](#)

Tree [remote-id](#)

Description Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).

Introduced 16.0.R1

Platforms All

ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 remote-id ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	All

mac

Synopsis	Use the MAC address for the remote ID
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the remote ID
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	All

vendor-specific-option

Synopsis	Enter the vendor-specific-option context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option

Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	All

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i>
Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	All

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option pool-name <i>boolean</i>
Tree	pool-name
Default	false
Introduced	16.0.R1
Platforms	All

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option sap-id <i>boolean</i>
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	All

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	configure service vprn string interface string ipv4 dhcp option-82 vendor-specific-option service-id boolean
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	configure service vprn string interface string ipv4 dhcp option-82 vendor-specific-option string string
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	configure service vprn string interface string ipv4 dhcp option-82 vendor-specific-option system-id boolean
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	All

proxy-server

Synopsis	Enter the proxy-server context
Context	configure service vprn string interface string ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp proxy-server admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

emulated-server *string*

Synopsis	IP address used as the DHCP server address for the SAP
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp proxy-server emulated-server <i>string</i>
Tree	emulated-server
Description	This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service.
Introduced	16.0.R1
Platforms	All

lease-time

Synopsis	Enter the lease-time context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	All

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp proxy-server lease-time radius-override <i>boolean</i>
Tree	radius-override

Default	false
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	DHCP lease time
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp proxy-server lease-time value <i>number</i>
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp python-policy reference
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

relay-plain-bootp *boolean*

Synopsis	Enable relaying of plain BOOTP packets
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp relay-plain-bootp boolean
Tree	relay-plain-bootp
Default	false
Introduced	16.0.R1
Platforms	All

relay-proxy

Synopsis	Enable the relay-proxy context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp relay-proxy
Tree	relay-proxy
Introduced	16.0.R1
Platforms	All

release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp relay-proxy release-update-src-ip <i>boolean</i>
Tree	release-update-src-ip
Default	false
Introduced	16.0.R1
Platforms	All

siaddr-override *string*

Synopsis	DHCP server IP address for address hiding function
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp relay-proxy siaddr-override <i>string</i>
Tree	siaddr-override
Introduced	16.0.R1
Platforms	All

release-include-gi-address *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp release-include-gi-address <i>boolean</i>
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server string

Synopsis	IP addresses for DHCP server requests
Context	configure service vprn string interface string ipv4 dhcp server string
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

src-ip-addr keyword

Synopsis	Type of source address to use for DHCP relay
Context	configure service vprn string interface string ipv4 dhcp src-ip-addr keyword
Tree	src-ip-addr
Default	auto
Options	auto, gi-address
Introduced	16.0.R1
Platforms	All

trusted boolean

Synopsis	Relay untrusted packets
Context	configure service vprn string interface string ipv4 dhcp trusted boolean
Tree	trusted
Description	When configured to true , the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request. A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.

This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.

Default	false
Introduced	16.0.R1
Platforms	All

use-arp *boolean*

Synopsis	Use ARP to determine the destination hardware address
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp use-arp <i>boolean</i>
Tree	use-arp
Default	false
Introduced	16.0.R1
Platforms	All

icmp

Synopsis	Enter the icmp context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp
Tree	icmp
Introduced	16.0.R1
Platforms	All

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp mask-reply <i>boolean</i>
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the param-problem context
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Context	configure service vprn string interface string ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of sent Parameter Problem messages
Context	configure service vprn string interface string ipv4 icmp param-problem admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number number

Synopsis	Maximum number of Parameter Problem messages to send
Context	configure service vprn string interface string ipv4 icmp param-problem number number
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds number

Synopsis	Time used to limit number of Parameter Problem messages
Context	configure service vprn string interface string ipv4 icmp param-problem seconds number
Tree	seconds
Range	1 to 60
Default	10

Units	seconds
Introduced	16.0.R1
Platforms	All

redirects

Synopsis	Enter the redirects context
Context	configure service vprn string interface string ipv4 icmp redirects
Tree	redirects
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	configure service vprn string interface string ipv4 icmp redirects admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	configure service vprn string interface string ipv4 icmp redirects number number
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp redirects seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

ttl-expired

Synopsis	Enter the ttl-expired context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp ttl-expired admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp ttl-expired number <i>number</i>

Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp ttl-expired seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the unreachables context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp unreachables admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced 16.0.R1
Platforms All

number *number*

Synopsis Maximum number of unreachable messages to send
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv4](#) [icmp](#) [unreachables](#) [number](#) *number*
Tree [number](#)
Range 10 to 2000
Default 100
Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis Time to limit the number of ICMP unreachable messages
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv4](#) [icmp](#) [unreachables](#) [seconds](#) *number*
Tree [seconds](#)
Range 1 to 60
Default 10
Units seconds
Introduced 16.0.R1
Platforms All

ip-helper-address *string*

Synopsis Gateway address
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv4](#) [ip-helper-address](#) *string*
Tree [ip-helper-address](#)
Introduced 16.0.R1
Platforms All

local-dhcp-server *reference*

Synopsis DHCP server for the interface

Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 local-dhcp-server <i>reference</i>
Tree	local-dhcp-server
Reference	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

host-route

Synopsis	Enter the host-route context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route
Tree	host-route
Introduced	19.10.R1
Platforms	All

populate [[route-type](#)] *keyword*

Synopsis	Enter the populate list instance
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i>
Tree	populate
Introduced	19.10.R1
Platforms	All

[\[route-type\]](#) *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i>

Tree	populate
Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i> route-tag <i>number</i>
Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	19.10.R1
Platforms	All

learn-unsolicited *boolean*

Synopsis	Learn new entries from any received NA message
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery learn-unsolicited <i>boolean</i>
Tree	learn-unsolicited
Description	<p>When configured to true, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to false, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> • If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored. • If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.

Default	false
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the limit context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery limit
Tree	limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Generate log entries only if limit is reached
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery limit max-entries <i>number</i>
Tree	max-entries
Range	0 to 524288
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold value that triggers a warning message
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Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery limit threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Units	percent
Introduced	16.0.R1
Platforms	All

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery local-proxy-arp <i>boolean</i>
Tree	local-proxy-arp
Description	When configured to true , the router enables local proxy ARP on the interface. When configured to false , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	All

populate *boolean*

Synopsis	Allow static and dynamic hosts to be populated in system ARP cache
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery populate <i>boolean</i>
Tree	populate
Default	false
Introduced	16.0.R1
Platforms	All

proactive-refresh *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery proactive-refresh <i>boolean</i>
Tree	proactive-refresh

Description	<p>When configured to true, the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries).</p> <p>When configured to false, the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.</p>
Default	false
Introduced	16.0.R1
Platforms	All

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i>
Tree	proxy-arp-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i>
Tree	remote-proxy-arp
Default	false
Introduced	16.0.R1
Platforms	All

retry-timer *number*

Synopsis	ARP retry interval
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Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery retry-timer <i>number</i>
Tree	retry-timer
Range	1 to 300
Default	50
Units	deciseconds
Introduced	16.0.R1
Platforms	All

static-neighbor [**ipv4-address**] *string*

Synopsis	Enter the static-neighbor list instance
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

[ipv4-address] *string*

Synopsis	IPv4 address that corresponds to the physical address
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

static-neighbor-unnumbered

Synopsis	Enable the static-neighbor-unnumbered context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor-unnumbered
Tree	static-neighbor-unnumbered
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor-unnumbered mac-address <i>string</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Default	14400
Units	seconds
Introduced	16.0.R1
Platforms	All

primary

Synopsis	Enable the primary context
Context	configure service vprn string interface string ipv4 primary
Tree	primary
Introduced	16.0.R1
Platforms	All

address string

Synopsis	Primary IPv4 address assigned to the interface
Context	configure service vprn string interface string ipv4 primary address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

broadcast keyword

Synopsis	Broadcast address format
Context	configure service vprn string interface string ipv4 primary broadcast keyword
Tree	broadcast
Default	host-ones
Options	all-ones, host-ones
Introduced	16.0.R1
Platforms	All

prefix-length number

Synopsis	IPv4 address prefix length
Context	configure service vprn string interface string ipv4 primary prefix-length number
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

track-srrp *number*

Synopsis SRRP instance whose state is tracked on this IP address
 Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4](#) [primary](#) [track-srrp](#) *number*
 Tree [track-srrp](#)
 Range 1 to 4294967295
 Introduced 16.0.R1
 Platforms All

qos-route-lookup *keyword*

Synopsis QoS Route lookup
 Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4](#) [qos-route-lookup](#) *keyword*
 Tree [qos-route-lookup](#)
 Options destination, source
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary [[address](#)] *string*

Synopsis Enter the **secondary** list instance
 Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4](#) [secondary](#) *string*
 Tree [secondary](#)
 Introduced 16.0.R1
 Platforms All

[[address](#)] *string*

Synopsis Secondary IPv4 address assigned to the interface
 Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4](#) [secondary](#) *string*
 Tree [secondary](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1

Platforms All

broadcast *keyword*

Synopsis Broadcast address format
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 secondary](#) *string* **broadcast** *keyword*
Tree [broadcast](#)
Default host-ones
Options all-ones, host-ones
Introduced 16.0.R1
Platforms All

igp-inhibit *boolean*

Synopsis Disable the running IGP from recognizing secondary IP
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 secondary](#) *string* **igp-inhibit** *boolean*
Tree [igp-inhibit](#)
Description When configured to **true**, the running IGP does not recognize the secondary IP address as a local interface.
Default false
Introduced 16.0.R1
Platforms All

prefix-length *number*

Synopsis IPv4 address prefix length
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 secondary](#) *string* **prefix-length** *number*
Tree [prefix-length](#)
Range 0 to 32
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 tcp-mss <i>number</i>
Tree	tcp-mss
Range	384 to 9746
Introduced	16.0.R1
Platforms	All

unnumbered

Synopsis	Enter the unnumbered context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 unnumbered
Tree	unnumbered
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	IP address for the interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 unnumbered ip-address <i>string</i>
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or ip-int-name .
Introduced	16.0.R1
Platforms	All

ip-int-name *string*

Synopsis	IP interface name
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 unnumbered ip-int-name <i>string</i>
Tree	ip-int-name
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or ip-int-name .
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the urpf-check context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 urpf-check ignore-default <i>boolean</i>
Tree	ignore-default
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 urpf-check mode <i>keyword</i>
Tree	mode
Default	strict
Options	strict, loose, strict-no-ecmp
Introduced	16.0.R1
Platforms	All

vrrp [*virtual-router-id*] *number*

Synopsis	Enter the vrrp list instance
Context	configure <i>service vprn string interface string ipv4 vrrp number</i>
Tree	vrrp
Introduced	16.0.R1
Platforms	All

[*virtual-router-id*] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	configure <i>service vprn string interface string ipv4 vrrp number</i>
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	configure <i>service vprn string interface string ipv4 vrrp number admin-state keyword</i>
Tree	admin-state
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Default	enable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Password for simple text authentication
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> authentication-key <i>string</i>
Tree	authentication-key
Description	This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages. If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

backup *string*

Synopsis	Virtual router IP addresses for the interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> backup <i>string</i>
Tree	backup
Description	This command associates virtual router IP addresses with those of the parental IP interface. This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance. Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance. For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.
Max. Instances	16

Introduced 16.0.R1
Platforms All

bfd-liveness

Synopsis Enable the **bfd-liveness** context
Context **configure** [service vprn string](#) [interface string](#) [ipv4 vrrp number](#) [bfd-liveness](#)
Tree [bfd-liveness](#)
Introduced 16.0.R1
Platforms All

dest-ip string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Destination IP address to use for BFD session
Context **configure** [service vprn string](#) [interface string](#) [ipv4 vrrp number](#) [bfd-liveness](#) [dest-ip string](#)
Tree [dest-ip](#)
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

interface-name string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Name of the interface running BFD
Context **configure** [service vprn string](#) [interface string](#) [ipv4 vrrp number](#) [bfd-liveness](#) [interface-name string](#)
Tree [interface-name](#)
String Length 1 to 32
Notes This element is mandatory.

Introduced	16.0.R1
Platforms	All

service-name *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> bfd-liveness service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> init-delay <i>number</i>
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> mac <i>string</i>
Tree	mac
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p>

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced 16.0.R1

Platforms All

master-int-inherit *boolean*

Synopsis Allow master instance to dictate the master down timer

Context **configure** *service vprn string interface string ipv4 vrrp number master-int-inherit boolean*

Tree [master-int-inherit](#)

Description When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 16.0.R1

Platforms All

message-interval *number*

Synopsis Interval for sending VRRP advertisement messages

Context **configure** *service vprn string interface string ipv4 vrrp number message-interval number*

Tree [message-interval](#)

Description This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	1 to 2559
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure service oper-group <i>string</i>
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> ntp-reply <i>boolean</i>
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> oper-group <i>reference</i>
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R1
Platforms	All

owner *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> owner <i>boolean</i>
Tree	owner
Description	When configured to true , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.

When configured to **false**, this virtual router instance is designated as a non-owner.

Default	false
Introduced	16.0.R1
Platforms	All

passive *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> passive <i>boolean</i>
Tree	passive
Description	When configured to true , the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down). When configured to false , this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> ping-reply <i>boolean</i>
Tree	ping-reply
Description	When configured to true , the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address). When configured to false , ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded. Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.
Default	false

Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	VRRP priority control policy
Context	configure service vprn string interface string ipv4 vrrp number policy reference
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	configure vrrp policy number
Introduced	16.0.R1
Platforms	All

preempt boolean

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure service vprn string interface string ipv4 vrrp number preempt boolean
Tree	preempt
Description	<p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1
Platforms	All

priority number

Synopsis	Base priority for the VRRP
Context	configure service vprn string interface string ipv4 vrrp number priority number
Tree	priority
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

ssh-reply boolean

Synopsis	Allow the non-owner master to reply to SSH requests
Context	configure service vprn string interface string ipv4 vrrp number ssh-reply boolean
Tree	ssh-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).</p> <p>When configure to false, SSH requests to non-owner master virtual IP addresses are silently discarded.</p>
Default	false
Introduced	16.0.R1
Platforms	All

standby-forwarding boolean

Synopsis	Allow standby router to forward traffic
Context	configure service vprn string interface string ipv4 vrrp number standby-forwarding boolean
Tree	standby-forwarding
Description	When configured to true , the standby router forwards all traffic.

When configured to **false**, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.

Default	false
Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> telnet-reply <i>boolean</i>
Tree	telnet-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to false, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p>
Default	false
Introduced	16.0.R1
Platforms	All

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> traceroute-reply <i>boolean</i>
Tree	traceroute-reply
Description	<p>When configured to true, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to false, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p>
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the ipv6 context
Context	configure service vprn string interface string ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

address [ipv6-address] string

Synopsis	Enter the address list instance
Context	configure service vprn string interface string ipv6 address string
Tree	address
Introduced	16.0.R1
Platforms	All

[ipv6-address] string

Synopsis	IPv6 address assigned to the interface
Context	configure service vprn string interface string ipv6 address string
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

duplicate-address-detection boolean



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	configure service vprn string interface string ipv6 address string duplicate-address-detection boolean
Tree	duplicate-address-detection
Description	When configured to true , the router enables Duplicate Address Detection (DAD).

When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.

Default	true
Introduced	16.0.R1
Platforms	All

eui-64 *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 address <i>string</i> eui-64 <i>boolean</i>
Tree	eui-64
Description	When configured to true , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 address <i>string</i> prefix-length <i>number</i>
Tree	prefix-length
Range	4 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

primary-preference *number*

Synopsis	Index assigned to the IPv6 address of the interface
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Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 address <i>string</i> primary-preference <i>number</i>
Tree	primary-preference
Description	<p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP ID whose state is tracked on this IP address
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 address <i>string</i> track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 bfd admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive *number*

Synopsis	BFD receive interval over this interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 bfd receive <i>number</i>
Tree	receive
Description	This command specifies the receive interval for the BFD session.

On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	configure service vprn string interface string ipv6 bfd transmit-interval number
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Local termination point for the BFD session
Context	configure service vprn string interface string ipv6 bfd type keyword
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.

Default	auto
Options	cpm-np, auto, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service vprn string interface string ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	All

relay

Synopsis	Enter the relay context
Context	configure service vprn string interface string ipv6 dhcp6 relay
Tree	relay
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	configure service vprn string interface string ipv6 dhcp6 relay admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn string interface string ipv6 dhcp6 relay description string

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	All

max-nbr-of-leases *number*

Synopsis	Maximum number of lease states allocated by the DHCPv6 relay function, allowed on interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate max-nbr-of-leases <i>number</i>
Tree	max-nbr-of-leases
Range	0 to 32767
Default	0
Introduced	16.0.R1
Platforms	All

route-populate

Synopsis	Enter the route-populate context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate route-populate
Tree	route-populate
Introduced	16.0.R1
Platforms	All

na *boolean*

Synopsis	Create route based on IA_NA prefix option in relay-reply message
Context	configure service vprn <i>string interface string ipv6 dhcp6 relay lease-populate route-populate na boolean</i>
Tree	na
Default	false
Introduced	16.0.R1
Platforms	All

pd

Synopsis	Enable the pd context
Context	configure service vprn <i>string interface string ipv6 dhcp6 relay lease-populate route-populate pd</i>
Tree	pd
Introduced	16.0.R1
Platforms	All

exclude *boolean*

Synopsis	Create back hole route based on prefix exclude option in relay-reply message
Context	configure service vprn <i>string interface string ipv6 dhcp6 relay lease-populate route-populate pd exclude boolean</i>
Tree	exclude
Default	false
Introduced	16.0.R1
Platforms	All

ta *boolean*

Synopsis	Create route based on IA_TA prefix option in relay-reply message
Context	configure service vprn <i>string interface string ipv6 dhcp6 relay lease-populate route-populate ta boolean</i>
Tree	ta
Default	false
Introduced	16.0.R1

Platforms All

link-address *string*

Synopsis Link address of the DHCPv6 relay messages
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 dhcp6 relay link-address](#) *string*
Tree [link-address](#)
Introduced 16.0.R1
Platforms All

neighbor-resolution *boolean*

Synopsis Enable neighbor resolution via DHCPv6 relay
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 dhcp6 relay neighbor-resolution](#) *boolean*
Tree [neighbor-resolution](#)
Default false
Introduced 16.0.R1
Platforms All

option

Synopsis Enter the **option** context
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 dhcp6 relay option](#)
Tree [option](#)
Introduced 16.0.R1
Platforms All

interface-id

Synopsis Enter the **interface-id** context
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 dhcp6 relay option interface-id](#)
Tree [interface-id](#)
Introduced 16.0.R1
Platforms All

ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option interface-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1
Platforms	All

if-index

Synopsis	Use interface index in interface ID option in DHCPv6 relay packet
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option interface-id if-index
Tree	if-index
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1
Platforms	All

sap-id

Synopsis	Use SAP ID in interface ID option in DHCPv6 relay packet
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option interface-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	String for interface ID option in DHCPv6 relay packet
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option interface-id string <i>string</i>
Tree	string
String Length	1 to 80

Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1
Platforms	All

remote-id *boolean*

Synopsis	Allow remote ID option to be sent in the DHCPv6 relay packet
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option remote-id <i>boolean</i>
Tree	remote-id
Default	false
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

server *string*

Synopsis	DHCPv6 server to which the DHCPv6 requests are forwarded
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay server <i>string</i>
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

source-address *string*

Synopsis	Source IPv6 address of the DHCPv6 relay messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay source-address <i>string</i>
Tree	source-address
Introduced	16.0.R1
Platforms	All

user-db *reference*

Synopsis	Local user database for authentication
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server

Synopsis	Enter the server context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 server
Tree	server
Introduced	16.0.R1
Platforms	All

max-nbr-of-leases *number*

Synopsis	DHCPv6 leases allowed
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 server max-nbr-of-leases <i>number</i>
Tree	max-nbr-of-leases
Range	0 to 8000
Default	8000
Introduced	16.0.R1
Platforms	All

prefix-delegation

Synopsis	Enter the prefix-delegation context
Context	configure service vprn string interface string ipv6 dhcp6 server prefix-delegation
Tree	prefix-delegation
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the prefix delegation
Context	configure service vprn string interface string ipv6 dhcp6 server prefix-delegation admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

prefix [ipv6-prefix] string

Synopsis	Enter the prefix list instance
Context	configure service vprn string interface string ipv6 dhcp6 server prefix-delegation prefix string
Tree	prefix
Introduced	16.0.R1
Platforms	All

[ipv6-prefix] string

Synopsis	IPv6 address and prefix
Context	configure service vprn string interface string ipv6 dhcp6 server prefix-delegation prefix string
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

client-id

Synopsis Enter the **client-id** context

Context **configure service vprn string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id**

Tree [client-id](#)

Introduced 16.0.R1

Platforms All

duid string

Synopsis Requesting router ID

Context **configure service vprn string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id duid string**

Tree [duid](#)

String Length 1 to 130

Introduced 16.0.R1

Platforms All

iaid number

Synopsis IAID from the requesting router to match

Context **configure service vprn string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id iaid number**

Tree [iaid](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

preferred-lifetime (number | keyword)

Synopsis Preferred lifetime of the prefix

Context **configure service vprn string interface string ipv6 dhcp6 server prefix-delegation prefix string preferred-lifetime (number | keyword)**

Tree [preferred-lifetime](#)

Range	1 to 4294967294
Default	604800
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

valid-lifetime (*number* | *keyword*)

Synopsis	Valid lifetime of the prefix
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 server prefix-delegation prefix <i>string</i> valid-lifetime (<i>number</i> <i>keyword</i>)
Tree	valid-lifetime
Range	1 to 4294967294
Default	2592000
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*

Synopsis	Enable/disable Duplicate Address Detection
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 duplicate-address-detection <i>boolean</i>
Tree	duplicate-address-detection
Default	true
Introduced	16.0.R1
Platforms	All

forward-ipv4-packets *boolean*

Synopsis	Forward unencapsulated IPv4 packets
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 forward-ipv4-packets <i>boolean</i>
Tree	forward-ipv4-packets
Default	false

Introduced 19.5.R1
Platforms All

icmp6

Synopsis Enter the **icmp6** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#)
Tree [icmp6](#)
Introduced 16.0.R1
Platforms All

packet-too-big

Synopsis Enter the **packet-too-big** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [packet-too-big](#)
Tree [packet-too-big](#)
Description Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of Packet Too Big message sends
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [packet-too-big](#) [admin-state](#) *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

number *number*

Synopsis Number of Packet Too big Messages issued per time frame
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [packet-too-big](#) [number](#) *number*

Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit Packet Too Big messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 packet-too-big seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the param-problem context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem
Tree	param-problem
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Parameter Problem messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem <i>seconds</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

redirects

Synopsis	Enter the redirects context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 redirects
Tree	redirects
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Redirect message sends
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 redirects admin-state <i>keyword</i>
Tree	admin-state
Default	enable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit ICMPv6 Redirect messages per time frame
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 redirects <i>number</i> <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Redirect messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 redirects <i>seconds</i> <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

time-exceeded

Synopsis	Enter the time-exceeded context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded
Tree	time-exceeded
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Time Exceeded message sends
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Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the unreachables context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 unreachables
Tree	unreachables
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of Unreachable message sends
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 icmp6 unreachablees](#) **admin-state** *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

number *number*

Synopsis Number to limit Unreachable messages per time frame
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 icmp6 unreachablees](#) **number** *number*
Tree [number](#)
Range 10 to 2000
Default 100
Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis Time used to limit ICMPv6 Unreachable messages
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 icmp6 unreachablees](#) **seconds** *number*
Tree [seconds](#)
Range 1 to 60
Default 10
Introduced 16.0.R1
Platforms All

link-local-address

Synopsis Enter the **link-local-address** context

Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 link-local-address
Tree	link-local-address
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IPv6 link-local address
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 link-local-address address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 link-local-address duplicate-address-detection <i>boolean</i>
Tree	duplicate-address-detection
Description	When configured to true , the router enables Duplicate Address Detection (DAD) on the interface. When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 local-dhcp-server <i>reference</i>
Tree	local-dhcp-server
Reference	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service vprn string interface string ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

host-route

Synopsis	Enter the host-route context
Context	configure service vprn string interface string ipv6 neighbor-discovery host-route
Tree	host-route
Introduced	20.2.R1
Platforms	All

populate [[route-type](#)] *keyword*

Synopsis	Enter the populate list instance
Context	configure service vprn string interface string ipv6 neighbor-discovery host-route populate keyword
Tree	populate
Introduced	20.2.R1
Platforms	All

[\[route-type\]](#) *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service vprn string interface string ipv6 neighbor-discovery host-route populate keyword
Tree	populate
Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	All

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery host-route populate <i>keyword</i> route-tag <i>number</i>
Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	20.2.R1
Platforms	All

learn-unsolicited *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery learn-unsolicited <i>keyword</i>
Tree	learn-unsolicited
Description	This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set. When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the limit context
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery limit
Tree	limit
Introduced	16.0.R1

Platforms All

log-only *boolean*

Synopsis Generate log entries when limit is reached

Context **configure** *service vprn string interface string ipv6 neighbor-discovery limit log-only boolean*

Tree [log-only](#)

Description When configured to **true**, the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned.
When configured to **false**, the router does not send the warning message.

Default false

Introduced 16.0.R1

Platforms All

max-entries *number*

Synopsis Maximum number of entries learned on an IP interface

Context **configure** *service vprn string interface string ipv6 neighbor-discovery limit max-entries number*

Tree [max-entries](#)

Description This command configures the maximum number of entries that can be learned on an IP interface.
When unconfigured, no maximum limit is imposed.

Range 0 to 102400

Introduced 16.0.R1

Platforms All

threshold *number*

Synopsis Threshold percentage that triggers a warning message

Context **configure** *service vprn string interface string ipv6 neighbor-discovery limit threshold number*

Tree [threshold](#)

Range 1 to 100

Default 90

Units	percent
Introduced	16.0.R1
Platforms	All

local-proxy-nd *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery local-proxy-nd <i>boolean</i>
Tree	local-proxy-nd
Description	<p>When configured to true, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.</p> <p>When configured to false, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.</p>
Default	false
Introduced	16.0.R1
Platforms	All

proactive-refresh *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery proactive-refresh <i>keyword</i>
Tree	proactive-refresh
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

proxy-nd-policy *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery proxy-nd-policy <i>reference</i>

Tree	proxy-nd-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	configure service vpn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery reachable-time <i>number</i>
Tree	reachable-time
Range	30 to 3600
Introduced	16.0.R1
Platforms	All

secure-nd

Synopsis	Enter the secure-nd context
Context	configure service vpn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd
Tree	secure-nd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Secure Neighbor Discovery
Context	configure service vpn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

allow-unsecured-msgs *boolean*

Synopsis	Accept unsecured messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd allow-unsecured-msgs <i>boolean</i>
Tree	allow-unsecured-msgs
Description	When configured to true , the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted. When configured to false , the router disables the acceptance of unsecured messages.
Default	true
Introduced	16.0.R1
Platforms	All

public-key-min-bits *number*

Synopsis	Minimum acceptable key length for public keys in CGA
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd public-key-min-bits <i>number</i>
Tree	public-key-min-bits
Range	512 to 1024
Default	1024
Introduced	16.0.R1
Platforms	All

security-parameter *number*

Synopsis	Security parameter used in the generation of a CGA
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd security-parameter <i>number</i>
Tree	security-parameter
Range	0 to 1
Default	1
Introduced	16.0.R1
Platforms	All

stale-time *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery stale-time <i>number</i>
Tree	stale-time
Range	60 to 65535
Introduced	16.0.R1
Platforms	All

static-neighbor [**ipv6-address**] *string*

Synopsis	Enter the static-neighbor list instance
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

[ipv6-address] *string*

Synopsis	IPv6 address corresponding to the physical address
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

qos-route-lookup *keyword*

Synopsis QoS Route lookup
Context **configure service vprn** *string* **interface** *string* **ipv6 qos-route-lookup** *keyword*
Tree **qos-route-lookup**
Options destination, source
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tcp-mss *number*

Synopsis TCP maximum segment size for the interface
Context **configure service vprn** *string* **interface** *string* **ipv6 tcp-mss** *number*
Tree **tcp-mss**
Range 1220 to 9726
Introduced 16.0.R1
Platforms All

urpf-check

Synopsis Enable the **urpf-check** context
Context **configure service vprn** *string* **interface** *string* **ipv6 urpf-check**
Tree **urpf-check**
Introduced 16.0.R1
Platforms All

ignore-default *boolean*

Synopsis Ignore default route when performing a uRPF check
Context **configure service vprn** *string* **interface** *string* **ipv6 urpf-check ignore-default** *boolean*
Tree **ignore-default**
Default false
Introduced 16.0.R1

Platforms All

mode *keyword*

Synopsis Unicast RPF check mode
Context **configure service vprn** *string* **interface** *string* **ipv6 urpf-check mode** *keyword*
Tree **mode**
Default strict
Options strict, loose, strict-no-ecmp
Introduced 16.0.R1
Platforms All

vrrp [**virtual-router-id**] *number*

Synopsis Enter the **vrrp** list instance
Context **configure service vprn** *string* **interface** *string* **ipv6 vrrp** *number*
Tree **vrrp**
Max. Instances 4
Introduced 16.0.R1
Platforms All

[**virtual-router-id**] *number*

Synopsis Virtual Router Identifier (VRID) for the IP interface
Context **configure service vprn** *string* **interface** *string* **ipv6 vrrp** *number*
Tree **vrrp**
Range 1 to 255
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of VRRP

Context	configure service vprn string interface string ipv6 vrrp number admin-state keyword
Tree	admin-state
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup string

Synopsis	Virtual router IP addresses for the interface
Context	configure service vprn string interface string ipv6 vrrp number backup string
Tree	backup
Description	<p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.</p>
Max. Instances	4

Introduced 16.0.R1
Platforms All

bfd-liveness

Synopsis Enable the **bfd-liveness** context
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 vrrp](#) *number* [bfd-liveness](#)
Tree [bfd-liveness](#)
Introduced 16.0.R1
Platforms All

dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Destination address for the BFD session
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 vrrp](#) *number* [bfd-liveness](#) [dest-ip](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [dest-ip](#)
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

interface-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Name of the interface running BFD
Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 vrrp](#) *number* [bfd-liveness](#) [interface-name](#) *string*
Tree [interface-name](#)
String Length 1 to 32
Notes This element is mandatory.

Introduced	16.0.R1
Platforms	All

service-name *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> bfd-liveness service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> init-delay <i>number</i>
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> mac <i>string</i>
Tree	mac
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p>

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced 16.0.R1

Platforms All

master-int-inherit *boolean*

Synopsis Allow master instance to dictate the master down timer

Context **configure** *service vprn string interface string ipv6 vrrp number master-int-inherit boolean*

Tree [master-int-inherit](#)

Description When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 16.0.R1

Platforms All

message-interval *number*

Synopsis Interval for sending VRRP advertisement messages

Context **configure** *service vprn string interface string ipv6 vrrp number message-interval number*

Tree [message-interval](#)

Description This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as the master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	10 to 4095
Default	100
Units	centiseconds
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure service oper-group <i>string</i>
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure service vprn string interface string ipv6 vrrp number ntp-reply boolean
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure service vprn string interface string ipv6 vrrp number oper-group reference
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group string
Introduced	16.0.R1
Platforms	All

owner *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	configure service vprn string interface string ipv6 vrrp number owner boolean
Tree	owner
Description	When configured to true , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.

When configured to **false**, this virtual router instance is designated as a non-owner.

Default	false
Introduced	16.0.R1
Platforms	All

passive *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> passive <i>boolean</i>
Tree	passive
Description	When configured to true , the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down). When configured to false , this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> ping-reply <i>boolean</i>
Tree	ping-reply
Description	When configured to true , the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address). When configured to false , ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded. Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.
Default	false

Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	VRRP priority control policy
Context	configure <i>service vprn string interface string ipv6 vrrp number policy reference</i>
Tree	<i>policy</i>
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	configure <i>vrrp policy number</i>
Introduced	16.0.R1
Platforms	All

preempt boolean

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure <i>service vprn string interface string ipv6 vrrp number preempt boolean</i>
Tree	<i>preempt</i>
Description	<p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Base priority for the VRRP
Context	configure service vprn string interface string ipv6 vrrp number priority number
Tree	priority
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process. The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	configure service vprn string interface string ipv6 vrrp number standby-forwarding boolean
Tree	standby-forwarding
Description	When configured to true , the standby router forwards all traffic. When configured to false , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure service vprn string interface string ipv6 vrrp number telnet-reply boolean
Tree	telnet-reply
Description	When configured to true , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).

When configured to **false**, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.

Default	false
Introduced	16.0.R1
Platforms	All

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure service vprn string interface string ipv6 vrrp number traceroute-reply boolean
Tree	traceroute-reply
Description	When configured to true , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to false , the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing

Synopsis	Enter the load-balancing context
Context	configure service vprn string interface string load-balancing
Tree	load-balancing
Introduced	16.0.R1
Platforms	All

flow-label-load-balancing *boolean*

Synopsis	Enable flow label load balancing
Context	configure service vprn string interface string load-balancing flow-label-load-balancing boolean
Tree	flow-label-load-balancing

Description	When configured to true , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface. When configured to false , the router disables load balancing in ECMP and LAG.
Default	false
Introduced	21.5.R1
Platforms	All

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	configure service vprn string interface string load-balancing ip-load-balancing <i>keyword</i>
Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the l4-load-balancing command is enabled, this command also includes the source or destination port in the hash inputs.
Default	both
Options	both, destination, source, inner-ip
Introduced	16.0.R3
Platforms	All

spi-load-balancing *boolean*

Synopsis	Enable SPI use in hashing
Context	configure service vprn string interface string load-balancing spi-load-balancing <i>boolean</i>
Tree	spi-load-balancing
Description	When configured to true , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.
Default	false
Introduced	16.0.R1
Platforms	All

teid-load-balancing *boolean*

Synopsis	Enable use of TEID in hashing
Context	configure service vprn string interface string load-balancing teid-load-balancing <i>boolean</i>

Tree	teid-load-balancing
Default	false
Introduced	16.0.R1
Platforms	All

loopback *boolean*

Synopsis	Use interface as a loopback interface
Context	configure service vprn <i>string</i> interface <i>string</i> loopback <i>boolean</i>
Tree	loopback
Default	false
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	MAC address for the interface
Context	configure service vprn <i>string</i> interface <i>string</i> mac <i>string</i>
Tree	mac
Introduced	16.0.R1
Platforms	All

mac-accounting *boolean*

Synopsis	Enable MAC accounting functionality
Context	configure service vprn <i>string</i> interface <i>string</i> mac-accounting <i>boolean</i>
Tree	mac-accounting
Default	false
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	configure service vprn <i>string</i> interface <i>string</i> monitor-oper-group <i>reference</i>

Tree	monitor-oper-group
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R1
Platforms	All

multi-chassis-shunting-profile *reference*

Synopsis	Multi-chassis shunting profile name
Context	configure service vprn <i>string</i> interface <i>string</i> multi-chassis-shunting-profile <i>reference</i>
Tree	multi-chassis-shunting-profile
Description	This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces.
Reference	configure service vprn <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i>
Notes	The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ping-template

Synopsis	Enable the ping-template context
Context	configure service vprn <i>string</i> interface <i>string</i> ping-template
Tree	ping-template
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the ping template
Context	configure service vprn <i>string</i> interface <i>string</i> ping-template admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ping template destination address
Context	configure service vprn <i>string</i> interface <i>string</i> ping-template destination-address <i>string</i>
Tree	destination-address
Description	<p>This command configures the address to where the ICMP echo requests are directed to test connectivity. The source of the ICMP echo request is the primary IPv4 address of the interface under which the ping-template is configured. The destination address must be on the same subnet as the source IP address. A configuration warning message displays if the primary IPv4 address and the destination are not on the same subnet, INFO: PIP #2092 Ping template misconfiguration - destination-address and primary IP address should fall in the same subnet.</p> <p>Unnumbered interfaces and loopback addresses are not supported.</p> <p>The config service ies vprn interface ping-template must be administratively disabled to remove or change the destination-address ip-address.</p>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ping template name
Context	configure service vprn <i>string</i> interface <i>string</i> ping-template name <i>reference</i>
Tree	name
Description	This command configures the name of the ping template to be assigned to the IP interface.
Reference	configure test-oam icmp ping-template <i>string</i>
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ptp-hw-assist

Synopsis	Enter the ptp-hw-assist context
Context	configure service vprn <i>string</i> interface <i>string</i> ptp-hw-assist
Tree	ptp-hw-assist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PTP time stamping assist
Context	configure service vprn <i>string</i> interface <i>string</i> ptp-hw-assist admin-state <i>keyword</i>
Tree	admin-state
Description	<p>This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.</p> <p>Only one interface per physical port can have ptp-hw-assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.</p>
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

radius-auth-policy *reference*

Synopsis	Authentication policy
Context	configure service vprn <i>string</i> interface <i>string</i> radius-auth-policy <i>reference</i>
Tree	radius-auth-policy
Reference	configure subscriber-mgmt radius-authentication-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis	Enter the sap list instance
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i>

Tree	sap
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aarp

Synopsis	Enable the aarp context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis	AARP instance ID
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> aarp <i>id</i> <i>reference</i>
Tree	id
Reference	configure application-assurance aarp <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Role referenced by the AARP
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> aarp type <i>keyword</i>
Tree	type
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

anti-spoof *keyword*

Synopsis	Anti-spoof filtering
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> anti-spoof <i>keyword</i>
Tree	anti-spoof
Options	source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis	SAP bandwidth
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> bandwidth <i>number</i>
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

calling-station-id *string*

Synopsis	Calling station ID
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> calling-station-id <i>string</i>
Tree	calling-station-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1

Platforms All

cpu-protection

Synopsis Enter the **cpu-protection** context

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [cpu-protection](#)

Tree [cpu-protection](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [cpu-protection](#) [eth-cfm-monitoring](#)

Tree [eth-cfm-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [cpu-protection](#) [eth-cfm-monitoring](#) [aggregate](#)

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [cpu-protection](#) [eth-cfm-monitoring](#) [car](#)

Tree [car](#)

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection policy-id <i>reference</i>
Tree	policy-id
Reference	configure system security cpu-protection policy <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 160
Introduced	16.0.R1
Platforms	All

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> dist-cpu-protection <i>reference</i>
Tree	dist-cpu-protection
Reference	configure system security dist-cpu-protection <i>policy</i> <i>string</i>
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	All

agg-rate

Synopsis	Enter the agg-rate context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: agg-rate or percent-agg-rate .
Introduced	16.0.R1
Platforms	All

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate adaptation-rule <i>keyword</i>
Tree	adaptation-rule
Default	closest
Options	max, min, closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on all policers and queues associated with context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i>

Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate number

Synopsis	Enforced aggregate rate for all queues
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i>
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the root context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root

Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [[priority-level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] *number*

Synopsis	Priority level
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy <i>policy-name</i> <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i>
Tree	qinq-mark-top-only
Default	false
Introduced	16.0.R1
Platforms	All

sap-egress

Synopsis	Enter the sap-egress context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

hs-secondary-shaper *string*

Synopsis	HS Secondary Shaper
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-secondary-shaper <i>string</i>
Tree	hs-secondary-shaper
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [[group-id](#)] *reference*

Synopsis	Enter the hs-wrr-group list instance
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i>
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[[group-id](#)] *reference*

Synopsis	HS WRR group identifier
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i>
Tree	hs-wrr-group
Reference	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override of the WRR group
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8

Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis Percent rate override applied to the HS WRR group
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress qos sap-egress](#)
[overrides hs-wrr-group](#) *reference* [percent-rate](#) *decimal-number*
Tree [percent-rate](#)
Range 0.01 to 100.00
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis Scheduling rate override applied to the HS WRR group
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress qos sap-egress](#)
[overrides hs-wrr-group](#) *reference* [rate](#) (*number* | *keyword*)
Tree [rate](#)
Range 1 to 2000000000
Units kilobps
Options max
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

policer [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress qos sap-egress](#)
[overrides policer](#) *reference*
Tree [policer](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	configure service vprn string interface string sap string egress qos sap-egress overrides policer reference
Tree	policer
Reference	configure qos sap-egress string policer number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service vprn string interface string sap string egress qos sap-egress overrides policer reference cbs (number keyword)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vprn string interface string sap string egress qos sap-egress overrides policer reference mbs (number keyword)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis Enter the **rate** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#)
[overrides](#) [policer](#) *reference* **rate**
Tree [rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis CIR rate
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#)
[overrides](#) [policer](#) *reference* **rate** **cir** (*number* | *keyword*)
Tree [cir](#)
Range 0 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis PIR rate
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#)
[overrides](#) [policer](#) *reference* **rate** **pir** (*number* | *keyword*)
Tree [pir](#)
Range 1 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[[queue-id](#)] *reference*

Synopsis	Policer unique ID
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i>
Tree	queue
Reference	configure qos sap-egress <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule

Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> avg-frame-overhead <i>decimal-number</i>
Tree	avg-frame-overhead
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size for the queue
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

hs-class-weight *number*

Synopsis	Class weight override for the queue
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the hs-wred-queue context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy reference

Synopsis	Slope policy applied to the HSQ queue group queue
Context	configure service vprn string interface string sap string egress qos sap-egress overrides queue reference hs-wred-queue policy reference
Tree	policy
Reference	configure qos slope-policy string
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
Context	configure service vprn string interface string sap string egress qos sap-egress overrides queue reference hs-wrr-weight number
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vprn string interface string sap string egress qos sap-egress overrides queue reference mbs (number keyword)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
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Context	configure service vprn string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure service vprn string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to false , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure service vprn string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service vprn string interface string sap string egress qos sap-egress overrides queue reference parent
Tree	parent

Introduced 16.0.R1
Platforms All

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group
Context **configure** [service vprn string](#) [interface string sap string egress qos sap-egress](#)
[overrides queue reference parent cir-weight number](#)
Tree [cir-weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group
Context **configure** [service vprn string](#) [interface string sap string egress qos sap-egress](#)
[overrides queue reference parent weight number](#)
Tree [weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

percent-rate

Synopsis Enter the **percent-rate** context
Context **configure** [service vprn string](#) [interface string sap string egress qos sap-egress](#)
[overrides queue reference percent-rate](#)
Tree [percent-rate](#)
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 16.0.R1
Platforms All

cir decimal-number

Synopsis CIR percent rate

Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max

Introduced 16.0.R1
Platforms All

pir (*number* | *keyword*)

Synopsis PIR rate
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [rate](#) **pir** (*number* | *keyword*)
Tree [pir](#)
Range 1 to 6400000000
Units kilobps
Options max
Introduced 16.0.R1
Platforms All

policy-name *reference*

Synopsis Policy ID to associate with SAP for mirrored service
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos](#) [sap-egress](#) *string*
Introduced 16.0.R1
Platforms All

port-redirect-group

Synopsis Enter the **port-redirect-group** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [port-redirect-group](#)
Tree [port-redirect-group](#)
Introduced 16.0.R1
Platforms All

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	configure service vprn string interface string sap string egress qos sap-egress port-redirect-group group-name reference
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group string
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of port queue group
Context	configure service vprn string interface string sap string egress qos sap-egress port-redirect-group instance number
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service vprn string interface string sap string egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service vprn string interface string sap string egress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [*scheduler-name*] *string*

Synopsis	Enter the scheduler list instance
Context	configure <i>service vprn string interface string sap string egress qos scheduler-policy overrides scheduler string</i>
Tree	<i>scheduler</i>
Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure <i>service vprn string interface string sap string egress qos scheduler-policy overrides scheduler string</i>
Tree	<i>scheduler</i>
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure <i>service vprn string interface string sap string egress qos scheduler-policy overrides scheduler string parent</i>
Tree	<i>parent</i>

Introduced 16.0.R1
Platforms All

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [parent](#) [cir-weight](#) *number*
Tree [cir-weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

weight *number*

Synopsis Relative weight of the scheduler to feed the queue
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [parent](#) [weight](#) *number*
Tree [weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

rate

Synopsis Enter the **rate** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#)
Tree [rate](#)
Introduced 16.0.R1
Platforms All

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#) [cir](#) (*number* | *keyword*)

Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

queue-group-redirect-list *reference*

Synopsis	Assign queue-group redirect list
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress queue-group-redirect-list <i>reference</i>
Tree	queue-group-redirect-list
Reference	configure qos queue-group-redirect-list <i>string</i>

Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service vprn string interface string sap string eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure service vprn string interface string sap string eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	configure service vprn string interface string sap string eth-cfm collect-lmm-fc-stats fc keyword
Tree	fc
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p>

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i>
Tree	fc-in-profile
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Description	<p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p>

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis	Enter the mep list instance
Context	configure <i>service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure <i>service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Reference	configure <i>eth-cfm domain string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure <i>service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Reference	configure <i>eth-cfm domain string association string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais boolean
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i>
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i>
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the csf context
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf multiplier <i>decimal-number</i>
Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test bit-error-threshold](#) *number*

Tree [bit-error-threshold](#)

Range 0 to 11840

Default 1

Units bit errors

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis Enter the **test-pattern** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test test-pattern](#)

Tree [test-pattern](#)

Description Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis Generate a CRC checksum

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test test-pattern](#) [crc-tlv](#) *boolean*

Tree [crc-tlv](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern keyword

Synopsis	Test pattern for Ethernet Test frames
Context	configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation keyword

Synopsis	Fault propagation for the MEP
Context	configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation keyword
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i>
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i>
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [eth-cfm mep md-admin-name reference](#) [ma-admin-name reference](#) [mep-id number](#) [grace eth-vsm-grace tx-eth-vsm-grace](#) *boolean*

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [eth-cfm mep md-admin-name reference](#) [ma-admin-name reference](#) [mep-id number](#) [low-priority-defect](#) *keyword*

Tree [low-priority-defect](#)

Default mac-rem-err-xcon

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis Threshold time limit for the one-way delay test

Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep <i>md-admin-name reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm squelch-ingress-levels <i>number</i>
Tree	squelch-ingress-levels
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max.	8
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fwd-wholesale

Synopsis	Enter the fwd-wholesale context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> fwd-wholesale
Tree	fwd-wholesale
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-service *reference*

Synopsis	PPPoE service name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> fwd-wholesale pppoe-service <i>reference</i>
Tree	pppoe-service
Reference	configure service epipe <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-admin-state *keyword*

Synopsis	Administrative state of the hosts
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> host-admin-state <i>keyword</i>
Tree	host-admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis	Host lockout policy
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> host-lockout-policy <i>reference</i>
Tree	host-lockout-policy
Reference	configure subscriber-mgmt host-lockout-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

match-qinq-dot1p keyword

Synopsis	Ingress match QinQ Dot1p
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos match-qinq-dot1p <i>keyword</i>
Tree	match-qinq-dot1p
Options	top, bottom
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the root context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [[priority-level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>

Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] *number*

Synopsis	Priority level
Context	configure service vprn string interface string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds priority number
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service vprn string interface string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds priority number mbs-contribution (number keyword)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service vprn string interface string sap string ingress qos policer-control-policy policy-name reference
Tree	policy-name
Reference	configure qos policer-control-policy string
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

sap-ingress

Synopsis Enter the **sap-ingress** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#)

Tree [sap-ingress](#)

Introduced 16.0.R1

Platforms All

fp-redirect-group

Synopsis Enter the **fp-redirect-group** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#)

Tree [fp-redirect-group](#)

Introduced 16.0.R1

Platforms All

group-name *reference*

Synopsis Queue group template name created on forwarding plane

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [ingress](#) [queue-group](#) *string*

Introduced 16.0.R1

Platforms All

instance *number*

Synopsis Queue group instance

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 16.0.R1
Platforms All

overrides

Synopsis Enter the **overrides** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#)
[overrides](#)
Tree [overrides](#)
Introduced 16.0.R1
Platforms All

ip-criteria

Synopsis Enter the **ip-criteria** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#)
[overrides](#) [ip-criteria](#)
Tree [ip-criteria](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis Tag ID activated for IPv4 criteria
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#)
[overrides](#) [ip-criteria](#) [activate-entry-tag](#) *number*
Tree [activate-entry-tag](#)
Range 1 to 255
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-criteria

Synopsis Enter the **ipv6-criteria** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#)
[overrides](#) [ipv6-criteria](#)
Tree [ipv6-criteria](#)

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis Tag ID activated for IPv6 criteria
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress](#)
[overrides ipv6-criteria activate-entry-tag](#) *number*
Tree [activate-entry-tag](#)
Range 1 to 255
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress](#)
[overrides policer](#) *reference*
Tree [policer](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[[policer-id](#)] *reference*

Synopsis Policer unique ID
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress](#)
[overrides policer](#) *reference*
Tree [policer](#)
Reference **configure** [qos sap-ingress](#) *string* [policer](#) *number*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis CBS

Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> percent-rate

Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [queue-id] *reference*

Synopsis	Enter the queue list instance
Context	configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *reference*

Synopsis	Policer unique ID
Context	configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference
Tree	queue
Reference	configure qos sap-ingress string queue number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	16.0.R1

Platforms All

pir *keyword*

Synopsis Constraint used when deriving the operational PIR value

Context **configure** [service vprn string](#) [interface string sap string](#) [ingress qos sap-ingress overrides queue reference adaptation-rule](#) **pir** *keyword*

Tree [pir](#)

Options max, min, closest

Introduced 16.0.R1

Platforms All

cbs (*number* | *keyword*)

Synopsis CBS

Context **configure** [service vprn string](#) [interface string sap string](#) [ingress qos sap-ingress overrides queue reference](#) **cbs** (*number* | *keyword*)

Tree [cbs](#)

Range 0 to 1048576

Units kilobytes

Options auto

Introduced 16.0.R1

Platforms All

drop-tail

Synopsis Enter the **drop-tail** context

Context **configure** [service vprn string](#) [interface string sap string](#) [ingress qos sap-ingress overrides queue reference](#) **drop-tail**

Tree [drop-tail](#)

Introduced 16.0.R1

Platforms All

low

Synopsis Enter the **low** context

Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1

Platforms All

fast-polling *boolean*

Synopsis Enable fast polling of the queue depth
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress](#)
[overrides queue](#) [reference](#) [monitor-queue-depth](#) **fast-polling** *boolean*
Tree [fast-polling](#)
Default false
Introduced 21.7.R1
Platforms All

parent

Synopsis Enter the **parent** context
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress](#)
[overrides queue](#) [reference](#) **parent**
Tree [parent](#)
Introduced 16.0.R1
Platforms All

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress](#)
[overrides queue](#) [reference](#) [parent](#) **cir-weight** *number*
Tree [cir-weight](#)
Range 0 to 100
Introduced 16.0.R1
Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress](#)
[overrides queue](#) [reference](#) [parent](#) **weight** *number*
Tree [weight](#)

Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir decimal-number

Synopsis	CIR percent rate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir decimal-number

Synopsis	PIR percent rate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	16.0.R1
Platforms	All

queuing-type *keyword*

Synopsis	Queuing type
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress queuing-type <i>keyword</i>
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [*scheduler-name*] *string*

Synopsis	Enter the scheduler list instance
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent
Tree	parent
Introduced	16.0.R1

Platforms All

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [parent cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

weight *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [parent weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

rate

Synopsis Enter the **rate** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [rate](#)

Tree [rate](#)

Introduced 16.0.R1

Platforms All

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [rate cir](#) (*number* | *keyword*)

Tree [cir](#)

Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

queue-group-redirect-list *reference*

Synopsis	Queue group redirect list
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress queue-group-redirect-list <i>reference</i>
Tree	queue-group-redirect-list
Reference	configure qos queue-group-redirect-list <i>string</i>
Introduced	16.0.R1

Platforms All

ip-tunnel [tunnel-name] *string*

Synopsis Enter the **ip-tunnel** list instance
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* **ip-tunnel** *string*
Tree [ip-tunnel](#)
Max. Instances 1
Introduced 16.0.R1
Platforms All

[tunnel-name] *string*

Synopsis IP tunnel name
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* **ip-tunnel** *string*
Tree [ip-tunnel](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the IP tunnel
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* **ip-tunnel** *string* **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

backup-remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup remote IP address that is applied to this tunnel
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> backup-remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	backup-remote-ip-address
Introduced	16.0.R1
Platforms	All

clear-df-bit *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear the Do-not-Fragment bit
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Description	When configured to true , the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum. When configured to false , clearing of the DF bit is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

delivery-service *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service to originate and terminate GRE packets
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> delivery-service <i>string</i>

Tree	delivery-service
Description	This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel. The GRE tunnel does not come up until a valid delivery service is configured.
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

description string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Text description
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dest-ip [dest-ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for dest-ip
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> dest-ip (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	dest-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[dest-ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	IP address of the remote IP tunnel endpoint
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> dest-ip (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	dest-ip
Description	This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dscp *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Differentiated Services Code Point (DSCP) name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet.

Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gre-header



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the gre-header context
Context	configure service vprn string interface string sap string ip-tunnel string gre-header
Tree	gre-header
Introduced	16.0.R1
Platforms	All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the GRE header in the tunnel
Context	configure service vprn string interface string sap string ip-tunnel string gre-header admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

key



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key context
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> gre-header key
Tree	key
Introduced	16.0.R1
Platforms	All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the keys in the GRE header
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> gre-header key admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

receive number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Receive key of the GRE header
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> gre-header key receive <i>number</i>
Tree	receive
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

send number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send key of the GRE header
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> gre-header <i>key</i> send <i>number</i>
Tree	send
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp-generation context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation
Tree	icmp-generation
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the frag-required context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required
Tree	frag-required
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send fragmentation required messages
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval that the ICMP messages can be sent
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages sent
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of ICMP messages that can be sent during the period specified by the interval command.
Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation
Tree	icmp6-generation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big
Tree	packet-too-big
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending Packet Too Big messages
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

number *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of PTB ICMPv6 messages that can be sent
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big number <i>number</i>
Tree	number
Description	This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

seconds *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval when PTB messages can be sent
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big <i>seconds</i> <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP MTU for the interface
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value. When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transport-mode-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transport mode profile name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> ipsec-transport-mode-profile <i>reference</i>
Tree	ipsec-transport-mode-profile

Reference	configure ipsec ipsec-transport-mode-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IP address of this tunnel
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> local-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-ip-address
Description	This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6). When this command specifies an IPv6 address, it must be a global unicast address.
Introduced	16.0.R1
Platforms	All

pmtu-discovery-aging *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to age out the learned path MTU
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation.
Range	900 to 3600
Default	900
Units	seconds

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the private side
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v6 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of path MTU to IPv6 hosts
Context	configure <i>service vprn string interface string sap string ip-tunnel string propagate-pmtu-v6 boolean</i>
Tree	propagate-pmtu-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust (*number | keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the public side
Context	configure <i>service vprn string interface string sap string ip-tunnel string public-tcp-mss-adjust (number keyword)</i>
Tree	public-tcp-mss-adjust
Description	This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassembly (*number | keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum reassembly wait time
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Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> reassemble (<i>number</i> <i>keyword</i>)
Tree	reassemble
Description	This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly.
Range	1 to 5000
Units	milliseconds
Options	use-tunnel-group-setting, none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IP address of the tunnel
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	remote-ip-address
Introduced	16.0.R1
Platforms	All

ipsec-gateway [**name**] *string*

Synopsis	Enter the ipsec-gateway list instance
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i>
Tree	ipsec-gateway
Max. Instances	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	IPsec gateway name
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Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i>
Tree	ipsec-gateway
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec gateway
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert

Synopsis	Enter the cert context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert
Tree	cert
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

status-verify

Synopsis	Enter the status-verify context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert status-verify
Tree	status-verify
Description	Commands in this context configure certificate revocation status verification.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-result *keyword*

Synopsis	Default result of Certificate Status Verification (CSV)
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default result when both the primary and secondary methods fail to provide an answer.
Default	revoked
Options	revoked, good
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert status-verify primary <i>keyword</i>
Tree	primary
Default	crI
Options	crI, ocsp
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secondary *keyword*

Synopsis	Secondary method of CSV to verify the revocation status
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert status-verify secondary <i>keyword</i>
Tree	secondary
Default	none
Options	none, <i>crl</i> , <i>ocsp</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure ipsec trust-anchor-profile <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-db

Synopsis	Enable the client-db context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db
Tree	client-db
Description	Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fallback *boolean*

Synopsis	Fall back to the default authentication policy
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db fallback <i>boolean</i>
Tree	fallback

Description	When configured to true , this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database. When configured to false and the client database lookup fails to return a matched result, the system fails the tunnel setup.
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name reference

Synopsis	Client database name
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db <i>name reference</i>
Tree	name
Reference	configure ipsec client-db <i>string</i>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-secure-service

Synopsis	Enable the default-secure-service context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service
Tree	default-secure-service
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private IPsec tunnel interface name
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service interface <i>string</i>

Tree	interface
String Length	1 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default security service name
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-tunnel-template *reference*

Synopsis	Default tunnel policy template for the gateway
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-tunnel-template <i>reference</i>
Tree	default-tunnel-template
Reference	configure ipsec tunnel-template <i>number</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-address-assignment

Synopsis	Enter the dhcp-address-assignment context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment
Tree	dhcp-address-assignment
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv4

Synopsis	Enable the dhcpv4 context
Context	configure service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv4
Tree	dhcpv4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the IPsec DHCPv4 server
Context	configure service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv4 admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gi-address string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Gateway IP address of DHCPv4 packets sent by the system
Context	configure service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv4 gi-address string
Tree	gi-address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-release *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv4 release message when IPsec tunnel removed
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 send-release <i>boolean</i>
Tree	send-release
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the server context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 server
Tree	server
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv4 server addresses
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 server address <i>string</i>
Tree	address
Description	This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen.

Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance used to reach the DHCPv4 server
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 server router-instance <i>string</i>
Tree	router-instance
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv6

Synopsis	Enable the dhcpv6 context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6
Tree	dhcpv6
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 server
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Link address of the relayed DHCPv6 packets

Context **configure** *service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 link-address string*

Tree *link-address*

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-release *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Send DHCPv6 release message when IPsec tunnel removed

Context **configure** *service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 send-release boolean*

Tree *send-release*

Default true

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **server** context

Context **configure** *service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 server*

Tree *server*

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server addresses
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 server address <i>string</i>
Tree	address
Description	This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance to reach the DHCPv6 server
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 server router-instance <i>string</i>
Tree	router-instance
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-policy *reference*

Synopsis	IKE policy ID
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Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> ike-policy <i>reference</i>
Tree	ike-policy
Reference	configure ipsec ike-policy <i>number</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis	Enter the local context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local
Tree	local
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-assignment

Synopsis	Enable the address-assignment context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment
Tree	address-assignment
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of local address assignments
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the ipv4 context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4
Tree	ipv4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-server *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv4 server name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 dhcp-server <i>string</i>
Tree	dhcp-server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the pool defined in the specified DHCPv4 server
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 pool <i>string</i>
Tree	pool
String Length	1 to 32

Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID for the local DHCPv4 server
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 router-instance <i>string</i>
Tree	router-instance
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secondary-pool *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the secondary pool defined in the DHCPv4 server
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 secondary-pool <i>string</i>
Tree	secondary-pool
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the ipv6 context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6
Tree	ipv6
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-server *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv6 server name
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 dhcp-server <i>string</i>
Tree	dhcp-server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Secondary pool name defined in the DHCPv6 server
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 pool <i>string</i>
Tree	pool
String Length	1 to 32

Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID hosting the DHCPv6 connection
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 router-instance <i>string</i>
Tree	router-instance
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local gateway address of the IPsec gateway
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	gateway-address
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enter the id context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local id
Tree	id

Description	Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Select ID based on authentication method in IKE policy
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local id auto
Tree	auto
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN as the local ID type
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local id fqdn <i>string</i>
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 address as the local ID type
Context	configure service vprn string interface string sap string ipsec-gateway string local id ipv4 string
Tree	ipv4
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address as the local ID type
Context	configure service vprn string interface string sap string ipsec-gateway string local id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-history-key-records

Synopsis	Enter the max-history-key-records context
Context	configure service vprn string interface string sap string ipsec-gateway string max-history-key-records
Tree	max-history-key-records
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp number

Synopsis	Maximum number of recent records
Context	configure service vprn string interface string sap string ipsec-gateway string max-history-key-records esp number
Tree	esp
Range	1 to 48
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike number

Synopsis	Maximum number of historical IKE keys recorded
Context	configure service vprn string interface string sap string ipsec-gateway string max-history-key-records ike number
Tree	ike
Range	1 to 3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pre-shared-key string

Synopsis	Pre-shared key for the IPsec gateway
Context	configure service vprn string interface string sap string ipsec-gateway string pre-shared-key string
Tree	pre-shared-key
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the radius context
Context	configure service vprn string interface string sap string ipsec-gateway string radius
Tree	radius
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> radius accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure ipsec radius accounting-policy <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *reference*

Synopsis	RADIUS authentication policy
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> radius authentication-policy <i>reference</i>
Tree	authentication-policy
Reference	configure ipsec radius authentication-policy <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ts-list *reference*

Synopsis	TS list used for IKEv2 TS negotiation
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> ts-list <i>reference</i>
Tree	ts-list
Reference	configure ipsec ts-list <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-tunnel [[name](#)] *string*

Synopsis	Enter the ipsec-tunnel list instance
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i>
Tree	ipsec-tunnel
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis IPsec tunnel name
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string*
Tree [ipsec-tunnel](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the IPsec tunnel
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string* [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **bfd** context
Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string* [bfd](#)
Tree [bfd](#)
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd-designate *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	configure <i>service vprn string interface string sap string ipsec-tunnel string bfd bfd-designate boolean</i>
Tree	bfd-designate
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd-liveness



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the bfd-liveness context
Context	configure <i>service vprn string interface string sap string ipsec-tunnel string bfd bfd-liveness</i>
Tree	bfd-liveness
Description	<p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dest-ip *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> bfd bfd-liveness dest-ip <i>string</i>
Tree	dest-ip
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> bfd bfd-liveness interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> bfd bfd-liveness service-name <i>string</i>
Tree	service-name
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

clear-df-bit *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Description	When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

copy-traffic-class-upon-decapsulation *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> copy-traffic-class-upon-decapsulation <i>boolean</i>
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> description <i>string</i>

Tree	description
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dest-ip [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Add a list entry for dest-ip
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Max. Instances	16
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Private IP address of the remote IP tunnel endpoint
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
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Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp-generation context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the frag-required context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4)

back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp-generation frag-required admin-state <i>keyword</i>
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Default	enable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Default	10
Units	seconds

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp6-generation packet-too-big
Tree	packet-too-big
Description	<p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the configure router interface ipsec ipsec-tunnel ip-mtu command for the interface.</p>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp6-generation packet-too-big interval <i>number</i>
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp6-generation packet-too-big message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu

Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key-exchange



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key-exchange context
Context	configure <i>service vpn string interface string sap string ipsec-tunnel string key-exchange</i>
Tree	<i>key-exchange</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the dynamic context
Context	configure <i>service vpn string interface string sap string ipsec-tunnel string key-exchange dynamic</i>
Tree	<i>dynamic</i>
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-establish *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic auto-establish <i>boolean</i>
Tree	auto-establish
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the cert context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

status-verify



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the status-verify context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Default	revoked
Options	revoked, good
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify primary <i>keyword</i>
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Default	crl
Options	crl, ocsp

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secondary *keyword*

Synopsis Secondary method used to verify certificate revocation
Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string* [key-exchange](#) [dynamic](#) [cert](#) [status-verify](#) **secondary** *keyword*
Tree [secondary](#)
Description This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Default none
Options none, [crl](#), [ocsp](#)
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor-profile *reference*

Synopsis Trust anchor profile name
Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string* [key-exchange](#) [dynamic](#) [cert](#) [trust-anchor-profile](#) *reference*
Tree [trust-anchor-profile](#)
Reference **configure** [ipsec](#) [trust-anchor-profile](#) *string*
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context
Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string* [key-exchange](#) [dynamic](#) **id**
Tree [id](#)
Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation.

The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

Context **configure service vpn** string interface string sap string ipsec-tunnel string key-exchange dynamic id fqdn string

Tree fqdn

String Length 1 to 255

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv4 as the local ID type

Context **configure service vpn** string interface string sap string ipsec-tunnel string key-exchange dynamic id ipv4 string

Tree ipv4

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	configure <i>service vprn string interface string sap string ipsec-tunnel string key-exchange dynamic id ipv6 (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ipv6
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	configure <i>service vprn string interface string sap string ipsec-tunnel string key-exchange dynamic ike-policy reference</i>
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The ipsec-transport-mode-profile configuration only supports IKEv2.
Reference	configure ipsec ike-policy <i>number</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	configure <i>service vprn string interface string sap string ipsec-tunnel string key-exchange dynamic ipsec-transform reference</i>

Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>
Max. Instances	4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pre-shared-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic pre-shared-key <i>string</i>
Tree	pre-shared-key
String Length	1 to 115
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

manual



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the manual context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange manual
Tree	manual
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keys [*security-association*] *number direction keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the keys list instance
Context	configure service vpn <i>string interface string sap string ipsec-tunnel string key-exchange manual keys number direction keyword</i>
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[security-association] *number*

Synopsis	SA entry ID
Context	configure service vpn <i>string interface string sap string ipsec-tunnel string key-exchange manual keys number direction keyword</i>
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of the IPsec tunnel
Context	configure service vpn <i>string interface string sap string ipsec-tunnel string key-exchange manual keys number direction keyword</i>
Tree	keys
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 130
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-key *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> encryption-key <i>string</i>
Tree	encryption-key
String Length	1 to 66
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Transform entry used by manual SAs
Context	configure <i>service vprn string interface string sap string ipsec-tunnel string key-exchange manual keys number direction keyword ipsec-transform reference</i>
Tree	<i>ipsec-transform</i>
Reference	configure ipsec ipsec-transform number
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spi *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	configure <i>service vprn string interface string sap string ipsec-tunnel string key-exchange manual keys number direction keyword spi number</i>
Tree	<i>spi</i>
Description	<p>This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.</p> <p>The remote node can use the SPI to look up the instruction to verify and decrypt the packet.</p>
Range	256 to 16383

Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-history-key-records



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the max-history-key-records context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> max-history-key-records esp <i>number</i>
Tree	esp
Range	1 to 48
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> max-history-key-records ike <i>number</i>
Tree	ike
Range	1 to 3
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pmtu-discovery-aging *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Default	900
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side.

When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.

Range	512 to 9000
Units	bytes
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v6 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> propagate-pmtu-v6 <i>boolean</i>
Tree	propagate-pmtu-v6
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

replay-window *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> replay-window <i>number</i>
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 64 128 256 512
Units	packets
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

security-policy



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the security-policy context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> security-policy
Tree	security-policy
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec security policy ID
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> security-policy id reference
Tree	id
Reference	configure service vpn <i>string</i> ipsec security-policy <i>number</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

strict-match *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> security-policy strict-match <i>boolean</i>
Tree	strict-match
Description	When configured to true , this command enables strict match of the security policy entry. When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the

configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.

If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.

If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.

If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.

Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-endpoint



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the tunnel-endpoint context
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> tunnel-endpoint
Tree	tunnel-endpoint
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

delivery-service *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delivery service name
Context	configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> tunnel-endpoint delivery-service <i>string</i>
Tree	delivery-service
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Address used for tunnel of the remote security gateway
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> tunnel-endpoint local-gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-gateway-address
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IP address of this tunnel.
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> tunnel-endpoint remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	remote-ip-address
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis	Enter the lag context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> lag
Tree	lag
Introduced	16.0.R1
Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> lag link-map-profile <i>number</i>
Tree	link-map-profile
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration. If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	16.0.R1
Platforms	All

per-link-hash

Synopsis	Enter the per-link-hash context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> lag per-link-hash class <i>number</i>
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> lag per-link-hash weight <i>number</i>

Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

multi-service-site *reference*

Synopsis	Multi service site name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> multi-service-site <i>reference</i>
Tree	multi-service-site
Reference	configure service customer <i>string</i> multi-service-site <i>string</i>
Introduced	16.0.R1
Platforms	All

static-host

Synopsis	Enter the static-host context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host
Tree	static-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 [[ip](#)] *string* [mac](#) *string*

Synopsis	Enter the ipv4 list instance
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i>
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ip] *string*

Synopsis	IP address
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i>

Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string

Synopsis	MAC address
Context	configure service vprn string interface string sap string static-host ipv4 string mac string
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the static host
Context	configure service vprn string interface string sap string static-host ipv4 string mac string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string string

Synopsis	ANCP string
Context	configure service vprn string interface string sap string static-host ipv4 string mac string ancp-string string
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis	Enter the app-profile context
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> app-profile
Tree	app-profile
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile reference

Synopsis	Application profile used by the static host
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> app-profile profile reference
Tree	profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> int-dest-id <i>string</i>
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile reference

Synopsis	SLA profile name
Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sla-profile reference
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis Sub-profile name

Context **configure** **service** **vprn** *string* **interface** *string* **sap** *string* **static-host** **ipv4** *string* **mac** *string* **sub-profile** *reference*

Tree **sub-profile**

Reference **configure** **subscriber-mgmt** **sub-profile** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis Enter the **subscriber-id** context

Context **configure** **service** **vprn** *string* **interface** *string* **sap** *string* **static-host** **ipv4** *string* **mac** *string* **subscriber-id**

Tree **subscriber-id**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis Subscriber identification

Context **configure** **service** **vprn** *string* **interface** *string* **sap** *string* **static-host** **ipv4** *string* **mac** *string* **subscriber-id** **string** *string*

Tree **string**

String Length 1 to 64

Notes The following elements are part of a choice: **string** or **use-sap-id**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis Use the SAP id as subscriber ID

Context	configure service vprn <i>string interface string sap string static-host ipv4 string mac string subscriber-id use-sap-id</i>
Tree	use-sap-id
Notes	The following elements are part of a choice: string or use-sap-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transit-policy

Synopsis	Enable the transit-policy context
Context	configure service vprn <i>string interface string sap string transit-policy</i>
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	configure service vprn <i>string interface string sap string transit-policy ip reference</i>
Tree	ip
Reference	configure application-assurance group number partition number transit-ip-policy number
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
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Context	configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> transit-policy prefix <i>reference</i>
Tree	prefix
Reference	configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i>
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv4 *reference*

Synopsis	Host connectivity IPv4 policy
Context	configure service vprn <i>string</i> interface <i>string</i> shcv-policy-ipv4 <i>reference</i>
Tree	shcv-policy-ipv4
Reference	configure subscriber-mgmt shcv-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[[sdp-bind-id](#)] *string*

Synopsis	SDP binding ID
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

aarp

Synopsis Enable the **aarp** context
Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* **aarp**
Tree [aarp](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id reference

Synopsis AARP instance ID
Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [aarp id reference](#)
Tree [id](#)
Reference **configure** [application-assurance aarp](#) *number*
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis Role referenced by the AARP
Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [aarp type keyword](#)
Tree [type](#)
Options dual-homed, dual-homed-secondary
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy reference

Synopsis Policy to collect accounting statistics
Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [accounting-policy reference](#)
Tree [accounting-policy](#)
Reference **configure** [log accounting-policy](#) *number*

Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the SDP binding to the service
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [admin-state](#) *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

app-profile *reference*

Synopsis Application profile name for this SDP
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [app-profile](#) *reference*
Tree [app-profile](#)
Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string*
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis Enter the **bfd** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [bfd](#)
Tree [bfd](#)
Introduced 21.2.R1
Platforms All

bfd-liveness

Synopsis Enable the **bfd-liveness** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [bfd](#) [bfd-liveness](#)
Tree [bfd-liveness](#)

Introduced	21.2.R1
Platforms	All

encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> bfd bfd-liveness encap <i>keyword</i>
Tree	encap
Default	ipv4
Options	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> bfd bfd-template <i>reference</i>
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context.
Reference	configure bfd bfd-template <i>string</i>
Introduced	21.2.R1
Platforms	All

failure-action *keyword*

Synopsis	VCCV BFD action taken on the SDP binding
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> bfd failure-action <i>keyword</i>
Tree	failure-action
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context.

Default	none
Options	none, down
Introduced	21.2.R1
Platforms	All

wait-for-up-timer *number*

Synopsis	Time waited for BFD up status
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	This command configures the time interval that is used to wait for a BFD session to come up. This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.
Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

control-word *boolean*

Synopsis	Use the control word as preferred
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i>
Tree	control-word

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cpu-protection

Synopsis	Enter the cpu-protection context
Context	configure service vprn string interface string spoke-sdp string cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the eth-cfm-monitoring context
Context	configure service vprn string interface string spoke-sdp string cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	configure service vprn string interface string spoke-sdp string cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
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Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection policy-id <i>reference</i>
Tree	policy-id
Reference	configure system security cpu-protection policy <i>number</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

egress

Synopsis Enter the **egress** context
Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* **egress**
Tree [egress](#)
Introduced 16.0.R1
Platforms All

filter

Synopsis Enter the **filter** context
Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* **egress** **filter**
Tree [filter](#)
Introduced 16.0.R1
Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* **egress** **filter** **ip** *reference*
Tree [ip](#)
Reference **configure** **filter** [ip-filter](#) *string*
Introduced 16.0.R1
Platforms All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> egress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> egress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

policy-name reference

Synopsis	Network policy ID
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> egress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>string</i>
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the egress port queue group
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> egress qos network port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue-group instance ID
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> egress qos network port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i>

Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats fc <i>keyword</i>
Tree	fc
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile keyword

Synopsis	Forwarding class name for profile-aware counter
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i>
Tree	fc-in-profile
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Description	<p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the mep list instance
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain string association string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
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Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais <i>boolean</i>
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
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Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i>
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i>
Tree	ccm-padding-size

Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the csf context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf multiplier <i>decimal-number</i>
Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i>
Tree	description

String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
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Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i>
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i>
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace
Tree	eth-vsm-grace

Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace
Description	When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to false , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **low-priority-defect** *keyword*

Tree [low-priority-defect](#)

Default mac-rem-err-xcon

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis Threshold time limit for the one-way delay test

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **one-way-delay-threshold** *number*

Tree [one-way-delay-threshold](#)

Range 0 to 600

Default 3

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis Levels for which ETH-CFM packets are silently discarded

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm squelch-ingress-levels](#) *number*

Tree [squelch-ingress-levels](#)

Description This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.

Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hash-label

Synopsis	Enable the hash-label context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> hash-label
Tree	hash-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	16.0.R1
Platforms	All

signal-capability

Synopsis	Enable the signaling of the hash label between PE nodes
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> hash-label signal-capability
Tree	signal-capability
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of the forwarding-plane ingress Queue Group for this SDP binding
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>string</i>
Introduced	16.0.R1
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

transit-policy

Synopsis	Enable the transit-policy context
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> transit-policy ip <i>reference</i>
Tree	ip
Reference	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i>
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> transit-policy prefix <i>reference</i>
Tree	prefix
Reference	configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i>
Notes	The following elements are part of a mandatory choice: ip or prefix .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding
Context	configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> vc-type <i>keyword</i>
Tree	vc-type
Default	ether
Options	ether, ipipe
Introduced	16.0.R1

Platforms All

static-tunnel-redundant-nexthop *string*

Synopsis Address for the static ISA tunnel redundant next-hop

Context **configure** *service vprn string interface string static-tunnel-redundant-nexthop string*

Tree [static-tunnel-redundant-nexthop](#)

Description This command specifies the redundant next-hop address on public or private IPsec interfaces (with a public or private tunnel SAP) for the static IPsec tunnel.
The next-hop address is resolved in the routing table of the corresponding service.

Notes The following elements are part of a choice: **multi-chassis-shunting-profile** or **(dynamic-tunnel-redundant-nexthop** and **static-tunnel-redundant-nexthop)**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tos-marking-state *keyword*

Synopsis TOS marking state

Context **configure** *service vprn string interface string tos-marking-state keyword*

Tree [tos-marking-state](#)

Default trusted

Options trusted, untrusted

Introduced 16.0.R1

Platforms All

tunnel *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable/disable tunnel interface

Context **configure** *service vprn string interface string tunnel boolean*

Tree [tunnel](#)

Default false

Introduced 16.0.R1

Platforms All

vas-if-type *keyword*

Synopsis VAS interface type
Context **configure** *service vprn string interface string vas-if-type keyword*
Tree *vas-if-type*
Options to-from-access, to-from-network, to-from-both
Introduced 16.0.R1
Platforms All

vpls [*vpls-name*] *string*

Synopsis Enter the **vpls** list instance
Context **configure** *service vprn string interface string vpls string*
Tree *vpls*
Max. 1
Instances
Introduced 16.0.R1
Platforms All

[*vpls-name*] *string*

Synopsis VPLS service
Context **configure** *service vprn string interface string vpls string*
Tree *vpls*
String Length 1 to 64
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

egress

Synopsis Enter the **egress** context
Context **configure** *service vprn string interface string vpls string egress*

Tree [egress](#)
Introduced 16.0.R1
Platforms All

reclassify-using-qos *reference*

Synopsis Egress QoS policy
Context **configure** [service vprn](#) *string* [interface](#) *string* [vpls](#) *string* [egress reclassify-using-qos](#) *reference*
Tree [reclassify-using-qos](#)
Reference **configure** [qos sap-egress](#) *string*
Introduced 16.0.R1
Platforms All

routed-override-filter

Synopsis Enter the **routed-override-filter** context
Context **configure** [service vprn](#) *string* [interface](#) *string* [vpls](#) *string* [egress routed-override-filter](#)
Tree [routed-override-filter](#)
Introduced 16.0.R1
Platforms All

ip *reference*

Synopsis IPv4 filter policy name
Context **configure** [service vprn](#) *string* [interface](#) *string* [vpls](#) *string* [egress routed-override-filter ip](#) *reference*
Tree [ip](#)
Reference **configure** [filter ip-filter](#) *string*
Introduced 16.0.R1
Platforms All

ipv6 *reference*

Synopsis IPv6 filter policy name

Context	configure service vprn <i>string interface string vpls string egress routed-override-filter ipv6 reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the evpn context
Context	configure service vprn <i>string interface string vpls string evpn</i>
Tree	evpn
Introduced	19.10.R1
Platforms	All

arp

Synopsis	Enter the arp context
Context	configure service vprn <i>string interface string vpls string evpn arp</i>
Tree	arp
Introduced	19.10.R1
Platforms	All

advertise [[route-type](#)] *keyword*

Synopsis	Enter the advertise list instance
Context	configure service vprn <i>string interface string vpls string evpn arp advertise keyword</i>
Tree	advertise
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The learn-dynamic command must be set to false when using this functionality.
Introduced	19.10.R1
Platforms	All

[route-type] keyword

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service vprn string interface string vpls string evpn arp advertise keyword
Tree	advertise
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

route-tag number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service vprn string interface string vpls string evpn arp advertise keyword route-tag number
Tree	route-tag
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	19.10.R1
Platforms	All

flood-garp-and-unknown-req boolean

Synopsis	Allow CPM originated ARP frames to flood R-VPLS service
Context	configure service vprn string interface string vpls string evpn arp flood-garp-and-unknown-req boolean
Tree	flood-garp-and-unknown-req
Description	When configured to true , the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command.

When configured to **false**, CPM-originated ARP flooding is suppressed.

Default	true
Introduced	19.10.R1
Platforms	All

learn-dynamic *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp learn-dynamic <i>boolean</i>
Tree	learn-dynamic
Default	true
Introduced	19.10.R1
Platforms	All

nd

Synopsis	Enter the nd context
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn nd
Tree	nd
Introduced	20.5.R1
Platforms	All

advertise [[route-type](#)] *keyword*

Synopsis	Enter the advertise list instance
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn nd advertise <i>keyword</i>
Tree	advertise
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The learn-dynamic command must be set to false when using this functionality.
Introduced	20.5.R1
Platforms	All

[route-type] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
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Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn nd advertise <i>keyword</i>
Tree	advertise
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn nd advertise <i>keyword</i> route-tag <i>number</i>
Tree	route-tag
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	20.5.R1
Platforms	All

learn-dynamic *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn nd learn-dynamic <i>boolean</i>
Tree	learn-dynamic
Default	true
Introduced	20.5.R1
Platforms	All

evpn-tunnel

Synopsis	Enable the evpn-tunnel context
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn-tunnel
Tree	evpn-tunnel
Introduced	16.0.R1
Platforms	All

allow-bfd *boolean*

Synopsis	Allow BFD on the EVPN tunnel
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn-tunnel allow-bfd <i>boolean</i>
Tree	allow-bfd
Default	false
Introduced	22.5.R1
Platforms	All

ipv6-gateway-address *keyword*

Synopsis	Type of IPv6 gateway address
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn-tunnel ipv6-gateway-address <i>keyword</i>
Tree	ipv6-gateway-address
Default	ip
Options	ip, mac
Introduced	16.0.R4
Platforms	All

supplementary-broadcast-domain *boolean*

Synopsis	Use the EVPN tunnel as a Supplementary Broadcast Domain
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn-tunnel supplementary-broadcast-domain <i>boolean</i>
Tree	supplementary-broadcast-domain
Description	When configured to true , this command allows the EVPN tunnel to be used as a Supplementary Broadcast Domain (SBD). The SBD is used in EVPN OISM to advertise the SMET routes and to receive the multicast traffic on egress PEs that are not attached to the source R-VPLS service.

When configured to **false**, this command disables EVPN tunnel use as an SBD.

Default	false
Introduced	19.10.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

routed-override-filter

Synopsis	Enter the routed-override-filter context
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> ingress routed-override-filter
Tree	routed-override-filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> ingress routed-override-filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> ingress routed-override-filter ipv6 reference

Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

ip-mirror-interface [\[interface-name\]](#) *string*

Synopsis	Enter the ip-mirror-interface list instance
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i>
Tree	ip-mirror-interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i>
Tree	ip-mirror-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[sdp-bind-id] *string*

Synopsis	SDP binding ID
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i> ingress filter ip <i>reference</i>
Tree	ip

Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Spoke SDP ingress VC label
Context	configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

ipsec

Synopsis	Enter the ipsec context
Context	configure service vprn <i>string</i> ipsec
Tree	ipsec
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow-reverse-route-override-type *keyword*

Synopsis	System behavior for new reverse route
Context	configure service vprn <i>string</i> ipsec allow-reverse-route-override-type <i>keyword</i>
Tree	allow-reverse-route-override-type
Description	This command specifies the system behavior when a new reverse route overlaps with an existing reverse route. When unconfigured, the system does not allow a new dynamic LAN-to-LAN tunnel that terminates in the private VPRN service to be created with an overlapping reverse route.
Options	same-idi, any-idi
Introduced	20.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-interface *[name] reference*

Synopsis Enter the **multi-chassis-shunt-interface** list instance
Context **configure service vpn** *string ipsec multi-chassis-shunt-interface reference*
Tree [multi-chassis-shunt-interface](#)
Introduced 22.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] reference

Synopsis Multi-chassis shunt interface name
Context **configure service vpn** *string ipsec multi-chassis-shunt-interface reference*
Tree [multi-chassis-shunt-interface](#)
Reference **configure service vpn** *string interface string*
Notes This element is part of a list key.
Introduced 22.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop

Synopsis Enter the **next-hop** context
Context **configure service vpn** *string ipsec multi-chassis-shunt-interface reference next-hop*
Tree [next-hop](#)
Description Commands in this context configure the next hop for shunting over the interface.
Introduced 22.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Next hop address
Context **configure service vpn** *string ipsec multi-chassis-shunt-interface reference next-hop address (ipv4-address-no-zone | ipv6-address-no-zone)*
Tree [address](#)

Description	This command configures the next-hop address for the shunting interface.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunting-profile [[name](#)] *string*

Synopsis	Enter the multi-chassis-shunting-profile list instance
Context	configure service vpn <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i>
Tree	multi-chassis-shunting-profile
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Multi-chassis shunting profile name
Context	configure service vpn <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i>
Tree	multi-chassis-shunting-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer [[ip-address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure service vpn <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> peer <i>reference</i>
Tree	peer
Max. Instances	3
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-address] reference

Synopsis	Peer address
Context	configure service vpn <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-interface reference

Synopsis	Multi-chassis shunt interface
Context	configure service vpn <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> peer <i>reference</i> multi-chassis-shunt-interface <i>reference</i>
Tree	multi-chassis-shunt-interface
Reference	configure service vpn <i>string</i> ipsec multi-chassis-shunt-interface <i>reference</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

security-policy [id] number

Synopsis	Enter the security-policy list instance
Context	configure service vpn <i>string</i> ipsec security-policy <i>number</i>
Tree	security-policy
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] number

Synopsis	IPsec security policy ID
Context	configure service vpn <i>string</i> ipsec security-policy <i>number</i>
Tree	security-policy
Range	1 to 32768
Notes	This element is part of a list key.

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [**entry-id**] *number*

Synopsis Enter the **entry** list instance
Context **configure service vpn string ipsec security-policy number entry number**
Tree **entry**
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis IPsec security policy entry ID
Context **configure service vpn string ipsec security-policy number entry number**
Tree **entry**
Range 1 to 16
Notes This element is part of a list key.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-ip

Synopsis Enter the **local-ip** context
Context **configure service vpn string ipsec security-policy number entry number local-ip**
Tree **local-ip**
Description Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry.

The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address string

Synopsis	Destination IPv4 address of the aggregate route
Context	configure service vpn string ipsec security-policy number entry number local-ip address string
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any boolean

Synopsis	Use any IP address
Context	configure service vpn string ipsec security-policy number entry number local-ip any boolean
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-ipv6

Synopsis	Enter the local-ipv6 context
Context	configure service vpn string ipsec security-policy number entry number local-ipv6
Tree	local-ipv6
Description	Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry. The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address string

Synopsis	Destination IPv6 address of the aggregate route
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Context	configure service vpn <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6 address <i>string</i>
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*

Synopsis	Use any IP address
Context	configure service vpn <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6 any <i>boolean</i>
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ip

Synopsis	Enter the remote-ip context
Context	configure service vpn <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> remote-ip
Tree	remote-ip
Description	<p>Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry.</p> <p>The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.</p>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	Destination IPv4 address of the aggregate route
Context	configure service vpn <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> remote-ip address <i>string</i>
Tree	address

Notes	The following elements are part of a choice: address or any .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*

Synopsis	Use any IP address
Context	configure service vpn <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> remote-ip any <i>boolean</i>
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ipv6

Synopsis	Enter the remote-ipv6 context
Context	configure service vpn <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> remote-ipv6
Tree	remote-ipv6
Description	Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry. The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	Destination IPv6 address of the aggregate route
Context	configure service vpn <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> remote-ipv6 address <i>string</i>
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*

Synopsis	Use any IP address
Context	configure service vprn string ipsec security-policy number entry number remote-ipv6 any boolean
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure service vprn string ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service vprn string ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	configure service vprn string ipv6 neighbor-discovery reachable-time number
Tree	reachable-time
Range	30 to 3600
Default	30
Introduced	16.0.R1

Platforms All

stale-time *number*

Synopsis Neighbor discovery cache entry stale time
Context **configure service vprn** *string* **ipv6 neighbor-discovery stale-time** *number*
Tree [stale-time](#)
Range 60 to 65535
Default 14400
Introduced 16.0.R1
Platforms All

router-advertisement

Synopsis Enter the **router-advertisement** context
Context **configure service vprn** *string* **ipv6 router-advertisement**
Tree [router-advertisement](#)
Introduced 16.0.R1
Platforms All

dns-options

Synopsis Enable the **dns-options** context
Context **configure service vprn** *string* **ipv6 router-advertisement dns-options**
Tree [dns-options](#)
Introduced 16.0.R1
Platforms All

rdnss-lifetime (*keyword* | *number*)

Synopsis Maximum time over which the RDNSS address is valid
Context **configure service vprn** *string* **ipv6 router-advertisement dns-options rdnss-lifetime** (*keyword* | *number*)
Tree [rdnss-lifetime](#)
Description This command specifies the maximum time that the RDNSS address is used for name resolution by the client.

Range	0 4 to 3600
Default	infinite
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

server *string*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	configure service vprn <i>string</i> ipv6 router-advertisement dns-options server <i>string</i>
Tree	server
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [[ip-int-name](#)] *reference*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[ip-int-name] *reference*

Synopsis	VPRN interface name
Context	configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i>
Tree	interface
Reference	configure service vprn <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of router advertisement
Context	configure service vprn string ipv6 router-advertisement interface reference admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

current-hop-limit *number*

Synopsis	Hop limit advertised in RA messages
Context	configure service vprn string ipv6 router-advertisement interface reference current-hop-limit number
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	All

dns-options

Synopsis	Enable the dns-options context
Context	configure service vprn string ipv6 router-advertisement interface reference dns-options
Tree	dns-options
Introduced	16.0.R1
Platforms	All

include-rdnss *boolean*

Synopsis	Include the RDNSS option in the RA
Context	configure service vprn string ipv6 router-advertisement interface reference dns-options include-rdnss boolean
Tree	include-rdnss

Default	true
Introduced	16.0.R1
Platforms	All

rdnss-lifetime (*number | keyword*)

Synopsis	Maximum time over which the RDNSS address 25 is valid
Context	configure service vprn string ipv6 router-advertisement interface reference dns-options rdnss-lifetime (<i>number keyword</i>)
Tree	rdnss-lifetime
Range	0 4 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

server string

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	configure service vprn string ipv6 router-advertisement interface reference dns-options server string
Tree	server
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

managed-configuration boolean

Synopsis	Set the managed address configuration flag
Context	configure service vprn string ipv6 router-advertisement interface reference managed-configuration boolean
Tree	managed-configuration
Default	false
Introduced	16.0.R1

Platforms All

max-advertisement-interval *number*

Synopsis Maximum time between sending advertisement messages

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **max-advertisement-interval** *number*

Tree [max-advertisement-interval](#)

Range 4 to 1800

Default 600

Units seconds

Introduced 16.0.R1

Platforms All

min-advertisement-interval *number*

Synopsis Minimum interval between router advertisement messages

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **min-advertisement-interval** *number*

Tree [min-advertisement-interval](#)

Range 3 to 1350

Default 200

Units seconds

Introduced 16.0.R1

Platforms All

mtu *number*

Synopsis MTU for sending packets to the router

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **mtu** *number*

Tree [mtu](#)

Range 1280 to 9800

Introduced 16.0.R1

Platforms All

other-stateful-configuration *boolean*

Synopsis	Set the other configuration flag
Context	configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> other-stateful-configuration <i>boolean</i>
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	All

prefix [[ipv6-prefix](#)] *string*

Synopsis	Enter the prefix list instance
Context	configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> prefix <i>string</i>
Tree	prefix
Max. Instances	254
Introduced	16.0.R1
Platforms	All

[ipv6-prefix] *string*

Synopsis	IPv6 address prefix
Context	configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> prefix <i>string</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

autonomous *boolean*

Synopsis	Set the autonomous flag value
Context	configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> prefix <i>string</i> autonomous <i>boolean</i>
Tree	autonomous
Default	true
Introduced	16.0.R1

Platforms All

on-link *boolean*

Synopsis Use prefix for on-link determination

Context **configure** [service](#) [vprn](#) *string* [ipv6](#) [router-advertisement](#) [interface](#) *reference* [prefix](#) *string* [on-link](#) *boolean*

Tree [on-link](#)

Default true

Introduced 16.0.R1

Platforms All

preferred-lifetime (*keyword | number*)

Synopsis Remaining time that the prefix remains preferred

Context **configure** [service](#) [vprn](#) *string* [ipv6](#) [router-advertisement](#) [interface](#) *reference* [prefix](#) *string* [preferred-lifetime](#) (*keyword | number*)

Tree [preferred-lifetime](#)

Range 0 to 4294967294

Default 604800

Units seconds

Options infinite

Introduced 16.0.R1

Platforms All

valid-lifetime (*keyword | number*)

Synopsis Remaining time in which the prefix is still valid

Context **configure** [service](#) [vprn](#) *string* [ipv6](#) [router-advertisement](#) [interface](#) *reference* [prefix](#) *string* [valid-lifetime](#) (*keyword | number*)

Tree [valid-lifetime](#)

Range 0 to 4294967294

Default 2592000

Units seconds

Options infinite

Introduced 16.0.R1

Platforms All

reachable-time *number*

Synopsis Time the router is reachable by other hosts or nodes

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **reachable-time** *number*

Tree **reachable-time**

Range 0 to 3600000

Default 0

Units milliseconds

Introduced 16.0.R1

Platforms All

retransmit-time *number*

Synopsis Time to advertise neighbor advertisement messages

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **retransmit-time** *number*

Tree **retransmit-time**

Range 0 to 1800000

Default 0

Units milliseconds

Introduced 16.0.R1

Platforms All

router-lifetime *number*

Synopsis Lifetime value in neighbor advertisement messages

Context **configure service vprn** *string* **ipv6 router-advertisement interface** *reference* **router-lifetime** *number*

Tree **router-lifetime**

Range 0 | 4 to 9000

Default 1800

Units seconds

Introduced 16.0.R1

Platforms All

use-virtual-mac *boolean*

Synopsis Use VRRP virtual MAC address for advertisement message
Context **configure** [service vprn](#) *string* [ipv6 router-advertisement interface reference](#) **use-virtual-mac** *boolean*
Tree [use-virtual-mac](#)
Default false
Introduced 16.0.R1
Platforms All

isis [[isis-instance](#)] *number*

Synopsis Enter the **isis** list instance
Context **configure** [service vprn](#) *string* [isis](#) *number*
Tree [isis](#)
Introduced 16.0.R1
Platforms All

[isis-instance] *number*

Synopsis Instance ID for the IS-IS instance
Context **configure** [service vprn](#) *string* [isis](#) *number*
Tree [isis](#)
Range 0 to 127
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the IS-IS instance
Context **configure** [service vprn](#) *string* [isis](#) *number* **admin-state** *keyword*
Tree [admin-state](#)

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-passive-only *boolean*

Synopsis	Advertise prefixes that belong to passive interfaces
Context	configure service vprn <i>string</i> isis number advertise-passive-only <i>boolean</i>
Tree	advertise-passive-only
Default	false
Introduced	16.0.R1
Platforms	All

advertise-router-capability *keyword*

Synopsis	Router capabilities advertisement to neighbors
Context	configure service vprn <i>string</i> isis number advertise-router-capability <i>keyword</i>
Tree	advertise-router-capability
Options	area, as
Introduced	16.0.R1
Platforms	All

all-l1isis *string*

Synopsis	Destination MAC address for all L1 IS-IS routers
Context	configure service vprn <i>string</i> isis number all-l1isis <i>string</i>
Tree	all-l1isis
Default	01:80:C2:00:00:14
Introduced	16.0.R1
Platforms	All

all-l2isis *string*

Synopsis	Destination MAC address for all L2 IS-IS routers
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Context	configure service vprn string isis number all-l2isis string
Tree	all-l2isis
Default	01:80:C2:00:00:15
Introduced	16.0.R1
Platforms	All

area-address string

Synopsis	Area address portion of the NSAP address
Context	configure service vprn string isis number area-address string
Tree	area-address
String Length	2 to 38
Max. Instances	3
Introduced	16.0.R1
Platforms	All

authentication-check boolean

Synopsis	Perform authentication check to reject mismatch PDUs
Context	configure service vprn string isis number authentication-check boolean
Tree	authentication-check
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key string

Synopsis	Authentication key to verify PDUs sent from neighbors
Context	configure service vprn string isis number authentication-key string
Tree	authentication-key
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	configure service vprn <i>string</i> isis <i>number</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
Context	configure service vprn <i>string</i> isis <i>number</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

csnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS packets of the CSNP type
Context	configure service vprn <i>string</i> isis <i>number</i> csnp-authentication <i>boolean</i>
Tree	csnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

default-route-tag *number*

Synopsis	Route tag for the default route
Context	configure service vprn <i>string</i> isis <i>number</i> default-route-tag <i>number</i>
Tree	default-route-tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

export-limit

Synopsis	Enable the export-limit context
Context	configure service vprn string isis number export-limit
Tree	export-limit
Introduced	16.0.R1
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure service vprn string isis number export-limit log-percent number
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure service vprn string isis number export-limit number number
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure service vprn string isis number export-policy reference
Tree	export-policy
Description	This command configures export routing policies for the routes exported from the routing table to IS-IS. If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied.

Routing policies are created in the **configure router policy-options** context.

Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure service vprn <i>string</i> isis <i>number</i> graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable the Graceful Restart helper for IS-IS
Context	configure service vprn <i>string</i> isis <i>number</i> graceful-restart helper-mode <i>boolean</i>
Tree	helper-mode
Default	true
Introduced	16.0.R1
Platforms	All

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	configure service vprn <i>string</i> isis <i>number</i> hello-authentication <i>boolean</i>
Tree	hello-authentication
Default	true
Introduced	16.0.R1

Platforms All

hello-padding *keyword*

Synopsis IS-IS Hello message padding
Context **configure service vprn** *string isis number hello-padding keyword*
Tree [hello-padding](#)
Options adaptive, loose, strict, none
Introduced 16.0.R1
Platforms All

ignore-attached-bit *boolean*

Synopsis Ignore attached bit on received Layer 1 LSPs
Context **configure service vprn** *string isis number ignore-attached-bit boolean*
Tree [ignore-attached-bit](#)
Default false
Introduced 16.0.R1
Platforms All

ignore-lsp-errors *boolean*

Synopsis Ignore LSP packets with errors
Context **configure service vprn** *string isis number ignore-lsp-errors boolean*
Tree [ignore-lsp-errors](#)
Default false
Introduced 16.0.R1
Platforms All

ignore-narrow-metric *boolean*

Synopsis Ignore links with narrow metrics
Context **configure service vprn** *string isis number ignore-narrow-metric boolean*
Tree [ignore-narrow-metric](#)
Default false

Introduced 16.0.R1
Platforms All

iid-tlv *boolean*

Synopsis Use IID TLVs with IS-IS multi-instance
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* **iid-tlv** *boolean*
Tree [iid-tlv](#)
Default false
Introduced 16.0.R1
Platforms All

import-policy *reference*

Synopsis Import policy names for routes from IGP to route table
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* **import-policy** *reference*
Tree [import-policy](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

interface [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* **interface** *string*
Tree [interface](#)
Introduced 16.0.R1
Platforms All

[interface-name] *string*

Synopsis IP interface name

Context	configure service vprn <i>string isis number interface string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IS-IS interface
Context	configure service vprn <i>string isis number interface string admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure service vprn <i>string isis number interface string bfd-liveness</i>
Tree	bfd-liveness
Description	Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enable the ipv4 context
Context	configure service vprn <i>string isis number interface string bfd-liveness ipv4</i>
Tree	ipv4
Introduced	16.0.R1
Platforms	All

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> bfd-liveness ipv4 include-bfd-tlv <i>boolean</i>
Tree	include-bfd-tlv
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the ipv6 context
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> bfd-liveness ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> bfd-liveness ipv6 include-bfd-tlv <i>boolean</i>
Tree	include-bfd-tlv
Default	false
Introduced	16.0.R1
Platforms	All

csnp-interval *number*

Synopsis	Time interval between successive CSN PDUs sent
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> csnp-interval <i>number</i>
Tree	csnp-interval
Range	1 to 65535
Default	10
Units	seconds

Introduced 16.0.R1
Platforms All

default-instance *boolean*

Synopsis Allow non-MI capable router to establish an adjacency
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* **default-instance** *boolean*
Tree [default-instance](#)
Default false
Introduced 16.0.R1
Platforms All

hello-authentication *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication** *boolean*
Tree [hello-authentication](#)
Default true
Introduced 16.0.R1
Platforms All

hello-authentication-key *string*

Synopsis Authentication key or hash string for Hello PDUs
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication-key** *string*
Tree [hello-authentication-key](#)
String Length 1 to 366
Introduced 16.0.R1
Platforms All

hello-authentication-keychain *reference*

Synopsis Authentication keychain to use for the session
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication-keychain** *reference*
Tree [hello-authentication-keychain](#)

Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

hello-authentication-type *keyword*

Synopsis	Hello authentication type
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> hello-authentication-type <i>keyword</i>
Tree	hello-authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

interface-type *keyword*

Synopsis	Interface type to broadcast, point-to-point, or to be default
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> interface-type <i>keyword</i>
Tree	interface-type
Options	point-to-point, broadcast
Introduced	16.0.R1
Platforms	All

ipv4-multicast *boolean*

Synopsis	Enable IPv4 multicast routing for the interface
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Context	configure service vprn <i>string isis number interface string ipv4-multicast boolean</i>
Tree	ipv4-multicast
Default	true
Introduced	16.0.R1
Platforms	All

ipv6-unicast *boolean*

Synopsis	Enable IPv6 unicast routing for the interface
Context	configure service vprn <i>string isis number interface string ipv6-unicast boolean</i>
Tree	ipv6-unicast
Default	true
Introduced	16.0.R1
Platforms	All

level [[level-number](#)] *keyword*

Synopsis	Enter the level list instance
Context	configure service vprn <i>string isis number interface string level keyword</i>
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[level-number] *keyword*

Synopsis	ISIS protocol level number
Context	configure service vprn <i>string isis number interface string level keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hello-authentication-key *string*

Synopsis	Authentication key for Hello PDUs
Context	configure service vprn <i>string</i> isis number interface string level <i>keyword</i> hello-authentication-key <i>string</i>
Tree	hello-authentication-key
Description	This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match. If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

hello-authentication-keychain *reference*

Synopsis	Authentication keychain to use for the session
Context	configure service vprn <i>string</i> isis number interface string level <i>keyword</i> hello-authentication-keychain <i>reference</i>
Tree	hello-authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

hello-authentication-type *keyword*

Synopsis	Hello authentication enabled on the context
Context	configure service vprn <i>string</i> isis number interface string level <i>keyword</i> hello-authentication-type <i>keyword</i>
Tree	hello-authentication-type
Description	This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello authentication-key statement must also be included.
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Interval between Hello messages sent on this level
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 20000
Default	9
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-multiplier *number*

Synopsis	Hello messages missed from neighbor before router declares adjacency down
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-multiplier <i>number</i>
Tree	hello-multiplier
Range	2 to 100
Default	3
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

ipv4-multicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv4 multicast
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Context	configure service vprn <i>string isis number interface string level</i> keyword ipv4-multicast-metric number
Tree	ipv4-multicast-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv6-unicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv6 unicast
Context	configure service vprn <i>string isis number interface string level</i> keyword ipv6-unicast-metric number
Tree	ipv6-unicast-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	IS-IS interface metric applied for IPv4 unicast
Context	configure service vprn <i>string isis number interface string level</i> keyword metric number
Tree	metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Passive interface
Context	configure service vprn <i>string isis number interface string level</i> keyword passive boolean
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Router to become the designated router on a multi-access network
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> priority <i>number</i>
Tree	priority
Range	0 to 127
Default	64
Introduced	16.0.R1
Platforms	All

sd-offset *number*

Synopsis	Value of the signal degrade offset
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> sd-offset <i>number</i>
Tree	sd-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

sf-offset *number*

Synopsis	Value of the signal fail offset
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> sf-offset <i>number</i>
Tree	sf-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	IS-IS levels for this interface
Context	configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level-capability <i>keyword</i>
Tree	level-capability
Default	1/2
Options	1, 2, 1/2

Introduced 16.0.R1
Platforms All

load-balancing-weight *number*

Synopsis Load balancing weight
Context **configure** [service vprn](#) *string* [isis number](#) [interface](#) *string* [load-balancing-weight](#) *number*
Tree [load-balancing-weight](#)
Max. Range 0 to 4294967295
Introduced 16.0.R1
Platforms All

loopfree-alternate

Synopsis Enter the **loopfree-alternate** context
Context **configure** [service vprn](#) *string* [isis number](#) [interface](#) *string* [loopfree-alternate](#)
Tree [loopfree-alternate](#)
Introduced 16.0.R3
Platforms All

exclude *boolean*

Synopsis Enable/disable Loopfree Alternative at interface level.
Context **configure** [service vprn](#) *string* [isis number](#) [interface](#) *string* [loopfree-alternate](#) [exclude](#) *boolean*
Tree [exclude](#)
Default false
Introduced 16.0.R3
Platforms All

policy-map

Synopsis Enable the **policy-map** context
Context **configure** [service vprn](#) *string* [isis number](#) [interface](#) *string* [loopfree-alternate](#) [policy-map](#)
Tree [policy-map](#)
Introduced 16.0.R3

Platforms All

route-nh-template *reference*

Synopsis Route next hop policy template that is applied to interface

Context **configure** [service vprn](#) *string* [isis](#) *number* [interface](#) *string* [loopfree-alternate](#) [policy-map](#) [route-nh-template](#) *reference*

Tree [route-nh-template](#)

Reference **configure** [routing-options](#) [route-next-hop-policy](#) [template](#) *string*

Notes This element is mandatory.

Introduced 16.0.R3

Platforms All

lsp-pacing-interval *number*

Synopsis Interval for sending LSPs from interface

Context **configure** [service vprn](#) *string* [isis](#) *number* [interface](#) *string* [lsp-pacing-interval](#) *number*

Tree [lsp-pacing-interval](#)

Range 0 to 65535

Default 100

Units milliseconds

Introduced 16.0.R1

Platforms All

mesh-group

Synopsis Enable the **mesh-group** context

Context **configure** [service vprn](#) *string* [isis](#) *number* [interface](#) *string* [mesh-group](#)

Tree [mesh-group](#)

Introduced 16.0.R1

Platforms All

blocked

Synopsis Prevent the interface from flooding LSPs

Context	configure service vprn string isis number interface string mesh-group blocked
Tree	blocked
Notes	The following elements are part of a choice: blocked or value .
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Mesh group for the interface
Context	configure service vprn string isis number interface string mesh-group value number
Tree	value
Range	1 to 2000000000
Notes	The following elements are part of a choice: blocked or value .
Introduced	16.0.R1
Platforms	All

passive boolean

Synopsis	Passive interface
Context	configure service vprn string isis number interface string passive boolean
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

retransmit-interval number

Synopsis	Minimum time between LSP PDU retransmissions on point-to-point interface
Context	configure service vprn string isis number interface string retransmit-interval number
Tree	retransmit-interval
Range	1 to 65535
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

tag number

Synopsis	Route tag for IP address of interface
Context	configure service vprn string isis number interface string tag number
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

ipv4-multicast-routing keyword

Synopsis	IS-IS topology for IPv4 multicast routing
Context	configure service vprn string isis number ipv4-multicast-routing keyword
Tree	ipv4-multicast-routing
Default	native
Options	false, native, mt
Introduced	16.0.R1
Platforms	All

ipv4-routing boolean

Synopsis	Support IPv4 routing for IS-IS instance
Context	configure service vprn string isis number ipv4-routing boolean
Tree	ipv4-routing
Default	true
Introduced	16.0.R1
Platforms	All

ipv6-routing keyword

Synopsis	Routing topology for IPv6
Context	configure service vprn string isis number ipv6-routing keyword
Tree	ipv6-routing
Default	false
Options	false, native, mt

Introduced 16.0.R1
Platforms All

level [[level-number](#)] *keyword*

Synopsis Enter the **level** list instance
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [level](#) *keyword*
Tree [level](#)
Max. Instances 2
Introduced 16.0.R1
Platforms All

[level-number] *keyword*

Synopsis ISIS protocol level number
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [level](#) *keyword*
Tree [level](#)
Options 1, 2
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

advertise-router-capability *boolean*

Synopsis Allow router advertisement capabilities
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [level](#) *keyword* [advertise-router-capability](#) *boolean*
Tree [advertise-router-capability](#)
Default true
Introduced 16.0.R1
Platforms All

authentication-key *string*

Synopsis Authentication key to verify PDUs sent on the interface

Context	configure service vprn string isis number level keyword authentication-key string
Tree	authentication-key
Description	<p>This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface.</p> <p>Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The authentication-type command must also be included.</p>
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	configure service vprn string isis number level keyword authentication-keychain reference
Tree	authentication-keychain
Reference	configure system security keychains keychain string
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type to be used
Context	configure service vprn string isis number level keyword authentication-type keyword
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

csnp-authentication *boolean*

Synopsis	Enable authentication of CSNP IS-IS protocol packets
Context	configure service vprn string isis number level keyword csnp-authentication boolean
Tree	csnp-authentication
Default	true

Introduced 16.0.R1
Platforms All

default-ipv4-multicast-metric *number*

Synopsis Default metric for IPv4 unicast
Context **configure** [service vprn](#) *string isis number level* *keyword* [default-ipv4-multicast-metric](#) *number*
Tree [default-ipv4-multicast-metric](#)
Range 1 to 16777215
Default 10
Introduced 16.0.R1
Platforms All

default-ipv6-unicast-metric *number*

Synopsis Default metric for IPv6 unicast
Context **configure** [service vprn](#) *string isis number level* *keyword* [default-ipv6-unicast-metric](#) *number*
Tree [default-ipv6-unicast-metric](#)
Range 1 to 16777215
Default 10
Introduced 16.0.R1
Platforms All

default-metric *number*

Synopsis Default metric
Context **configure** [service vprn](#) *string isis number level* *keyword* [default-metric](#) *number*
Tree [default-metric](#)
Range 1 to 16777215
Default 10
Introduced 16.0.R1
Platforms All

external-preference *number*

Synopsis	External route preference for IS-IS level
Context	configure service vprn <i>string isis number level</i> keyword external-preference <i>number</i>
Tree	external-preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	configure service vprn <i>string isis number level</i> keyword hello-authentication <i>boolean</i>
Tree	hello-authentication
Default	true
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure service vprn <i>string isis number level</i> keyword hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interface participating in specific IS-IS level in SPF LFA computation
Context	configure service vprn <i>string isis number level</i> keyword loopfree-alternate-exclude <i>boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

lsp-mtu-size *number*



WARNING:

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	configure service vprn <i>string</i> isis <i>number</i> level <i>keyword</i> lsp-mtu-size <i>number</i>
Tree	lsp-mtu-size
Range	490 to 9778
Default	1492
Units	bytes
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	External route preference at level
Context	configure service vprn <i>string</i> isis <i>number</i> level <i>keyword</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

psnp-authentication *boolean*

Synopsis	Enable authentication on PSNP IS-IS protocol packets
Context	configure service vprn <i>string</i> isis <i>number</i> level <i>keyword</i> psnp-authentication <i>boolean</i>
Tree	psnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

wide-metrics-only *boolean*

Synopsis	Use wide metrics advertisements in the LSPs
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Context	configure service vprn <i>string isis number level keyword wide-metrics-only boolean</i>
Tree	wide-metrics-only
Default	false
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	Routing level for instance
Context	configure service vprn <i>string isis number level-capability keyword</i>
Tree	level-capability
Default	1/2
Options	1, 2, 1/2
Introduced	16.0.R1
Platforms	All

link-group [**link-group-name**] *string*

Synopsis	Enter the link-group list instance
Context	configure service vprn <i>string isis number link-group string</i>
Tree	link-group
Introduced	16.0.R1
Platforms	All

[link-group-name] *string*

Synopsis	Link group name for the IS-IS protocol
Context	configure service vprn <i>string isis number link-group string</i>
Tree	link-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

level [[level-number](#)] *keyword*

Synopsis	Enter the level list instance
Context	configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i>
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[level-number] *keyword*

Synopsis	ISIS protocol level number
Context	configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ipv4-multicast-metric-offset *number*

Synopsis	Offset value for the IPv4 multicast address family
Context	configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> ipv4-multicast-metric-offset <i>number</i>
Tree	ipv4-multicast-metric-offset
Range	1 to 16777215

Introduced 16.0.R1
Platforms All

ipv4-unicast-metric-offset *number*

Synopsis Offset value for the IPv4 unicast address family
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [link-group](#) *string* [level](#) *keyword* [ipv4-unicast-metric-offset](#) *number*
Tree [ipv4-unicast-metric-offset](#)
Range 1 to 16777215
Introduced 16.0.R1
Platforms All

ipv6-unicast-metric-offset *number*

Synopsis Offset value for the IPv6 unicast address family
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [link-group](#) *string* [level](#) *keyword* [ipv6-unicast-metric-offset](#) *number*
Tree [ipv6-unicast-metric-offset](#)
Range 1 to 16777215
Introduced 16.0.R1
Platforms All

member [[interface-name](#)] *reference*

Synopsis Add a list entry for **member**
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [link-group](#) *string* [level](#) *keyword* [member](#) *reference*
Tree [member](#)
Max. Instances 8
Introduced 16.0.R1
Platforms All

[interface-name] *reference*

Synopsis Interface name for the associated link group

Context	configure service vprn <i>string isis number link-group string level keyword member reference</i>
Tree	member
Reference	configure service vprn <i>string isis number interface string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

oper-members *number*

Synopsis	Minimum number of operational links
Context	configure service vprn <i>string isis number link-group string level keyword oper-members number</i>
Tree	oper-members
Range	1 to 8
Introduced	16.0.R1
Platforms	All

revert-members *number*

Synopsis	Minimum number of operational links to return link group to normal state and remove offsets
Context	configure service vprn <i>string isis number link-group string level keyword revert-members number</i>
Tree	revert-members
Range	1 to 8
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure service vprn <i>string isis number loopfree-alternate</i>
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

exclude

Synopsis	Enter the exclude context
Context	configure service vprn string isis number loopfree-alternate exclude
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure service vprn string isis number loopfree-alternate exclude prefix-policy reference
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

lsp-lifetime *number*



WARNING:

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	Amount of time during which an LSP is considered valid
Context	configure service vprn string isis number lsp-lifetime number
Tree	lsp-lifetime
Range	350 to 65535
Default	1200
Units	seconds

Introduced 16.0.R1
Platforms All

lsp-minimum-remaining-lifetime *number*

Synopsis Minimum value for the Remaining Lifetime of an LSP
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* **lsp-minimum-remaining-lifetime** *number*
Tree [lsp-minimum-remaining-lifetime](#)
Range 350 to 65535
Units seconds
Introduced 19.7.R1
Platforms All

lsp-mtu-size *number*



WARNING:

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis LSP MTU size
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* **lsp-mtu-size** *number*
Tree [lsp-mtu-size](#)
Range 490 to 9778
Default 1492
Units bytes
Introduced 16.0.R1
Platforms All

lsp-refresh

Synopsis Enter the **lsp-refresh** context
Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* **lsp-refresh**
Tree [lsp-refresh](#)
Introduced 16.0.R1
Platforms All

half-lifetime *boolean*

Synopsis	Set the refresh interval to always be half the LSP lifetime
Context	configure service vprn <i>string isis number lsp-refresh half-lifetime boolean</i>
Tree	half-lifetime
Default	true
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Refresh timer interval
Context	configure service vprn <i>string isis number lsp-refresh interval number</i>
Tree	interval
Range	150 to 65535
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	All

mru-mismatch-detection *boolean*

Synopsis	Enable detection of MRU mismatch
Context	configure service vprn <i>string isis number mru-mismatch-detection boolean</i>
Tree	mru-mismatch-detection
Description	<p>When configured to true, this command verifies that the received IS-IS Hello (IIH) packet size does not exceed the configured maximum port MTU size. The received IIH packet is dropped when its size exceeds the maximum port MTU size.</p> <p>When configured to false, the IS-IS router instance will not drop oversized IIH packets.</p> <p>By default, FP-based hardware can receive oversized packets but it will not originate them.</p>
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multi-topology

Synopsis	Enable the multi-topology context
Context	configure service vprn string isis number multi-topology
Tree	multi-topology
Introduced	16.0.R1
Platforms	All

ipv4-multicast *boolean*

Synopsis	Support IPv4 topology (MT3)
Context	configure service vprn string isis number multi-topology ipv4-multicast boolean
Tree	ipv4-multicast
Default	false
Introduced	16.0.R1
Platforms	All

ipv6-unicast *boolean*

Synopsis	Support multi-topology TLVs
Context	configure service vprn string isis number multi-topology ipv6-unicast boolean
Tree	ipv6-unicast
Default	false
Introduced	16.0.R1
Platforms	All

multicast-import

Synopsis	Enter the multicast-import context
Context	configure service vprn string isis number multicast-import
Tree	multicast-import
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Submit IPv4 routes into the multicast RPF of the RTM
Context	configure service vprn string isis number multicast-import ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

overload

Synopsis	Enable the overload context
Context	configure service vprn string isis number overload
Tree	overload
Introduced	16.0.R1
Platforms	All

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	configure service vprn string isis number overload max-metric <i>boolean</i>
Tree	max-metric
Default	false
Introduced	16.0.R1
Platforms	All

overload-export-external *boolean*

Synopsis	Advertise the external routes when router is in overloaded
Context	configure service vprn string isis number overload-export-external <i>boolean</i>
Tree	overload-export-external
Default	false
Introduced	16.0.R1
Platforms	All

overload-export-interlevel *boolean*

Synopsis	Advertise the inter-level routes when router is overloaded
Context	configure service vprn <i>string isis number</i> overload-export-interlevel <i>boolean</i>
Tree	overload-export-interlevel
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure service vprn <i>string isis number</i> overload-on-boot
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	configure service vprn <i>string isis number</i> overload-on-boot max-metric <i>boolean</i>
Tree	max-metric
Default	false
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state after reboot
Context	configure service vprn <i>string isis number</i> overload-on-boot timeout <i>number</i>
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

poi-tlv *boolean*

Synopsis	Purge Originator Identification TLV
Context	configure service vprn <i>string</i> isis <i>number</i> poi-tlv <i>boolean</i>
Tree	poi-tlv
Default	false
Introduced	16.0.R1
Platforms	All

prefix-attributes-tlv *boolean*

Synopsis	Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information
Context	configure service vprn <i>string</i> isis <i>number</i> prefix-attributes-tlv <i>boolean</i>
Tree	prefix-attributes-tlv
Default	false
Introduced	16.0.R1
Platforms	All

prefix-limit

Synopsis	Enable the prefix-limit context
Context	configure service vprn <i>string</i> isis <i>number</i> prefix-limit
Tree	prefix-limit
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Maximum number of prefixes for IS-IS instance
Context	configure service vprn <i>string</i> isis <i>number</i> prefix-limit limit <i>number</i>
Tree	limit
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

log-only *boolean*

Synopsis Send warning message when the prefix limit is reached
Context **configure service vprn** *string isis number prefix-limit log-only boolean*
Tree [log-only](#)
Default false
Introduced 16.0.R1
Platforms All

overload-timeout (*number | keyword*)

Synopsis Time router remains in overload after prefix limit is exceeded before restarting
Context **configure service vprn** *string isis number prefix-limit overload-timeout (number | keyword)*
Tree [overload-timeout](#)
Range 1 to 1800
Default forever
Units seconds
Options forever
Introduced 16.0.R1
Platforms All

warning-threshold *number*

Synopsis Threshold value to trigger a warning message to be sent
Context **configure service vprn** *string isis number prefix-limit warning-threshold number*
Tree [warning-threshold](#)
Range 0 to 100
Default 0
Units percent
Introduced 16.0.R1
Platforms All

psnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type
Context	configure service vprn <i>string</i> isis <i>number</i> psnp-authentication <i>boolean</i>
Tree	psnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

reference-bandwidth *number*

Synopsis	Reference bandwidth for bandwidth relative costing
Context	configure service vprn <i>string</i> isis <i>number</i> reference-bandwidth <i>number</i>
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the rib-priority context
Context	configure service vprn <i>string</i> isis <i>number</i> rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the high context
Context	configure service vprn <i>string</i> isis <i>number</i> rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	List used to select routes processed at higher priority through OSPF route calculation process
Context	configure service vprn <i>string</i> isis number rib-priority high prefix-list <i>reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list <i>string</i>
Notes	The following elements are part of a choice: prefix-list or tag .
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Tag value that is used to match IS-IS routes
Context	configure service vprn <i>string</i> isis number rib-priority high tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Notes	The following elements are part of a choice: prefix-list or tag .
Introduced	16.0.R1
Platforms	All

router-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the ISIS instance
Context	configure service vprn <i>string</i> isis number router-id <i>string</i>
Tree	router-id
Introduced	16.0.R1
Platforms	All

standard-multi-instance *boolean*

Synopsis	Enable RFC standards compliant multi-instance behavior
Context	configure service vprn <i>string</i> isis number standard-multi-instance <i>boolean</i>

Tree	standard-multi-instance
Default	false
Introduced	16.0.R1
Platforms	All

strict-adjacency-check *boolean*

Synopsis	Enable strict checking of address families for IS-IS adjacencies
Context	configure service vprn <i>string</i> isis <i>number</i> strict-adjacency-check <i>boolean</i>
Tree	strict-adjacency-check
Default	false
Introduced	16.0.R1
Platforms	All

summary-address [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the summary-address list instance
Context	configure service vprn <i>string</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	summary-address
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for the summary address
Context	configure service vprn <i>string</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	summary-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	IS-IS level for the summary address
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Context	configure service vprn <i>string isis number summary-address (ipv4-prefix ipv6-prefix) level-capability keyword</i>
Tree	level-capability
Default	1/2
Options	1, 2, 1/2
Introduced	16.0.R1
Platforms	All

route-tag *number*

Synopsis	Route tag assigned to the summary address
Context	configure service vprn <i>string isis number summary-address (ipv4-prefix ipv6-prefix) route-tag number</i>
Tree	route-tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

suppress-attached-bit *boolean*

Synopsis	Allow IS-IS to suppress setting attached bit on LSPs
Context	configure service vprn <i>string isis number suppress-attached-bit boolean</i>
Tree	suppress-attached-bit
Default	false
Introduced	16.0.R1
Platforms	All

system-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	System ID
Context	configure <i>service vprn string isis number system-id string</i>
Tree	<i>system-id</i>
String Length	14
Default	0000.0000.0000
Introduced	16.0.R1
Platforms	All

timers

Synopsis	Enter the timers context
Context	configure <i>service vprn string isis number timers</i>
Tree	<i>timers</i>
Introduced	16.0.R1
Platforms	All

lsp-wait

Synopsis	Enter the lsp-wait context
Context	configure <i>service vprn string isis number timers lsp-wait</i>
Tree	<i>lsp-wait</i>
Introduced	16.0.R1
Platforms	All

lsp-initial-wait *number*

Synopsis	Initial LSP generation delay
Context	configure <i>service vprn string isis number timers lsp-wait lsp-initial-wait number</i>
Tree	<i>lsp-initial-wait</i>
Range	10 to 100000
Default	10
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsp-max-wait *number*

Synopsis	Maximum time between two consecutive LSP occurrences
Context	configure service vprn string isis number timers lsp-wait lsp-max-wait number
Tree	lsp-max-wait
Range	10 to 120000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsp-second-wait *number*

Synopsis	Delay between first and second LSP generation
Context	configure service vprn string isis number timers lsp-wait lsp-second-wait number
Tree	lsp-second-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the spf-wait context
Context	configure service vprn string isis number timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after topology change
Context	configure service vprn string isis number timers spf-wait spf-initial-wait number
Tree	spf-initial-wait

Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Maximum interval amid two consecutive SPF calculations
Context	configure service vprn <i>string</i> isis <i>number</i> timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Default	10000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between first and second SPF calculations
Context	configure service vprn <i>string</i> isis <i>number</i> timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

unicast-import

Synopsis	Enter the unicast-import context
Context	configure service vprn <i>string</i> isis <i>number</i> unicast-import
Tree	unicast-import
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Submit IPv4 routes into unicast RTM
Context	configure service vprn <i>string isis number unicast-import ipv4 boolean</i>
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Submit IPv6 routes into unicast RTM
Context	configure service vprn <i>string isis number unicast-import ipv6 boolean</i>
Tree	ipv6
Default	true
Introduced	16.0.R1
Platforms	All

l2tp

Synopsis	Enable the l2tp context
Context	configure service vprn <i>string l2tp</i>
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of L2TP
Context	configure service vprn <i>string l2tp admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding *keyword*

Synopsis	Attribute of the Value Pair (AVP) hiding algorithm
Context	configure service vprn string l2tp avp-hiding keyword
Tree	avp-hiding
Options	sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *boolean*

Synopsis	Use challenge-response authentication
Context	configure service vprn string l2tp challenge boolean
Tree	challenge
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	configure service vprn string l2tp destruct-timeout number
Tree	destruct-timeout
Range	60 to 86400
Default	60
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-tunnel

Synopsis	Enter the ethernet-tunnel context
Context	configure service vprn string l2tp ethernet-tunnel
Tree	ethernet-tunnel
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reconnect-timeout (*number* | *keyword*)

Synopsis Timeout for a session setup retry
Context **configure service vprn** *string* **l2tp ethernet-tunnel reconnect-timeout** (*number* | *keyword*)
Tree **reconnect-timeout**
Range 10 to 3600
Default infinite
Units seconds
Options infinite
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-avps

Synopsis Enter the **exclude-avps** context
Context **configure service vprn** *string* **l2tp exclude-avps**
Tree **exclude-avps**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-number *boolean*

Synopsis Calling Number AVP to exclude
Context **configure service vprn** *string* **l2tp exclude-avps calling-number** *boolean*
Tree **calling-number**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial-rx-lcp-conf-req *boolean*

Synopsis Exclude the Initial Received LCP CONFREQ AVP
Context **configure service vprn** *string* **l2tp exclude-avps initial-rx-lcp-conf-req** *boolean*

Tree	initial-rx-lcp-conf-req
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure service vprn <i>string</i> l2tp failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-max-session-lifetime *number*

Synopsis	Subset of sessions that this system attempts to synchronize in the Session State Synchronization phase
Context	configure service vprn <i>string</i> l2tp failover recovery-max-session-lifetime <i>number</i>
Tree	recovery-max-session-lifetime
Range	2 to 4294967295
Default	2
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	configure service vprn <i>string</i> l2tp failover recovery-method <i>keyword</i>
Tree	recovery-method
Default	mcs
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	configure service vprn string l2tp failover recovery-time number
Tree	recovery-time
Range	0 to 900
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp [*id*] *reference*

Synopsis	Enter the track-srrp list instance
Context	configure service vprn string l2tp failover track-srrp reference
Tree	track-srrp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *reference*

Synopsis	SRRP instance ID for multi-chassis redundancy failover
Context	configure service vprn string l2tp failover track-srrp reference
Tree	track-srrp
Reference	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync track-srrp number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer *reference*

Synopsis	Multi-chassis peer address
Context	configure service vprn string l2tp failover track-srrp reference peer reference
Tree	peer

Reference	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone)
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

Synopsis	Synchronization tag on the multi-chassis peer
Context	configure service vprn <i>string</i> l2tp failover track-srrp reference sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group [[tunnel-group-name](#)] *string*

Synopsis	Enter the group list instance
Context	configure service vprn <i>string</i> l2tp group <i>string</i>
Tree	group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[tunnel-group-name](#)] *string*

Synopsis	Tunnel group name
Context	configure service vprn <i>string</i> l2tp group <i>string</i>
Tree	group
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the L2TP tunnel group
Context	configure service vprn <i>string</i> l2tp group <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding *keyword*

Synopsis	The AVP hiding algorithm
Context	configure service vprn <i>string</i> l2tp group <i>string</i> avp-hiding <i>keyword</i>
Tree	avp-hiding
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *keyword*

Synopsis	Enable use of challenge-response authentication
Context	configure service vprn <i>string</i> l2tp group <i>string</i> challenge <i>keyword</i>
Tree	challenge
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> l2tp group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	configure service vprn <i>string</i> l2tp group <i>string</i> destruct-timeout <i>number</i>
Tree	destruct-timeout
Range	60 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-tunnel

Synopsis	Enter the ethernet-tunnel context
Context	configure service vprn <i>string</i> l2tp group <i>string</i> ethernet-tunnel
Tree	ethernet-tunnel
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reconnect-timeout (*number* | *keyword*)

Synopsis	Timeout for a session setup retry at group level
Context	configure service vprn <i>string</i> l2tp group <i>string</i> ethernet-tunnel reconnect-timeout (<i>number</i> <i>keyword</i>)
Tree	reconnect-timeout
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure service vprn <i>string</i> l2tp group <i>string</i> failover
Tree	failover

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis Recovery method of the sequence numbers after failover
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [failover recovery-method](#) *keyword*
Tree [recovery-method](#)
Options mcs, recovery-tunnel
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis Time requested from the L2TP peer before assuming failover as failed
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [failover recovery-time](#) *number*
Tree [recovery-time](#)
Range 0 to 900
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval (*number* | *keyword*)

Synopsis Hello interval
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [hello-interval](#) (*number* | *keyword*)
Tree [hello-interval](#)
Range 10 to 3600
Units seconds
Options infinite
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout (*number* | *keyword*)

Synopsis	Idle timeout
Context	configure service vprn <i>string</i> l2tp group <i>string</i> idle-timeout (<i>number</i> <i>keyword</i>)
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the l2tpv3 context
Context	configure service vprn <i>string</i> l2tp group <i>string</i> l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookie-length (*number* | *keyword*)

Synopsis	Cookie field length
Context	configure service vprn <i>string</i> l2tp group <i>string</i> l2tpv3 cookie-length (<i>number</i> <i>keyword</i>)
Tree	cookie-length
Range	4 8
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

digest-type *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	configure service vprn <i>string</i> l2tp group <i>string</i> l2tpv3 digest-type <i>keyword</i>
Tree	digest-type
Options	none, md5, sha1
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nonce-length *number*

Synopsis Length for the local L2TPv3 nonce (random number)
Context **configure service vpn** *string* **l2tp group** *string* **l2tpv3 nonce-length** *number*
Tree [nonce-length](#)
Range 0 | 16 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis L2TPv3 password
Context **configure service vpn** *string* **l2tp group** *string* **l2tpv3 password** *string*
Tree [password](#)
String Length 1 to 115
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust (*number* | *keyword*)

Synopsis TCP maximum segment size (MSS) on private network
Context **configure service vpn** *string* **l2tp group** *string* **l2tpv3 private-tcp-mss-adjust** (*number* | *keyword*)
Tree [private-tcp-mss-adjust](#)
Range 512 to 9000
Units octets
Options disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust (*number* | *keyword*)

Synopsis TCP Maximum Segment Size (MSS) on public network

Context	configure service vprn <i>string</i> l2tp group <i>string</i> l2tpv3 public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pw-cap-list

Synopsis	Enter the pw-cap-list context
Context	configure service vprn <i>string</i> l2tp group <i>string</i> l2tpv3 pw-cap-list
Tree	pw-cap-list
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise Ethernet pseudowire type
Context	configure service vprn <i>string</i> l2tp group <i>string</i> l2tpv3 pw-cap-list ethernet <i>boolean</i>
Tree	ethernet
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-vlan *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise Ethernet VLAN pseudowire type
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Context **configure service vprn** *string* **l2tp group** *string* **l2tpv3 pw-cap-list ethernet-vlan** *boolean*
Tree [ethernet-vlan](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rem-router-id *string*

Synopsis Filter on remote router ID
Context **configure service vprn** *string* **l2tp group** *string* **l2tpv3 rem-router-id** *string*
Tree [rem-router-id](#)
Default 0.0.0.0
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-password-change *boolean*

Synopsis Enable tracking of password changes
Context **configure service vprn** *string* **l2tp group** *string* **l2tpv3 track-password-change** *boolean*
Tree [track-password-change](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis Enter the **lac** context
Context **configure service vprn** *string* **l2tp group** *string* **lac**
Tree [lac](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *keyword*

Synopsis DF (do not fragment) bit in data traffic transmitted as LAC

Context	configure service vprn <i>string</i> l2tp group <i>string</i> lac df-bit <i>keyword</i>
Tree	df-bit
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

Ins

Synopsis	Enter the Ins context
Context	configure service vprn <i>string</i> l2tp group <i>string</i> Ins
Tree	Ins
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

Ins-group *reference*

Synopsis	ISA LNS group
Context	configure service vprn <i>string</i> l2tp group <i>string</i> Ins Ins-group <i>reference</i>
Tree	Ins-group
Reference	configure isa Ins-group <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	configure service vprn <i>string</i> l2tp group <i>string</i> Ins load-balance-method <i>keyword</i>
Tree	load-balance-method
Default	per-session
Options	per-session, per-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the mlppp context
Context	configure service vprn string l2tp group string lns mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel group
Context	configure service vprn string l2tp group string lns mlppp admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the endpoint context
Context	configure service vprn string l2tp group string lns mlppp endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ip (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
Context	configure service vprn string l2tp group string lns mlppp endpoint ip (ipv4-address keyword)
Tree	ip
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mac (*mac-address* | *keyword*)

Synopsis	Endpoint ID as a MAC address
Context	configure service vprn <i>string</i> l2tp group <i>string</i> lns mlppp endpoint mac (<i>mac-address</i> <i>keyword</i>)
Tree	mac
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

interleave *boolean*

Synopsis	Enable link fragmentation and interleaving
Context	configure service vprn <i>string</i> l2tp group <i>string</i> lns mlppp interleave <i>boolean</i>
Tree	interleave
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-fragment-delay (*number* | *keyword*)

Synopsis	Maximum fragment delay caused by transmission on a link
Context	configure service vprn <i>string</i> l2tp group <i>string</i> lns mlppp max-fragment-delay (<i>number</i> <i>keyword</i>)
Tree	max-fragment-delay
Range	5 to 1000
Default	no-fragmentation
Units	milliseconds
Options	no-fragmentation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-links *number*

Synopsis	Maximum MLPPP links
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Context	configure service vprn <i>string</i> l2tp group <i>string</i> lns mlppp max-links <i>number</i>
Tree	max-links
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

reassemble-timeout *number*

Synopsis	Reassembly timeout
Context	configure service vprn <i>string</i> l2tp group <i>string</i> lns mlppp reassemble-timeout <i>number</i>
Tree	reassemble-timeout
Range	100 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

short-sequence-numbers *boolean*

Synopsis	Request a peer to send short sequence numbers
Context	configure service vprn <i>string</i> l2tp group <i>string</i> lns mlppp short-sequence-numbers <i>boolean</i>
Tree	short-sequence-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ppp

Synopsis	Enter the ppp context
Context	configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	configure service vpn <i>string</i> l2tp group <i>string</i> ins ppp authentication <i>keyword</i>
Tree	authentication
Default	pref-chap
Options	pap, chap, pref-chap, pref-pap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	configure service vpn <i>string</i> l2tp group <i>string</i> ins ppp authentication-policy <i>string</i>
Tree	authentication-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

chap-challenge-length

Synopsis	Enter the chap-challenge-length context
Context	configure service vpn <i>string</i> l2tp group <i>string</i> ins ppp chap-challenge-length
Tree	chap-challenge-length
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the PPP CHAP challenge length
Context	configure service vpn <i>string</i> l2tp group <i>string</i> ins ppp chap-challenge-length <i>end</i> <i>number</i>
Tree	end
Range	8 to 64
Default	64

Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the PPP CHAP challenge length
Context	configure service vprn string l2tp group string lns ppp chap-challenge-length start number
Tree	start
Range	8 to 64
Default	32
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-group-interface

Synopsis	Enter the default-group-interface context
Context	configure service vprn string l2tp group string lns ppp default-group-interface
Tree	default-group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface string

Synopsis	Group interface
Context	configure service vprn string l2tp group string lns ppp default-group-interface interface string
Tree	interface
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

Synopsis	Administrative service name
Context	configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp default-group-interface service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *boolean*

Synopsis	Allow IPCP subnet negotiation for PPPoE hosts
Context	configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp ipcp-subnet-negotiation <i>boolean</i>
Tree	ipcp-subnet-negotiation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the keepalive context
Context	configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPP keepalive interval
Context	configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp keepalive interval <i>number</i>
Tree	interval
Range	10 to 300
Default	30
Units	seconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis PPP keepalive multiplier
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [lns ppp keepalive multiplier](#) *number*
Tree [multiplier](#)
Range 1 to 5
Default 3
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-force-ack-accm *boolean*

Synopsis Force acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [lns ppp lcp-force-ack-accm](#) *boolean*
Tree [lcp-force-ack-accm](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-magic-numbers *boolean*

Synopsis Check magic number in echo request and reply messages
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [lns ppp lcp-ignore-magic-numbers](#) *boolean*
Tree [lcp-ignore-magic-numbers](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis Maximum PPP MTU size
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [lns ppp mtu](#) *number*

Tree	mtu
Range	512 to 9212
Default	1500
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-authentication *boolean*

Synopsis	Use authentication AVPs that are received from LAC
Context	configure service vprn string l2tp group string lns ppp proxy-authentication <i>boolean</i>
Tree	proxy-authentication
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-lcp *boolean*

Synopsis	Proxy LCP AVPs that are received from LAC
Context	configure service vprn string l2tp group string lns ppp proxy-lcp <i>boolean</i>
Tree	proxy-lcp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reject-disabled-ncp *boolean*

Synopsis	Force LCP Protocol Reject for IPv6CP Configure Request
Context	configure service vprn string l2tp group string lns ppp reject-disabled-ncp <i>boolean</i>
Tree	reject-disabled-ncp
Default	false
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db string

Synopsis	Local user database for PPP PAP and CHAP authentication
Context	configure service vprn string l2tp group string lns ppp user-db string
Tree	user-db
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address string

Synopsis	Local address
Context	configure service vprn string l2tp group string local-address string
Tree	local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name string

Synopsis	Local host name used to distinguish tunnels
Context	configure service vprn string l2tp group string local-name string
Tree	local-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab number

Synopsis	Maximum retries for established tunnels
Context	configure service vprn string l2tp group string max-retries-estab number
Tree	max-retries-estab
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis	Maximum retries for unestablished tunnels
Context	configure service vpn <i>string</i> l2tp group <i>string</i> max-retries-not-estab <i>number</i>
Tree	max-retries-not-estab
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password between L2TP LAC and LNS
Context	configure service vpn <i>string</i> l2tp group <i>string</i> password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Protocol version
Context	configure service vpn <i>string</i> l2tp group <i>string</i> protocol <i>keyword</i>
Tree	protocol
Default	v2
Options	v2, v3, v3draft
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	configure service vpn <i>string</i> l2tp group <i>string</i> radius-accounting-policy <i>reference</i>
Tree	radius-accounting-policy

Reference **configure** [aaa radius l2tp-accounting-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis L2TP receive window size
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [receive-window-size](#) *number*
Tree [receive-window-size](#)
Range 4 to 1024
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-assign-method *keyword*

Synopsis Session assignment method
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [session-assign-method](#) *keyword*
Tree [session-assign-method](#)
Options existing-first, weighted, weighted-random
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit (*number* | *keyword*)

Synopsis Session limit
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [session-limit](#) (*number* | *keyword*)
Tree [session-limit](#)
Range 1 to 250000
Options unlimited
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel [[tunnel-name](#)] *string*

Synopsis Enter the **tunnel** list instance

Context	configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i>
Tree	tunnel
Max. Instances	31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[tunnel-name] *string*

Synopsis	Tunnel name
Context	configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i>
Tree	tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the L2TP tunnel
Context	configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-establish *boolean*

Synopsis	Allow the tunnel to be automatically set up by the system
Context	configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> auto-establish <i>boolean</i>
Tree	auto-establish
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding *keyword*

Synopsis	The AVP hiding algorithm
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> avp-hiding <i>keyword</i>
Tree	avp-hiding
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *keyword*

Synopsis	Enable use of challenge-response authentication
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> challenge <i>keyword</i>
Tree	challenge
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> destruct-timeout <i>number</i>
Tree	destruct-timeout
Range	60 to 86400
Units	seconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis Enter the **failover** context

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **failover**

Tree **failover**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis Recovery method of the sequence numbers after failover

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **failover recovery-method** *keyword*

Tree **recovery-method**

Options mcs, recovery-tunnel

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis Time requested from the L2TP peer before assuming failover as failed

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **failover recovery-time** *number*

Tree **recovery-time**

Range 0 to 900

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval (*number* | *keyword*)

Synopsis Hello interval

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **hello-interval** (*number* | *keyword*)

Tree	hello-interval
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout (*number* | *keyword*)

Synopsis	Idle timeout
Context	configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> idle-timeout (<i>number</i> <i>keyword</i>)
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the l2tpv3 context
Context	configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust (*number* | *keyword*)

Synopsis	TCP maximum segment size (MSS) on private network
Context	configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> l2tpv3 private-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	private-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust (*number | keyword*)

Synopsis TCP maximum segment size (MSS) on public network
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* [l2tpv3 public-tcp-mss-adjust](#) (*number | keyword*)
Tree [public-tcp-mss-adjust](#)
Range 512 to 9000
Units octets
Options disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis Enter the **lac** context
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* [lac](#)
Tree [lac](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *keyword*

Synopsis DF (do not fragment) bit in data traffic transmitted as LAC
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* [lac df-bit](#) *keyword*
Tree [df-bit](#)
Options false, true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lns

Synopsis Enter the **lns** context
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* [lns](#)

Tree	Ins
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

Ins-group *reference*

Synopsis	ISA LNS group
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins Ins-group <i>reference</i>
Tree	Ins-group
Reference	configure isa Ins-group <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins load-balance-method <i>keyword</i>
Tree	load-balance-method
Options	per-session, per-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the mlppp context
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins mlppp admin-state <i>keyword</i>

Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the endpoint context
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ip (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint ip (<i>ipv4-address</i> <i>keyword</i>)
Tree	ip
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mac (*mac-address* | *keyword*)

Synopsis	Endpoint ID as a MAC address
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint mac (<i>mac-address</i> <i>keyword</i>)
Tree	mac
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

interleave *keyword*

Synopsis	Use of Link fragmentation and interleaving
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp interleave <i>keyword</i>
Tree	interleave
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-fragment-delay *number*

Synopsis	Maximum fragment delay caused by transmission on a link
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp max-fragment-delay <i>number</i>
Tree	max-fragment-delay
Range	5 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-links *number*

Synopsis	Maximum MLPPP links
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp max-links <i>number</i>
Tree	max-links
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

reassemble-timeout *number*

Synopsis	Reassembly timeout
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp reassemble-timeout <i>number</i>
Tree	reassemble-timeout
Range	100 1000

Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

short-sequence-numbers *keyword*

Synopsis	Request a peer to send short sequence numbers
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp short-sequence-numbers <i>keyword</i>
Tree	short-sequence-numbers
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ppp

Synopsis	Enter the ppp context
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp authentication <i>keyword</i>
Tree	authentication
Options	pap, chap, pref-chap, pref-pap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
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Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp authentication-policy <i>string</i>
Tree	authentication-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

chap-challenge-length

Synopsis	Enter the chap-challenge-length context
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length
Tree	chap-challenge-length
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the PPP CHAP challenge length
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length end <i>number</i>
Tree	end
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the PPP CHAP challenge length
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length start <i>number</i>
Tree	start
Range	8 to 64
Units	octets
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-group-interface

Synopsis Enter the **default-group-interface** context

Context **configure service vprn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp default-group-interface**

Tree [default-group-interface](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *string*

Synopsis Group interface

Context **configure service vprn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp default-group-interface interface** *string*

Tree [interface](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

Synopsis Administrative service name

Context **configure service vprn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp default-group-interface service-name** *string*

Tree [service-name](#)

String Length 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *keyword*

Synopsis Use of IPCP subnet negotiation for PPPoE hosts

Context **configure service vprn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp ipcp-subnet-negotiation** *keyword*

Tree [ipcp-subnet-negotiation](#)

Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the keepalive context
Context	configure service vprn string l2tp group string tunnel string lns ppp keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPP keepalive interval
Context	configure service vprn string l2tp group string tunnel string lns ppp keepalive interval number
Tree	interval
Range	10 to 300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	PPP keepalive multiplier
Context	configure service vprn string l2tp group string tunnel string lns ppp keepalive multiplier number
Tree	multiplier
Range	1 to 5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-force-ack-accm *keyword*

Synopsis	Forced acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp lcp-force-ack-accm <i>keyword</i>
Tree	lcp-force-ack-accm
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-magic-numbers *keyword*

Synopsis	Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp lcp-ignore-magic-numbers <i>keyword</i>
Tree	lcp-ignore-magic-numbers
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	Maximum PPP MTU size
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp mtu <i>number</i>
Tree	mtu
Range	512 to 9212
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-authentication *keyword*

Synopsis	Authentication AVPs that are received from LAC
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp proxy-authentication <i>keyword</i>

Tree	proxy-authentication
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-lcp *keyword*

Synopsis	Use the Proxy LCP AVPs that are received from the LAC
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp proxy-lcp <i>keyword</i>
Tree	proxy-lcp
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reject-disabled-ncp *keyword*

Synopsis	Force LCP Project Reject for IPv6CP Configure Request
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp reject-disabled-ncp <i>keyword</i>
Tree	reject-disabled-ncp
Options	false, true
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis	Local user database for PPP PAP and CHAP authentication
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp user-db <i>string</i>
Tree	user-db
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis	Local address
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Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **local-address** *string*
Tree **local-address**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis Local host name used to distinguish tunnels
Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **local-name** *string*
Tree **local-name**
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis Maximum retries for established tunnels
Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **max-retries-estab** *number*
Tree **max-retries-estab**
Range 2 to 7
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis Maximum retries for unestablished tunnels
Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **max-retries-not-estab** *number*
Tree **max-retries-not-estab**
Range 2 to 7
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis Password between L2TP LAC and LNS

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **password** *string*
Tree **password**
String Length 1 to 115
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer *string*

Synopsis Peer address
Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **peer** *string*
Tree **peer**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis Tunnel preference number with its group
Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **preference** *number*
Tree **preference**
Range 0 to 16777215
Default 50
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis RADIUS accounting policy
Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **radius-accounting-policy** *reference*
Tree **radius-accounting-policy**
Reference **configure aaa radius** **l2tp-accounting-policy** *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> receive-window-size <i>number</i>
Tree	receive-window-size
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-name *string*

Synopsis	Remote tunnel host name
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> remote-name <i>string</i>
Tree	remote-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit (*number* | *keyword*)

Synopsis	L2TP session limit for each tunnel of this router
Context	configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> session-limit (<i>number</i> <i>keyword</i>)
Tree	session-limit
Range	1 to 65534
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-session-limit *number*

Synopsis	L2TP session limit for each group of this router
Context	configure service vprn <i>string</i> l2tp group-session-limit <i>number</i>
Tree	group-session-limit
Range	1 to 250000
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval (*number* | *keyword*)

Synopsis Hello interval
Context **configure service vprn** *string* **l2tp hello-interval** (*number* | *keyword*)
Tree **hello-interval**
Range 10 to 3600
Default 300
Units seconds
Options infinite
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout (*number* | *keyword*)

Synopsis Idle timeout
Context **configure service vprn** *string* **l2tp idle-timeout** (*number* | *keyword*)
Tree **idle-timeout**
Range 0 to 3600
Default infinite
Units seconds
Options infinite
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-avps

Synopsis Enter the **ignore-avps** context
Context **configure service vprn** *string* **l2tp ignore-avps**
Tree **ignore-avps**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sequencing-required *boolean*

Synopsis	Ignore Sequencing Required AVP
Context	configure service vprn string l2tp ignore-avps sequencing-required <i>boolean</i>
Tree	sequencing-required
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the l2tpv3 context
Context	configure service vprn string l2tp l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookie-length *number*

Synopsis	Cookie field length
Context	configure service vprn string l2tp l2tpv3 cookie-length <i>number</i>
Tree	cookie-length
Range	4 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

digest-type *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	configure service vprn string l2tp l2tpv3 digest-type <i>keyword</i>
Tree	digest-type
Options	md5, sha1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nonce-length *number*

Synopsis	Length of the local L2TPv3 nonce (random number)
Context	configure service vprn <i>string</i> l2tp l2tpv3 nonce-length <i>number</i>
Tree	nonce-length
Range	0 16 to 64
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	L2TPv3 password
Context	configure service vprn <i>string</i> l2tp l2tpv3 password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*

Synopsis	TCP maximum segment size (MSS) on private network
Context	configure service vprn <i>string</i> l2tp l2tpv3 private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust *number*

Synopsis	TCP maximum segment size (MSS) on public network
Context	configure service vprn <i>string</i> l2tp l2tpv3 public-tcp-mss-adjust <i>number</i>
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transport-type

Synopsis Enter the **transport-type** context
Context **configure service vprn string l2tp l2tpv3 transport-type**
Tree [transport-type](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip boolean

Synopsis Use IP as the transport type for the L2TPv3 tunnel
Context **configure service vprn string l2tp l2tpv3 transport-type ip boolean**
Tree [ip](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis Enter the **lac** context
Context **configure service vprn string l2tp lac**
Tree [lac](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-number-format string

Synopsis Calling Number AVP for L2TP control messages
Context **configure service vprn string l2tp lac calling-number-format string**
Tree [calling-number-format](#)
String Length 1 to 255
Default %S %s

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cisco-nas-port

Synopsis Enter the **cisco-nas-port** context
Context **configure service vprn string l2tp lac cisco-nas-port**
Tree [cisco-nas-port](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet string

Synopsis L2TP Cisco NAS port AVP with binary patterns for Ethernet
Context **configure service vprn string l2tp lac cisco-nas-port ethernet string**
Tree [ethernet](#)
String Length 1 to 255
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit boolean

Synopsis Send all L2TP packets with DF bit set to 1
Context **configure service vprn string l2tp lac df-bit boolean**
Tree [df-bit](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address string

Synopsis Local address
Context **configure service vprn string l2tp local-address string**
Tree [local-address](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis Local host name
Context **configure service vprn** *string* **l2tp local-name** *string*
Tree **local-name**
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis Maximum retries for established tunnels
Context **configure service vprn** *string* **l2tp max-retries-estab** *number*
Tree **max-retries-estab**
Range 2 to 7
Default 5
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis Maximum retries for unestablished tunnels
Context **configure service vprn** *string* **l2tp max-retries-not-estab** *number*
Tree **max-retries-not-estab**
Range 2 to 7
Default 5
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-attempt *keyword*

Synopsis Tunnel that is selected when previous session setup failed
Context **configure service vprn** *string* **l2tp next-attempt** *keyword*

Tree	next-attempt
Default	next-preference-level
Options	same-preference-level, next-preference-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	L2TP password
Context	configure service vpn <i>string</i> l2tp password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer-address-change-policy *keyword*

Synopsis	Reaction for L2TP response from a different address
Context	configure service vpn <i>string</i> l2tp peer-address-change-policy <i>keyword</i>
Tree	peer-address-change-policy
Default	reject
Options	accept, ignore, reject
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	configure service vpn <i>string</i> l2tp radius-accounting-policy <i>reference</i>
Tree	radius-accounting-policy
Reference	configure aaa radius l2tp-accounting-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	configure service vprn <i>string</i> l2tp receive-window-size <i>number</i>
Tree	receive-window-size
Range	4 to 1024
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

replace-result-code

Synopsis	Enter the replace-result-code context
Context	configure service vprn <i>string</i> l2tp replace-result-code
Tree	replace-result-code
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-invalid-dst *boolean*

Synopsis	Replace result code with general error code
Context	configure service vprn <i>string</i> l2tp replace-result-code cdn-invalid-dst <i>boolean</i>
Tree	cdn-invalid-dst
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-permanent-no-facilities *boolean*

Synopsis	Replace result code with general error
Context	configure service vprn <i>string</i> l2tp replace-result-code cdn-permanent-no-facilities <i>boolean</i>
Tree	cdn-permanent-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-temporary-no-facilities *boolean*

Synopsis	Replace result code with general error
Context	configure service vprn <i>string</i> l2tp replace-result-code cdn-temporary-no-facilities <i>boolean</i>
Tree	cdn-temporary-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rtm-debounce-time (*number* | *keyword*)

Synopsis	Debounce timer that declares L2TP action for route table management events
Context	configure service vprn <i>string</i> l2tp rtm-debounce-time (<i>number</i> <i>keyword</i>)
Tree	rtm-debounce-time
Range	0 to 5000
Default	infinite
Units	milliseconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-assign-method *keyword*

Synopsis	Session assignment method
Context	configure service vprn <i>string</i> l2tp session-assign-method <i>keyword</i>
Tree	session-assign-method
Default	existing-first
Options	existing-first, weighted, weighted-random
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	L2TP session limit of this router
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Context	configure service vpn <i>string</i> l2tp session-limit <i>number</i>
Tree	session-limit
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-selection-blacklist

Synopsis	Enter the tunnel-selection-blacklist context
Context	configure service vpn <i>string</i> l2tp tunnel-selection-blacklist
Tree	tunnel-selection-blacklist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

add-tunnel-on

Synopsis	Enter the add-tunnel-on context
Context	configure service vpn <i>string</i> l2tp tunnel-selection-blacklist add-tunnel-on
Tree	add-tunnel-on
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-change-timeout *boolean*

Synopsis	Enable a timed-out tunnel to be forced to the denylist
Context	configure service vpn <i>string</i> l2tp tunnel-selection-blacklist add-tunnel-on address-change-timeout <i>boolean</i>
Tree	address-change-timeout
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-err-code *boolean*

Synopsis	Add to deny if CDN is received with code: General error
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Context	configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-err-code boolean
Tree	cdn-err-code
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-invalid-dst boolean

Synopsis	Force tunnel to the denylist in case of Result Codes 6
Context	configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-invalid-dst boolean
Tree	cdn-invalid-dst
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-permanent-no-facilities boolean

Synopsis	Force tunnel to the denylist in case of Result Codes 5
Context	configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-permanent-no-facilities boolean
Tree	cdn-permanent-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-temporary-no-facilities boolean

Synopsis	Force tunnel to the denylist in case of Result Codes 4
Context	configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-temporary-no-facilities boolean
Tree	cdn-temporary-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop-ccn-err-code *boolean*

Synopsis	Add to denylist if received with general error code
Context	configure service vprn <i>string</i> l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-err-code <i>boolean</i>
Tree	stop-ccn-err-code
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop-ccn-other *boolean*

Synopsis	Add to denylist if StopCCN received with general error
Context	configure service vprn <i>string</i> l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-other <i>boolean</i>
Tree	stop-ccn-other
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-cdn-not-established-in-time *boolean*

Synopsis	Add to denylist if CDN transmitted with result code
Context	configure service vprn <i>string</i> l2tp tunnel-selection-blacklist add-tunnel-on tx-cdn-not-established-in-time <i>boolean</i>
Tree	tx-cdn-not-established-in-time
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-list-length (*number* | *keyword*)

Synopsis	Number of tunnels or peers in the denylist
Context	configure service vprn <i>string</i> l2tp tunnel-selection-blacklist max-list-length (<i>number</i> <i>keyword</i>)
Tree	max-list-length

Range	1 to 65535
Default	infinite
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-time *number*

Synopsis	Time that a tunnel or peer can remain in the denylist
Context	configure service vprn <i>string</i> l2tp tunnel-selection-blacklist max-time <i>number</i>
Tree	max-time
Range	1 to 60
Default	5
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout-action *keyword*

Synopsis	Action when a tunnel or peer exceeds time in denylist
Context	configure service vprn <i>string</i> l2tp tunnel-selection-blacklist timeout-action <i>keyword</i>
Tree	timeout-action
Default	remove-from-blacklist
Options	remove-from-blacklist, try-one-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-session-limit *number*

Synopsis	L2TP session limit for each tunnel of this router
Context	configure service vprn <i>string</i> l2tp tunnel-session-limit <i>number</i>
Tree	tunnel-session-limit
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

label-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allocation mode for VPRN service labels
Context	configure service vprn <i>string label-mode keyword</i>
Tree	label-mode
Default	vrf
Options	vrf, next-hop
Introduced	16.0.R1
Platforms	All

local-routes-domain-id *string*

Synopsis	Local routes domain ID
Context	configure service vprn <i>string local-routes-domain-id string</i>
Tree	local-routes-domain-id
Description	<p>This command specifies the domain ID that is used in the D-PATH attribute for local routes before those routes are exported to a BGP neighbor using BGP-IPVPN, EVPN-IFF, EVPN-IFL, or PE-CE BGP. A local route is a non-BGP route installed in the VPRN route table and learned using static route or an IGP.</p> <p>The domain IDs are used in the D-PATH attribute, in accordance with draft-ietf-bess-evpn-ipvpn-interworking. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN IFL and BGP IPVPN).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p>
Introduced	21.10.R1
Platforms	All

log

Synopsis	Enter the log context
Context	configure service vprn <i>string log</i>
Tree	log

Introduced 16.0.R1
Platforms All

filter [*filter-name*] *string*

Synopsis Enter the **filter** list instance
Context **configure service vprn string log filter string**
Tree **filter**
Max. Instances 1500
Introduced 16.0.R1
Platforms All

[filter-name] *string*

Synopsis Filter ID
Context **configure service vprn string log filter string**
Tree **filter**
String Length 1 to 64
Notes This element is part of a list key.
Introduced 21.2.R1
Platforms All

default-action *keyword*

Synopsis Default action for the event filter
Context **configure service vprn string log filter string default-action keyword**
Tree **default-action**
Default forward
Options drop, forward
Introduced 16.0.R1
Platforms All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> log filter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

named-entry [[entry-name](#)] *string*

Synopsis	Enter the named-entry list instance
Context	configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i>
Tree	named-entry
Description	Commands in this context create or edit an event filter entry.
Max. Instances	999
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

[entry-name] *string*

Synopsis	Entry name
Context	configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i>
Tree	named-entry
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

action *keyword*

Synopsis	Action for this event filter entry
Context	configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> action <i>keyword</i>
Tree	action

Options	drop, forward
Introduced	21.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.2.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match
Tree	match
Introduced	21.2.R1
Platforms	All

application

Synopsis	Enter the application context
Context	configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match application
Tree	application
Introduced	21.2.R1
Platforms	All

eq *keyword*

Synopsis	Application to match
Context	configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match application eq <i>keyword</i>
Tree	eq

Options	application-assurance, aps, atm, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igh, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, ppp, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, gmpls, lmp, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

neq keyword

Synopsis	Application to be filtered out
Context	configure service vprn string log filter string named-entry string match application neq keyword
Tree	neq
Options	application-assurance, aps, atm, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igh, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, ppp, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, gmpls, lmp, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

event

Synopsis	Enter the event context
Context	configure service vprn string log filter string named-entry string match event
Tree	event
Introduced	21.2.R1
Platforms	All

eq number

Synopsis	Log event message to match
Context	configure service vprn string log filter string named-entry string match event eq number
Tree	eq
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq, gt, gte, lt, lte , or neq .
Introduced	21.2.R1
Platforms	All

gt number

Synopsis	Number of the log event to match
Context	configure service vprn string log filter string named-entry string match event gt number
Tree	gt
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq, gt, gte, lt, lte , or neq .
Introduced	21.2.R1
Platforms	All

gte number

Synopsis	Number of the log event to match
Context	configure service vprn string log filter string named-entry string match event gte number
Tree	gte
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq, gt, gte, lt, lte , or neq .
Introduced	21.2.R1
Platforms	All

lt number

Synopsis	Number of the log event to match
Context	configure service vprn string log filter string named-entry string match event lt number
Tree	lt

Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

lte number

Synopsis	Number of the log event to match
Context	configure service vprn string log filter string named-entry string match event lte number
Tree	lte
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

neq number

Synopsis	Log event message to filter out
Context	configure service vprn string log filter string named-entry string match event neq number
Tree	neq
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

message

Synopsis	Enter the message context
Context	configure service vprn string log filter string named-entry string match message
Tree	message
Introduced	21.2.R1
Platforms	All

eq string

Synopsis	Log event message to match
Context	configure service vprn string log filter string named-entry string match message eq string
Tree	eq
String Length	1 to 400
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

neq string

Synopsis	Log event message to be filtered out
Context	configure service vprn string log filter string named-entry string match message neq string
Tree	neq
String Length	1 to 400
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

regex boolean

Synopsis	String comparison to determine if the log event matches the value of pattern
Context	configure service vprn string log filter string named-entry string match message regex boolean
Tree	regex
Default	false
Introduced	21.2.R1
Platforms	All

severity

Synopsis	Enter the severity context
Context	configure service vprn string log filter string named-entry string match severity
Tree	severity

Introduced 21.2.R1
Platforms All

eq keyword

Synopsis Log event severity level to match
Context **configure service vprn string log filter string named-entry string match severity eq keyword**
Tree **eq**
Options cleared, indeterminate, critical, major, minor, warning
Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**
Introduced 21.2.R1
Platforms All

gt keyword

Synopsis Log event severity level
Context **configure service vprn string log filter string named-entry string match severity gt keyword**
Tree **gt**
Options cleared, indeterminate, critical, major, minor, warning
Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**
Introduced 21.2.R1
Platforms All

gte keyword

Synopsis Log event severity level
Context **configure service vprn string log filter string named-entry string match severity gte keyword**
Tree **gte**
Options cleared, indeterminate, critical, major, minor, warning
Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**
Introduced 21.2.R1
Platforms All

lt keyword

Synopsis	Log event severity level
Context	configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match severity lt <i>keyword</i>
Tree	lt
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

lte keyword

Synopsis	Log event severity level
Context	configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match severity lte <i>keyword</i>
Tree	lte
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

neq keyword

Synopsis	Log event severity level to filter out
Context	configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match severity neq <i>keyword</i>
Tree	neq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

subject

Synopsis	Enter the subject context
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Context	configure service vprn string log filter string named-entry string match subject
Tree	subject
Introduced	21.2.R1
Platforms	All

eq string

Synopsis	Log event subject string to match
Context	configure service vprn string log filter string named-entry string match subject eq string
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

neq string

Synopsis	Log event subject string to filter out
Context	configure service vprn string log filter string named-entry string match subject neq string
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

regex boolean

Synopsis	String comparison to determine if the log event matches the value of subject
Context	configure service vprn string log filter string named-entry string match subject regex boolean
Tree	regex
Default	false
Introduced	21.2.R1
Platforms	All

log-id [*name*] *string*

Synopsis	Enter the log-id list instance
Context	configure service vprn string log log-id string
Tree	log-id
Max. Instances	30
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Log ID
Context	configure service vprn string log log-id string
Tree	log-id
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the log
Context	configure service vprn string log log-id string admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn string log log-id string description string
Tree	description

String Length 1 to 80
Introduced 16.0.R1
Platforms All

destination

Synopsis Enter the **destination** context
Context **configure service vprn string log log-id string destination**
Tree **destination**
Introduced 16.0.R1
Platforms All

netconf

Synopsis Enable the **netconf** context
Context **configure service vprn string log log-id string destination netconf**
Tree **netconf**
Notes The following elements are part of a choice: **netconf**, **snmp**, or **syslog**.
Introduced 16.0.R1
Platforms All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Number of events stored in the NETCONF log
Context **configure service vprn string log log-id string destination netconf max-entries *number***
Tree **max-entries**
Range 50 to 3000
Default 100
Introduced 16.0.R1
Platforms All

snmp

Synopsis	Enable the snmp context
Context	configure service vprn string log log-id string destination snmp
Tree	snmp
Notes	The following elements are part of a choice: netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in the memory log
Context	configure service vprn string log log-id string destination snmp max-entries number
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

syslog *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Index with the information to format event messages sent to a specific SYSLOG collector
Context	configure service vprn string log log-id string destination syslog reference
Tree	syslog
Reference	configure service vprn string log syslog string
Notes	The following elements are part of a choice: netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Event filter policy with the log destination
Context	configure service vprn <i>string</i> log log-id <i>string</i> filter <i>reference</i>
Tree	filter
Reference	configure service vprn <i>string</i> log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

netconf-stream *string*

Synopsis	Destination NETCONF stream name
Context	configure service vprn <i>string</i> log log-id <i>string</i> netconf-stream <i>string</i>
Tree	netconf-stream
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
Context	configure service vprn <i>string</i> log log-id <i>string</i> python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

source

Synopsis	Enter the source context
Context	configure service vprn <i>string</i> log log-id <i>string</i> source
Tree	source
Introduced	16.0.R1
Platforms	All

change *boolean*

Synopsis	Collect log events from the change event stream
Context	configure service vprn <i>string</i> log log-id <i>string</i> source change <i>boolean</i>
Tree	change
Default	false
Introduced	16.0.R1
Platforms	All

debug *boolean*

Synopsis	Collect log events from the debug event stream
Context	configure service vprn <i>string</i> log log-id <i>string</i> source debug <i>boolean</i>
Tree	debug
Default	false
Introduced	19.10.R1
Platforms	All

main *boolean*

Synopsis	Collect log events from the main event stream
Context	configure service vprn <i>string</i> log log-id <i>string</i> source main <i>boolean</i>
Tree	main
Default	false
Introduced	16.0.R1
Platforms	All

security *boolean*

Synopsis	Collect log events from the security event stream
Context	configure service vprn <i>string</i> log log-id <i>string</i> source security <i>boolean</i>
Tree	security
Default	false
Introduced	19.10.R1
Platforms	All

time-format *keyword*

Synopsis	Time zone output for file log contents and syslog
Context	configure service vprn <i>string</i> log log-id <i>string</i> time-format <i>keyword</i>
Tree	time-format
Default	utc
Options	utc, local
Introduced	16.0.R1
Platforms	All

snmp-trap-group [[log-name](#)] *string*

Synopsis	Enter the snmp-trap-group list instance
Context	configure service vprn <i>string</i> log snmp-trap-group <i>string</i>
Tree	snmp-trap-group
Introduced	16.0.R1
Platforms	All

[[log-name](#)] *string*

Synopsis	Log ID
Context	configure service vprn <i>string</i> log snmp-trap-group <i>string</i>
Tree	snmp-trap-group
String Length	1 to 17
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> log snmp-trap-group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

trap-target [*name*] *string*

Synopsis Enter the **trap-target** list instance

Context **configure service vprn** *string* **log snmp-trap-group** *string* **trap-target** *string*

Tree **trap-target**

Max. Instances 25

Introduced 16.0.R1

Platforms All

[name] *string*

Synopsis Trap target name

Context **configure service vprn** *string* **log snmp-trap-group** *string* **trap-target** *string*

Tree **trap-target**

String Length 1 to 28

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the trap receiver

Context **configure service vprn** *string* **log snmp-trap-group** *string* **trap-target** *string* **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **address**

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context	configure service vprn string log snmp-trap-group string trap-target string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

notify-community string

Synopsis	SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification
Context	configure service vprn string log snmp-trap-group string trap-target string notify-community string
Tree	notify-community
String Length	1 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

port number

Synopsis	UDP port number to send messages to this remote SNMP notification collector
Context	configure service vprn string log snmp-trap-group string trap-target string port number
Tree	port
Range	0 1 to 65535
Default	162
Introduced	16.0.R1
Platforms	All

replay boolean

Synopsis	Retransmit missed notifications
Context	configure service vprn string log snmp-trap-group string trap-target string replay boolean
Tree	replay
Default	false

Introduced 16.0.R1
Platforms All

security-level *keyword*

Synopsis Security level at which SNMP notification messages are sent to SNMP notification collector

Context **configure** [service vprn](#) *string* [log snmp-trap-group](#) *string* [trap-target](#) *string* **security-level** *keyword*

Tree [security-level](#)

Default no-auth-no-privacy

Options no-auth-no-privacy, auth-no-privacy, privacy

Introduced 16.0.R1

Platforms All

version *keyword*

Synopsis SNMP version to format notification messages sent to this SNMP notification collector

Context **configure** [service vprn](#) *string* [log snmp-trap-group](#) *string* [trap-target](#) *string* **version** *keyword*

Tree [version](#)

Default snmpv3

Options snmpv1, snmpv2c, snmpv3

Introduced 16.0.R1

Platforms All

syslog [[syslog-name](#)] *string*

Synopsis Enter the **syslog** list instance

Context **configure** [service vprn](#) *string* [log syslog](#) *string*

Tree [syslog](#)

Max. Instances 30

Introduced 16.0.R1

Platforms All

[syslog-name] string

Synopsis	Syslog name
Context	configure service vprn string log syslog string
Tree	syslog
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

address (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	IP address of the Syslog target host
Context	configure service vprn string log syslog string address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	address
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure service vprn string log syslog string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

facility keyword

Synopsis	Facility code for messages
Context	configure service vprn string log syslog string facility keyword
Tree	facility
Default	local7
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7

Introduced 16.0.R1
Platforms All

log-prefix (*keyword* | *string*)

Synopsis String that is prepended to every log message sent to this target syslog host
Context **configure service vprn** *string log syslog string log-prefix (keyword | string)*
Tree [log-prefix](#)
String Length 1 to 32
Default TMNX
Options no-prefix
Introduced 16.0.R1
Platforms All

port number

Synopsis Destination port when sending syslog over UDP
Context **configure service vprn** *string log syslog string port number*
Tree [port](#)
Range 0 | 1 to 65535
Default 514
Introduced 16.0.R1
Platforms All

severity keyword

Synopsis Severity level threshold for the syslog message
Context **configure service vprn** *string log syslog string severity keyword*
Tree [severity](#)
Default info
Options emergency, alert, critical, error, warning, notice, info, debug
Introduced 16.0.R1
Platforms All

tls-client-profile *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TLS client profile used to encrypt syslog communication
Context	configure service vprn <i>string</i> log syslog <i>string</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Description	This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS. Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages. When this command is unconfigured, the syslog messages are sent over UDP.
Reference	configure system security tls client-tls-profile <i>string</i>
Introduced	21.10.R1
Platforms	All

management

Synopsis	Enable the management context
Context	configure service vprn <i>string</i> management
Tree	management
Introduced	16.0.R4
Platforms	All

allow-ftp *boolean*

Synopsis	Allow access to the FTP server
Context	configure service vprn <i>string</i> management allow-ftp <i>boolean</i>
Tree	allow-ftp
Description	When configured to true , this command allows FTP access to the SR OS router via the VPRN router instance. When configured to false , this command disallows access to the SR OS FTP server.
Default	false
Introduced	16.0.R6
Platforms	All

allow-grpc *boolean*

Synopsis	Allow access to the gRPC server
Context	configure service vprn <i>string management</i> allow-grpc <i>boolean</i>
Tree	allow-grpc
Description	When configured to true , this command allows access to the gRPC server via the VPRN router instance. When configured to false , this command disallows gRPC server access.
Default	false
Introduced	19.5.R1
Platforms	All

allow-netconf *boolean*

Synopsis	Allow access to the NETCONF server
Context	configure service vprn <i>string management</i> allow-netconf <i>boolean</i>
Tree	allow-netconf
Description	When configured to true , this command allows NETCONF server access to the SR OS router via the VPRN router instance. When configured to false , this command disallows access to the NETCONF server.
Default	false
Introduced	19.5.R1
Platforms	All

allow-ssh *boolean*

Synopsis	Allow access to the SSH server
Context	configure service vprn <i>string management</i> allow-ssh <i>boolean</i>
Tree	allow-ssh
Description	When configured to true , this command allows SSH server access to the SR OS router via the VPRN router instance. When configured to false , this command disallows SSH server access.
Default	false
Introduced	16.0.R5
Platforms	All

allow-telnet *boolean*

Synopsis	Allow access to the IPv4 Telnet server
Context	configure service vprn string management allow-telnet boolean
Tree	allow-telnet
Description	When configured to true , this command allows IPv4 Telnet server access to the SR OS router via the VPRN router instance. When configured to false , this command disallows access to the IPv4 Telnet server.
Default	false
Introduced	16.0.R5
Platforms	All

allow-telnet6 *boolean*

Synopsis	Allow access to the Telnet IPv6 server
Context	configure service vprn string management allow-telnet6 boolean
Tree	allow-telnet6
Description	When configured to true , this command allows IPv6 Telnet server access to the SR OS router via the VPRN router instance. When configured to false , this command removes access to the IPv6 Telnet server.
Default	false
Introduced	16.0.R5
Platforms	All

maximum-ipv4-routes

Synopsis	Enter the maximum-ipv4-routes context
Context	configure service vprn string maximum-ipv4-routes
Tree	maximum-ipv4-routes
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Action when the maximum number of routes, held within a VRF context, is reached
Context	configure service vprn string maximum-ipv4-routes log-only boolean

Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Mid-level water marker for the number of routes which this VRF holds
Context	configure service vprn <i>string</i> maximum-ipv4-routes threshold <i>number</i>
Tree	threshold
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

value *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of routes that are configured on this virtual router
Context	configure service vprn <i>string</i> maximum-ipv4-routes value <i>number</i>
Tree	value
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

maximum-ipv6-routes

Synopsis	Enter the maximum-ipv6-routes context
Context	configure service vprn <i>string</i> maximum-ipv6-routes
Tree	maximum-ipv6-routes
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Action when the maximum number of routes, held within a VRF context, is reached
Context	configure service vprn <i>string</i> maximum-ipv6-routes log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Mid-level water marker for the number of routes which this VRF holds
Context	configure service vprn <i>string</i> maximum-ipv6-routes threshold <i>number</i>
Tree	threshold
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

value *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of routes that are configured on this virtual router
Context	configure service vprn <i>string</i> maximum-ipv6-routes value <i>number</i>
Tree	value
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

mc-maximum-routes

Synopsis	Enter the mc-maximum-routes context
Context	configure service vprn <i>string</i> mc-maximum-routes

Tree	mc-maximum-routes
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Action when the maximum number of multicast routes, held within a VRF context, is reached
Context	configure service vprn <i>string</i> mc-maximum-routes log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Mid-level water marker for the number of multicast routes which this VRF holds
Context	configure service vprn <i>string</i> mc-maximum-routes threshold <i>number</i>
Tree	threshold
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Maximum multicast routes configured on virtual router
Context	configure service vprn <i>string</i> mc-maximum-routes value <i>number</i>
Tree	value
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

mld

Synopsis	Enable the mld context
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Context	configure service vprn string mld
Tree	mld
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MLD
Context	configure service vprn string mld admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

forwarding-group-interface forwarding-service *string group-interface-name reference*

Synopsis	Enter the forwarding-group-interface list instance
Context	configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference
Tree	forwarding-group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forwarding-service *string*

Synopsis	Forwarding service for a subscriber interface in a retailer context
Context	configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference
Tree	forwarding-group-interface
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference
Tree	forwarding-group-interface
Reference	configure service vprn string subscriber-interface string group-interface string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference import-policy reference
Tree	import-policy
Reference	configure policy-options policy-statement string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference maximum-number-group-sources number

Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure service vpn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure service vpn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the mcac context
Context	configure service vpn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac
Tree	mcac
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis Enter the **bandwidth** context

Context **configure service vprn** *string* **mld forwarding-group-interface forwarding-service** *string*
group-interface-name *reference* **mcac bandwidth**

Tree **bandwidth**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure service vprn** *string* **mld forwarding-group-interface forwarding-service** *string*
group-interface-name *reference* **mcac bandwidth mandatory** (*number* | *keyword*)

Tree **mandatory**

Range 0 to 2147483647

Default unlimited

Options unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis Maximum allowed bandwidth

Context **configure service vprn** *string* **mld forwarding-group-interface forwarding-service** *string*
group-interface-name *reference* **mcac bandwidth total** (*number* | *keyword*)

Tree **total**

Range 0 to 2147483647

Default unlimited

Options unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference mcac interface-policy reference
Tree	interface-policy
Reference	configure mcac interface-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference mcac policy reference
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none">• subscriber level and redirected interface when redirection is configured• subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference query-interval number

Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for MLD queries
Context	configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-source-address <i>string</i>
Tree	query-source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow MLD traffic from known hosts only
Context	configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> sub-hosts-only <i>boolean</i>
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Enable subnet checking
Context	configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	MLD protocol version
Context	configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> version <i>keyword</i>
Tree	version
Default	2

Options	1, 2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-if-query-source-address *string*

Synopsis	Source address in queries for group interfaces when not configured at group interface level
Context	configure service vprn <i>string</i> mld group-if-query-source-address <i>string</i>
Tree	group-if-query-source-address
Introduced	16.0.R1
Platforms	All

group-interface [[group-interface-name](#)] *reference*

Synopsis	Enter the group-interface list instance
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i>
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[group-interface-name] *reference*

Synopsis	Group interface name
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i>
Tree	group-interface
Reference	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis Maximum number of sources that are allowed per group
Context **configure** [service vprn](#) *string* [mld group-interface](#) *reference* [maximum-number-sources](#) *number*
Tree [maximum-number-sources](#)
Range 1 to 1000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis Enter the **mcac** context
Context **configure** [service vprn](#) *string* [mld group-interface](#) *reference* [mcac](#)
Tree [mcac](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis Enter the **bandwidth** context
Context **configure** [service vprn](#) *string* [mld group-interface](#) *reference* [mcac bandwidth](#)
Tree [bandwidth](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels
Context **configure** [service vprn](#) *string* [mld group-interface](#) *reference* [mcac bandwidth mandatory](#) (*number* | *keyword*)
Tree [mandatory](#)
Range 0 to 2147483647

Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> mcac policy <i>reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p>

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	configure mcac policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval number

Synopsis	Time between two consecutive host-query messages
Context	configure service vpn string mld group-interface reference query-interval number
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval number

Synopsis	Time between group-specific query messages
Context	configure service vpn string mld group-interface reference query-last-member-interval number
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval number

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpn string mld group-interface reference query-response-interval number

Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for MLD queries
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> query-source-address <i>string</i>
Tree	query-source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow MLD traffic from known hosts only
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> sub-hosts-only <i>boolean</i>
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Enable subnet checking
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> subnet-check <i>boolean</i>

Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	MLD protocol version
Context	configure service vprn <i>string</i> mld group-interface <i>reference</i> version <i>keyword</i>
Tree	version
Default	2
Options	1, 2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [[ip-interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>string</i> mld interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[ip-interface-name] *string*

Synopsis	IP interface name
Context	configure service vprn <i>string</i> mld interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	configure service vprn <i>string</i> mld interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	configure service vprn <i>string</i> mld interface <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure service vprn <i>string</i> mld interface <i>string</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
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Context	configure service vprn <i>string</i> mld interface <i>string</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure service vprn <i>string</i> mld interface <i>string</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the mcac context
Context	configure service vprn <i>string</i> mld interface <i>string</i> mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
Context	configure service vprn <i>string</i> mld interface <i>string</i> mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure service vprn <i>string</i> mld interface <i>string</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)

Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure service vprn <i>string</i> mld interface <i>string</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure service vprn <i>string</i> mld interface <i>string</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the mc-constraints context
Context	configure service vprn <i>string</i> mld interface <i>string</i> mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

level [*level-id*] *number*

Synopsis	Enter the level list instance
Context	configure service vprn string mld interface string mcac mc-constraints level number
Tree	level
Introduced	16.0.R1
Platforms	All

[level-id] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure service vprn string mld interface string mcac mc-constraints level number
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure service vprn string mld interface string mcac mc-constraints level number bandwidth number
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [*number-lag-port-down*] *number*

Synopsis	Enter the number-down list instance
Context	configure service vprn string mld interface string mcac mc-constraints number-down number

Tree	number-down
Introduced	16.0.R1
Platforms	All

[number-lag-port-down] number

Synopsis	Number of ports that are down in this LAG link
Context	configure service vprn string mld interface string mcac mc-constraints number-down number
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level number

Synopsis	Level ID to associate with number of down LAG ports
Context	configure service vprn string mld interface string mcac mc-constraints number-down number level number
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight boolean

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	configure service vprn string mld interface string mcac mc-constraints use-lag-port-weight boolean
Tree	use-lag-port-weight
Description	When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper

operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.

Default	false
Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	Multicast CAC policy name
Context	configure service vprn string mld interface string mcac policy reference
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none">• subscriber level and redirected interface when redirection is configured• subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy string
Introduced	16.0.R1
Platforms	All

query-interval number

Synopsis	Time between two consecutive host-query messages
Context	configure service vprn string mld interface string query-interval number
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vprn <i>string</i> mld interface <i>string</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vprn <i>string</i> mld interface <i>string</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure service vprn <i>string</i> mld interface <i>string</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure service vprn <i>string</i> mld interface <i>string</i> ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range *start string end string*

Synopsis	Enter the group-range list instance
Context	configure <i>service vprn string mld interface string ssm-translate group-range start string end string</i>
Tree	<i>group-range</i>
Introduced	16.0.R1
Platforms	All

start string

Synopsis	Lower bound of the group range
Context	configure <i>service vprn string mld interface string ssm-translate group-range start string end string</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end string

Synopsis	Upper bound of the group range
Context	configure <i>service vprn string mld interface string ssm-translate group-range start string end string</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [*source-address*] *string*

Synopsis	Add a list entry for source
Context	configure <i>service vprn string mld interface string ssm-translate group-range start string end string source string</i>
Tree	<i>source</i>

Min. Instances	1
Introduced	16.0.R1
Platforms	All

[source-address] string

Synopsis	Source IP address
Context	configure service vprn string mld interface string ssm-translate group-range start string end string source string
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

static

Synopsis	Enter the static context
Context	configure service vprn string mld interface string static
Tree	static
Introduced	16.0.R1
Platforms	All

group [group-address] string

Synopsis	Enter the group list instance
Context	configure service vprn string mld interface string static group string
Tree	group
Introduced	16.0.R1
Platforms	All

[group-address] string

Synopsis	Group address of multicast channel
Context	configure service vprn string mld interface string static group string
Tree	group

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure service vprn <i>string</i> mld interface <i>string</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address
Context	configure service vprn <i>string</i> mld interface <i>string</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	configure service vprn <i>string</i> mld interface <i>string</i> static group <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

group-range [start](#) *string* [end](#) *string* [step](#) *string*

Synopsis	Enter the group-range list instance
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Context	configure service vprn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i>
Tree	group-range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the static multicast group
Context	configure service vprn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the static multicast group
Context	configure service vprn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

step *string*

Synopsis	Step interval for the group-range addresses
Context	configure service vprn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure service vprn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address
Context	configure service vprn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	configure service vprn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	MLD protocol version
Context	configure service vprn <i>string</i> mld interface <i>string</i> version <i>keyword</i>
Tree	version
Default	2

Options	1, 2
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vprn <i>string</i> mld query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vprn <i>string</i> mld query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vprn <i>string</i> mld query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1

Platforms All

robust-count *number*

Synopsis Number of retries after expected message loss
Context **configure** [service vprn](#) *string* **mld** **robust-count** *number*
Tree [robust-count](#)
Range 2 to 10
Default 2
Introduced 16.0.R1
Platforms All

ssm-translate

Synopsis Enter the **ssm-translate** context
Context **configure** [service vprn](#) *string* **mld** **ssm-translate**
Tree [ssm-translate](#)
Introduced 16.0.R1
Platforms All

group-range [start](#) *string* [end](#) *string*

Synopsis Enter the **group-range** list instance
Context **configure** [service vprn](#) *string* **mld** [ssm-translate](#) [group-range](#) [start](#) *string* [end](#) *string*
Tree [group-range](#)
Introduced 16.0.R1
Platforms All

start *string*

Synopsis Lower bound of the group range
Context **configure** [service vprn](#) *string* **mld** [ssm-translate](#) [group-range](#) [start](#) *string* [end](#) *string*
Tree [group-range](#)
Notes This element is part of a list key.
Introduced 16.0.R1

Platforms All

end string

Synopsis Upper bound of the group range
Context **configure service vprn string mld ssm-translate group-range start string end string**
Tree [group-range](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

source [source-address] string

Synopsis Add a list entry for **source**
Context **configure service vprn string mld ssm-translate group-range start string end string source string**
Tree [source](#)
Min. Instances 1
Introduced 16.0.R1
Platforms All

[source-address] string

Synopsis Source IP address
Context **configure service vprn string mld ssm-translate group-range start string end string source string**
Tree [source](#)
Notes This element is part of a list key.
Introduced 16.0.R2
Platforms All

msdp

Synopsis Enable the **msdp** context
Context **configure service vprn string msdp**

Tree	msdp
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	configure service vprn <i>string</i> msdp active-source-limit <i>number</i>
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	configure service vprn <i>string</i> msdp admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

data-encapsulation *boolean*

Synopsis	Enable encapsulation of multicast data used by MSDP
Context	configure service vprn <i>string</i> msdp data-encapsulation <i>boolean</i>
Tree	data-encapsulation
Default	true
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
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Context	configure service vprn string msdp export-policy reference
Tree	export-policy
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

group [name] string

Synopsis	Enter the group list instance
Context	configure service vprn string msdp group string
Tree	group
Introduced	19.10.R1
Platforms	All

[name] string

Synopsis	MSDP group name
Context	configure service vprn string msdp group string
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit number

Synopsis	Maximum number of active messages accepted by MSDP
Context	configure service vprn string msdp group string active-source-limit number
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	configure service vprn <i>string msdp group string admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	configure service vprn <i>string msdp group string export-policy reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policies to import Source Active state from the Source Active list into MSDP
Context	configure service vprn <i>string msdp group string import-policy reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	configure <i>service vprn string msdp group string local-address string</i>
Tree	<i>local-address</i>
Introduced	19.10.R1
Platforms	All

mode *keyword*

Synopsis	Topology of groups of peers
Context	configure <i>service vprn string msdp group string mode keyword</i>
Tree	<i>mode</i>
Default	standard
Options	standard, mesh-group
Introduced	19.10.R1
Platforms	All

peer [*ip-address*] *string*

Synopsis	Enter the peer list instance
Context	configure <i>service vprn string msdp group string peer string</i>
Tree	<i>peer</i>
Introduced	19.10.R1
Platforms	All

[ip-address] *string*

Synopsis	IP address of the remote MSDP router for peering
Context	configure <i>service vprn string msdp group string peer string</i>
Tree	<i>peer</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> active-source-limit <i>number</i>
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

authentication-key *string*

Synopsis	MD5 authentication key for the MSDP peering session
Context	configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

default-peer *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> default-peer <i>boolean</i>
Tree	default-peer
Default	false
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	configure service vpn <i>string</i> msdp group <i>string</i> peer <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policies to import Source Active state from the Source Active list into MSDP
Context	configure service vpn <i>string</i> msdp group <i>string</i> peer <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	configure service vpn <i>string</i> msdp group <i>string</i> peer <i>string</i> local-address <i>string</i>
Tree	local-address
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the receive-message-rate context
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Context	configure service vprn <i>string msdp group string peer string receive-message-rate</i>
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate number

Synopsis	Number of MSDP messages read from the TCP session
Context	configure service vprn <i>string msdp group string peer string receive-message-rate rate number</i>
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold number

Synopsis	Limit for MSDP messages read from the TCP session
Context	configure service vprn <i>string msdp group string peer string receive-message-rate threshold number</i>
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time number

Synopsis	Limit of MSDP messages read from the TCP session
Context	configure service vprn <i>string msdp group string peer string receive-message-rate time number</i>
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the receive-message-rate context
Context	configure service vprn string msdp group string receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate number

Synopsis	Number of MSDP messages read from the TCP session
Context	configure service vprn string msdp group string receive-message-rate rate number
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold number

Synopsis	Limit for MSDP messages read from the TCP session
Context	configure service vprn string msdp group string receive-message-rate threshold number
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time number

Synopsis	Limit of MSDP messages read from the TCP session
Context	configure service vprn string msdp group string receive-message-rate time number
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1

Platforms All

import-policy *reference*

Synopsis Policies to import Source Active state from the Source Active list into MSDP

Context **configure** [service vprn](#) *string* [msdp import-policy](#) *reference*

Tree [import-policy](#)

Reference **configure** [policy-options policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 19.10.R1

Platforms All

local-address *string*

Synopsis Local end of an MSDP session

Context **configure** [service vprn](#) *string* [msdp local-address](#) *string*

Tree [local-address](#)

Introduced 19.10.R1

Platforms All

peer [[ip-address](#)] *string*

Synopsis Enter the **peer** list instance

Context **configure** [service vprn](#) *string* [msdp peer](#) *string*

Tree [peer](#)

Introduced 19.10.R1

Platforms All

[[ip-address](#)] *string*

Synopsis IP address of the remote MSDP router for peering

Context **configure** [service vprn](#) *string* [msdp peer](#) *string*

Tree [peer](#)

Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	configure service vprn <i>string</i> msdp peer <i>string</i> active-source-limit <i>number</i>
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	configure service vprn <i>string</i> msdp peer <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

authentication-key *string*

Synopsis	MD5 authentication key for the MSDP peering session
Context	configure service vprn <i>string</i> msdp peer <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

default-peer *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
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Context	configure service vprn string msdp peer string default-peer boolean
Tree	default-peer
Default	false
Introduced	19.10.R1
Platforms	All

export-policy reference

Synopsis	Policies to export source active state into MSDP
Context	configure service vprn string msdp peer string export-policy reference
Tree	export-policy
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy reference

Synopsis	Policies to import Source Active state from the Source Active list into MSDP
Context	configure service vprn string msdp peer string import-policy reference
Tree	import-policy
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address string

Synopsis	Local end of an MSDP session
Context	configure service vprn string msdp peer string local-address string
Tree	local-address

Introduced 19.10.R1
Platforms All

receive-message-rate

Synopsis Enter the **receive-message-rate** context
Context **configure service vprn string msdp peer string receive-message-rate**
Tree **receive-message-rate**
Introduced 19.10.R1
Platforms All

rate number

Synopsis Number of MSDP messages read from the TCP session
Context **configure service vprn string msdp peer string receive-message-rate rate number**
Tree **rate**
Range 10 to 10000
Introduced 19.10.R1
Platforms All

threshold number

Synopsis Limit for MSDP messages read from the TCP session
Context **configure service vprn string msdp peer string receive-message-rate threshold number**
Tree **threshold**
Range 1 to 1000000
Introduced 19.10.R1
Platforms All

time number

Synopsis Limit of MSDP messages read from the TCP session
Context **configure service vprn string msdp peer string receive-message-rate time number**
Tree **time**
Range 1 to 600

Units	seconds
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the receive-message-rate context
Context	configure service vprn string msdp receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate number

Synopsis	Number of MSDP messages read from the TCP session
Context	configure service vprn string msdp receive-message-rate rate number
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold number

Synopsis	Limit for MSDP messages read from the TCP session
Context	configure service vprn string msdp receive-message-rate threshold number
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time number

Synopsis	Limit of MSDP messages read from the TCP session
Context	configure service vprn string msdp receive-message-rate time number
Tree	time

Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route tables for RPF lookup
Context	configure service vprn string msdp rpf-table keyword
Tree	rpf-table
Default	rtable-u
Options	rtable-m, rtable-u, both
Introduced	19.10.R1
Platforms	All

source [**ip-prefix**] *string*

Synopsis	Enter the source list instance
Context	configure service vprn string msdp source string
Tree	source
Introduced	19.10.R1
Platforms	All

[**ip-prefix**] *string*

Synopsis	Source IP address for accepted active source messages
Context	configure service vprn string msdp source string
Tree	source
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Number of active source messages accepted by MSDP
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Context	configure service vprn <i>string</i> msdp source <i>string</i> active-source-limit <i>number</i>
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

source-active-cache-lifetime *number*

Synopsis	Lifetime given to SA cache entries when created or refreshed
Context	configure service vprn <i>string</i> msdp source-active-cache-lifetime <i>number</i>
Tree	source-active-cache-lifetime
Range	90 to 600
Default	90
Units	seconds
Introduced	19.10.R1
Platforms	All

mss-adjust

Synopsis	Enable the mss-adjust context
Context	configure service vprn <i>string</i> mss-adjust
Tree	mss-adjust
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group used for TCP-MSS adjustment
Context	configure service vprn <i>string</i> mss-adjust nat-group <i>number</i>
Tree	nat-group
Max. Range	0 to 4294967295
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

segment-size *number*

Synopsis	TCP-MSS option value in transmitted TCP SYN requests
Context	configure service vprn <i>string</i> mss-adjust segment-size <i>number</i>
Tree	segment-size
Range	160 to 10240
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtrace2

Synopsis	Enter the mtrace2 context
Context	configure service vprn <i>string</i> mtrace2
Tree	mtrace2
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of multicast path tracing
Context	configure service vprn <i>string</i> mtrace2 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

udp-port *number*

Synopsis	Destination UDP port for mstat2 mtrace2 test, or unsolicited mstat2 mtrace2 packets
Context	configure service vprn <i>string</i> mtrace2 udp-port <i>number</i>

Tree	udp-port
Range	1024 to 49151
Default	5000
Introduced	16.0.R1
Platforms	All

multicast-info-policy *reference*

Synopsis	Multicast policy name for virtual router
Context	configure service vprn <i>string</i> multicast-info-policy <i>reference</i>
Tree	multicast-info-policy
Reference	configure multicast-management multicast-info-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

mvpn

Synopsis	Enable the mvpn context
Context	configure service vprn <i>string</i> mvpn
Tree	mvpn
Introduced	19.5.R1
Platforms	All

auto-discovery

Synopsis	Enter the auto-discovery context
Context	configure service vprn <i>string</i> mvpn auto-discovery
Tree	auto-discovery
Introduced	19.5.R1
Platforms	All

source-address *string*

Synopsis	IPv4 source address
Context	configure service vprn <i>string</i> mvpn auto-discovery source-address <i>string</i>

Tree	source-address
Default	0.0.0.0
Introduced	19.5.R1
Platforms	All

type *keyword*

Synopsis	Status of multicast VPN membership auto-discovery
Context	configure service vprn <i>string</i> mvpn auto-discovery type <i>keyword</i>
Tree	type
Options	bgp, mdt-safi
Introduced	19.5.R1
Platforms	All

c-mcast-signaling *keyword*

Synopsis	Protocol for PE-to-PE signaling of CE multicast states
Context	configure service vprn <i>string</i> mvpn c-mcast-signaling <i>keyword</i>
Tree	c-mcast-signaling
Default	pim
Options	bgp, pim
Introduced	19.5.R1
Platforms	All

intersite-shared

Synopsis	Enter the intersite-shared context
Context	configure service vprn <i>string</i> mvpn intersite-shared
Tree	intersite-shared
Description	Commands in this context configure whether to use inter-site shared C-trees. Optional parameters allow enabling additional intersite shared functionality. Not specifying an optional parameter when executing the command disables that parameter.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of inter-site shared C-trees use
Context	configure service vpn <i>string</i> mvpn intersite-shared admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

kat-type5-advertisement-withdraw *boolean*

Synopsis	Enable KATs on source PEs for ng-MVPN deployments
Context	configure service vpn <i>string</i> mvpn intersite-shared kat-type5-advertisement-withdraw <i>boolean</i>
Tree	kat-type5-advertisement-withdraw
Description	When configured to true , this command specifies that the MVPN Type-5 “Source Active AD routes” are not removed even if all receivers are removed from the tree.
Default	false
Introduced	19.5.R1
Platforms	All

persistent-type5-advertisement *boolean*

Synopsis	Ensure Type-5 S-A routes are generated for MCAST source
Context	configure service vpn <i>string</i> mvpn intersite-shared persistent-type5-advertisement <i>boolean</i>
Tree	persistent-type5-advertisement
Description	When configured to true , this command removes the MVPN Type-5 “Source Active AD routes” even if receivers are present but the keepalive timer (KAT) has timed out because of no traffic.
Default	false
Introduced	19.5.R1
Platforms	All

mdt-type *keyword*

Synopsis	MVPN instance type per PE node
Context	configure service vprn <i>string mvpn mdt-type keyword</i>
Tree	mdt-type
Default	sender-receiver
Options	sender-only, receiver-only, sender-receiver
Introduced	19.5.R1
Platforms	All

provider-tunnel

Synopsis	Enter the provider-tunnel context
Context	configure service vprn <i>string mvpn provider-tunnel</i>
Tree	provider-tunnel
Introduced	19.5.R1
Platforms	All

inclusive

Synopsis	Enter the inclusive context
Context	configure service vprn <i>string mvpn provider-tunnel inclusive</i>
Tree	inclusive
Introduced	19.5.R1
Platforms	All

bier

Synopsis	Enable the bier context
Context	configure service vprn <i>string mvpn provider-tunnel inclusive bier</i>
Tree	bier
Notes	The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp .
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	configure service vprn <i>string mvpn provider-tunnel inclusive bier admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

sub-domain *number*

Synopsis	Sub-domain used to attach the BIER provider tunnel
Context	configure service vprn <i>string mvpn provider-tunnel inclusive bier sub-domain number</i>
Tree	sub-domain
Range	0 to 255
Introduced	19.5.R1
Platforms	All

bsr *keyword*

Synopsis	BSR signaling type
Context	configure service vprn <i>string mvpn provider-tunnel inclusive bsr keyword</i>
Tree	bsr
Options	unicast, spmsi
Introduced	19.5.R1
Platforms	All

mldp

Synopsis	Enable the mldp context
Context	configure service vprn <i>string mvpn provider-tunnel inclusive mldp</i>
Tree	mldp
Notes	The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp .
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MLDP LSP use for tunnels
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive mldp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

p2mp-sr

Synopsis	Enable the p2mp-sr context
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive p2mp-sr
Tree	p2mp-sr
Notes	The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp .
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state for P2MP SR
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive p2mp-sr admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	All

bfd-leaf *boolean*

Synopsis	Enable unidirectional multipoint BFD on the leaf PE
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive p2mp-sr bfd-leaf <i>boolean</i>
Tree	bfd-leaf

Description	When configured to true , this command enables unidirectional multipoint BFD sessions on a receiver (leaf) PE node for upstream fast failure detection over P2MP SR tree LSP.
Default	false
Introduced	21.10.R1
Platforms	All

bfd-root

Synopsis	Enable the bfd-root context
Context	configure service vprn string mvpn provider-tunnel inclusive p2mp-sr bfd-root
Tree	bfd-root
Introduced	21.10.R1
Platforms	All

multiplier number

Synopsis	Multiplier for the transmit interval of the BFD session
Context	configure service vprn string mvpn provider-tunnel inclusive p2mp-sr bfd-root multiplier number
Tree	multiplier
Description	This command configures the multiplier for the transmit interval. The interval and the multiplier are used to calculate the detection time, which is the period of time without receiving BFD packets after which the session failure is determined.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	All

transmit-interval number

Synopsis	Transmit interval of the BFD session
Context	configure service vprn string mvpn provider-tunnel inclusive p2mp-sr bfd-root transmit-interval number
Tree	transmit-interval
Description	This command configures the transmit interval. The interval and the multiplier are used to calculate the detection time, which is the period of time without receiving BFD packets after which the session failure is determined.

Range	10 to 100000
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

p2mp-policy *boolean*

Synopsis	Use P2MP policy for inclusive MVPN provider tunnel
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive p2mp-sr p2mp-policy <i>boolean</i>
Tree	p2mp-policy
Default	false
Introduced	21.5.R1
Platforms	All

static-policy *reference*

Synopsis	Static policy for inclusive MVPN provider tunnel
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive p2mp-sr static-policy <i>reference</i>
Tree	static-policy
Reference	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i>
Introduced	21.5.R1
Platforms	All

pim

Synopsis	Enable the pim context
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim
Tree	pim
Notes	The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp .
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM use for provider tunnels
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

group-address *string*

Synopsis	Multicast group address
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim group-address <i>string</i>
Tree	group-address
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

hello-interval *number*

Synopsis	Frequency at which PIM Hello messages are transmitted
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim hello-interval <i>number</i>
Tree	hello-interval
Range	0 to 255
Default	30
Introduced	19.5.R1
Platforms	All

hello-multiplier *number*

Synopsis	Multiplier to determine the holdtime for a PIM neighbor
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim hello-multiplier <i>number</i>
Tree	hello-multiplier
Range	20 to 100
Default	35

Introduced 19.5.R1
Platforms All

improved-assert *boolean*

Synopsis Enable the improved assert procedure
Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [provider-tunnel](#) [inclusive](#) [pim](#) [improved-assert](#) *boolean*
Tree [improved-assert](#)
Default true
Introduced 19.5.R1
Platforms All

mode *keyword*

Synopsis PIM mode for the inclusive provider tunnel
Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [provider-tunnel](#) [inclusive](#) [pim](#) [mode](#) *keyword*
Tree [mode](#)
Options asm, ssm
Notes This element is mandatory.
Introduced 19.5.R1
Platforms All

three-way-hello *boolean*

Synopsis Enable PIM three-way hello
Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [provider-tunnel](#) [inclusive](#) [pim](#) [three-way-hello](#) *boolean*
Tree [three-way-hello](#)
Default false
Introduced 19.5.R1
Platforms All

tracking-support *boolean*

Synopsis Enable the T bit in the LAN Prune Delay option

Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim tracking-support <i>boolean</i>
Tree	tracking-support
Default	false
Introduced	19.5.R1
Platforms	All

rsvp

Synopsis	Enable the rsvp context
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive rsvp
Tree	rsvp
Notes	The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp .
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RSVP use for provider tunnels
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive rsvp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

bfd-leaf *boolean*

Synopsis	Enable unidirectional multi-point BFD on a receiver
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive rsvp bfd-leaf <i>boolean</i>
Tree	bfd-leaf
Default	false
Introduced	19.5.R1
Platforms	All

bfd-root

Synopsis	Enable the bfd-root context
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive rsvp bfd-root
Tree	bfd-root
Introduced	19.5.R1
Platforms	All

multiplier *number*

Synopsis	Enable unidirectional multi-point BFD on a sender
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive rsvp bfd-root multiplier <i>number</i>
Tree	multiplier
Range	1 to 20
Default	3
Introduced	19.5.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit interval for the BFD session
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive rsvp bfd-root transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

lsp-template *reference*

Synopsis	P2MP LSP created as the provider tunnel
Context	configure service vprn <i>string</i> mvpn provider-tunnel inclusive rsvp lsp-template <i>reference</i>
Tree	lsp-template
Reference	configure router <i>string</i> mpls lsp-template <i>string</i>

Introduced 19.5.R1
Platforms All

umh-rate-monitoring

Synopsis Enter the **umh-rate-monitoring** context
Context **configure service vprn string mvpn provider-tunnel inclusive umh-rate-monitoring**
Tree [umh-rate-monitoring](#)
Introduced 21.5.R1
Platforms All

revertive-timer number

Synopsis Time until switch to primary PMSI after recovering rate
Context **configure service vprn string mvpn provider-tunnel inclusive umh-rate-monitoring revertive-timer number**
Tree [revertive-timer](#)
Range 0 to 3600
Introduced 21.5.R1
Platforms All

traffic-rate-delta number

Synopsis Rate delta between PMSIs under which traffic switches
Context **configure service vprn string mvpn provider-tunnel inclusive umh-rate-monitoring traffic-rate-delta number**
Tree [traffic-rate-delta](#)
Range 0 to 4294967294
Introduced 21.5.R1
Platforms All

wildcard-spmsi boolean

Synopsis Enable RFC 6625 S-PMSI functionality for NG-MVPN
Context **configure service vprn string mvpn provider-tunnel inclusive wildcard-spmsi boolean**
Tree [wildcard-spmsi](#)

Default	false
Introduced	19.5.R1
Platforms	All

selective

Synopsis	Enter the selective context
Context	configure service vprn string mvpn provider-tunnel selective
Tree	selective
Introduced	19.5.R1
Platforms	All

asm-mdt boolean

Synopsis	Enable Data MDT with PIM-ASM mode on receiver PE node
Context	configure service vprn string mvpn provider-tunnel selective asm-mdt boolean
Tree	asm-mdt
Default	false
Introduced	19.5.R1
Platforms	All

auto-discovery boolean

Synopsis	Enable C-trees to P-tunnel binding auto-discovery
Context	configure service vprn string mvpn provider-tunnel selective auto-discovery boolean
Tree	auto-discovery
Default	false
Introduced	19.5.R1
Platforms	All

bier

Synopsis	Enable the bier context
Context	configure service vprn string mvpn provider-tunnel selective bier
Tree	bier

Notes	The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp .
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	configure service vprn string mvpn provider-tunnel selective bier admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

sub-domain *number*

Synopsis	Sub-domain used to attach the BIER provider tunnel
Context	configure service vprn string mvpn provider-tunnel selective bier sub-domain number
Tree	sub-domain
Range	0 to 255
Introduced	19.5.R1
Platforms	All

data-delay-interval *number*

Synopsis	Interval a PE switches from inclusive to selective
Context	configure service vprn string mvpn provider-tunnel selective data-delay-interval number
Tree	data-delay-interval
Range	3 to 180
Default	3
Introduced	19.5.R1
Platforms	All

data-threshold

Synopsis	Enter the data-threshold context
Context	configure service vprn string mvpn provider-tunnel selective data-threshold
Tree	data-threshold
Introduced	19.5.R1
Platforms	All

group-prefix [[ip-group-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis	Enter the group-prefix list instance
Context	configure service vprn string mvpn provider-tunnel selective data-threshold group-prefix (ipv4-prefix ipv6-prefix)
Tree	group-prefix
Introduced	19.5.R1
Platforms	All

[\[ip-group-prefix\]](#) ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis	IPv4 or IPv6 multicast group address and prefix
Context	configure service vprn string mvpn provider-tunnel selective data-threshold group-prefix (ipv4-prefix ipv6-prefix)
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

pe-threshold-add *number*

Synopsis	PE add threshold
Context	configure service vprn string mvpn provider-tunnel selective data-threshold group-prefix (ipv4-prefix ipv6-prefix) pe-threshold-add number
Tree	pe-threshold-add
Range	1 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

pe-threshold-delete *number*

Synopsis	PE delete threshold
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective data-threshold group-prefix (ipv4-prefix ipv6-prefix) pe-threshold-delete <i>number</i>
Tree	pe-threshold-delete
Range	2 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

threshold *number*

Synopsis	S-PMSI threshold
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective data-threshold group-prefix (ipv4-prefix ipv6-prefix) threshold <i>number</i>
Tree	threshold
Range	0 to 4294967294
Units	kilobps
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

join-tlv-packing *boolean*

Synopsis	Enable packing of MDT join TLVs into a single PDU
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective join-tlv-packing <i>boolean</i>
Tree	join-tlv-packing
Default	true
Introduced	19.5.R1
Platforms	All

mldp

Synopsis	Enable the mldp context
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective mldp

Tree	mldp
Notes	The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp .
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MLDP LSP use for tunnels
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective mldp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

maximum-p2mp-spmsi *number*

Synopsis	Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective mldp maximum-p2mp-spmsi <i>number</i>
Tree	maximum-p2mp-spmsi
Range	1 to 4000
Default	10
Introduced	19.5.R1
Platforms	All

multistream-spmsi [[multistream-id](#)] *number*

Synopsis	Enter the multistream-spmsi list instance
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i>
Tree	multistream-spmsi
Introduced	19.5.R1
Platforms	All

[**multistream-id**] *number*

Synopsis	Multistream spmsi id
Context	configure service vprn string mvpn provider-tunnel selective multistream-spmsi number
Tree	multistream-spmsi
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of multi-stream S-PMSI
Context	configure service vprn string mvpn provider-tunnel selective multistream-spmsi number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

group-prefix [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*) **source-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for group-prefix
Context	configure service vprn string mvpn provider-tunnel selective multistream-spmsi number group-prefix (ipv4-prefix ipv6-prefix) source-prefix (ipv4-prefix ipv6-prefix)
Tree	group-prefix
Introduced	19.5.R1
Platforms	All

[**ip-group-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IPv4 or IPv6 multicast group address and prefix
Context	configure service vprn string mvpn provider-tunnel selective multistream-spmsi number group-prefix (ipv4-prefix ipv6-prefix) source-prefix (ipv4-prefix ipv6-prefix)
Tree	group-prefix

Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

source-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IPv4 or IPv6 unicast source address and prefix
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

lsp-template *reference*

Synopsis	RSVP-TE LSP template for S-PMSI
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> lsp-template <i>reference</i>
Tree	lsp-template
Reference	configure router <i>string</i> mpls lsp-template <i>string</i>
Notes	The following elements are part of a choice: lsp-template , p2mp-sr , or pim .
Introduced	19.5.R1
Platforms	All

p2mp-sr

Synopsis	Enter the p2mp-sr context
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> p2mp-sr
Tree	p2mp-sr
Notes	The following elements are part of a choice: lsp-template , p2mp-sr , or pim .
Introduced	21.5.R1
Platforms	All

p2mp-policy *boolean*

Synopsis	Use P2MP policy for selective MVPN provider tunnel
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spm <i>si</i> <i>number</i> p2mp-sr p2mp-policy <i>boolean</i>
Tree	p2mp-policy
Default	false
Introduced	21.5.R1
Platforms	All

static-policy *reference*

Synopsis	P2MP static policy for inclusive MVPN provider tunnel
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spm <i>si</i> <i>number</i> p2mp-sr static-policy <i>reference</i>
Tree	static-policy
Reference	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i>
Introduced	21.5.R1
Platforms	All

pim

Synopsis	Enable the pim context
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spm <i>si</i> <i>number</i> pim
Tree	pim
Notes	The following elements are part of a choice: isp-template , p2mp-sr , or pim .
Introduced	19.5.R1
Platforms	All

group-address *string*

Synopsis	Group address of the data MDT
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spm <i>si</i> <i>number</i> pim group-address <i>string</i>
Tree	group-address
Introduced	19.5.R1

Platforms All

mode *keyword*

Synopsis PIM mode for the selective provider tunnel

Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [provider-tunnel](#) [selective](#) [multistream-spm](#) *number*
[pim](#) **mode** *keyword*

Tree [mode](#)

Options asm, ssm

Introduced 19.5.R1

Platforms All

p2mp-sr

Synopsis Enable the **p2mp-sr** context

Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [provider-tunnel](#) [selective](#) [p2mp-sr](#)

Tree [p2mp-sr](#)

Notes The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.

Introduced 21.5.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of P2MP SR

Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [provider-tunnel](#) [selective](#) [p2mp-sr](#) **admin-state**
keyword

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 21.5.R1

Platforms All

p2mp-policy *boolean*

Synopsis Use P2MP policy for selective MVPN provider tunnel

Context	configure service vprn <i>string</i> mvpn provider-tunnel selective p2mp-sr p2mp-policy <i>boolean</i>
Tree	p2mp-policy
Default	false
Introduced	21.5.R1
Platforms	All

static-policy *reference*

Synopsis	Static policy for selective MVPN provider tunnel
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective p2mp-sr static-policy <i>reference</i>
Tree	static-policy
Reference	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i>
Introduced	21.5.R1
Platforms	All

pim

Synopsis	Enable the pim context
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective pim
Tree	pim
Notes	The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp .
Introduced	19.5.R1
Platforms	All

group-prefix *string*

Synopsis	Multicast group address and netmask length
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective pim group-prefix <i>string</i>
Tree	group-prefix
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

mode *keyword*

Synopsis	PIM mode.
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective pim mode <i>keyword</i>
Tree	mode
Options	asm, ssm
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

rsvp

Synopsis	Enable the rsvp context
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective rsvp
Tree	rsvp
Notes	The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp .
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RSVP use for provider tunnels
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective rsvp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

lsp-template *reference*

Synopsis	P2MP LSP created as the selective provider tunnel
Context	configure service vprn <i>string</i> mvpn provider-tunnel selective rsvp lsp-template <i>reference</i>
Tree	lsp-template
Reference	configure router <i>string</i> mpls lsp-template <i>string</i>

Introduced 19.5.R1
Platforms All

maximum-p2mp-spmsi *number*

Synopsis Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels
Context **configure** [service vprn](#) *string* [mvpn provider-tunnel selective rsvp maximum-p2mp-spmsi](#) *number*
Tree [maximum-p2mp-spmsi](#)
Range 1 to 4000
Default 10
Introduced 19.5.R1
Platforms All

umh-rate-monitoring

Synopsis Enter the **umh-rate-monitoring** context
Context **configure** [service vprn](#) *string* [mvpn provider-tunnel selective umh-rate-monitoring](#)
Tree [umh-rate-monitoring](#)
Introduced 21.5.R1
Platforms All

group [[group-ip-address](#)] (*ipv4-prefix* | *ipv6-prefix*) [source](#) (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **group** list instance
Context **configure** [service vprn](#) *string* [mvpn provider-tunnel selective umh-rate-monitoring group](#) (*ipv4-prefix* | *ipv6-prefix*) [source](#) (*ipv4-prefix* | *ipv6-prefix*)
Tree [group](#)
Introduced 21.5.R1
Platforms All

[[group-ip-address](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Group IP address
Context **configure** [service vprn](#) *string* [mvpn provider-tunnel selective umh-rate-monitoring group](#) (*ipv4-prefix* | *ipv6-prefix*) [source](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree	group
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

source (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source IP address
Context	configure service vpn <i>string</i> mvpn provider-tunnel selective umh-rate-monitoring group (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

revertive-timer *number*

Synopsis	Time until switch to primary PMSI after recovering rate
Context	configure service vpn <i>string</i> mvpn provider-tunnel selective umh-rate-monitoring group (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) revertive-timer <i>number</i>
Tree	revertive-timer
Range	0 to 3600
Introduced	21.5.R1
Platforms	All

traffic-rate-delta *number*

Synopsis	Rate delta between PMSIs under which traffic switches
Context	configure service vpn <i>string</i> mvpn provider-tunnel selective umh-rate-monitoring group (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) traffic-rate-delta <i>number</i>
Tree	traffic-rate-delta
Range	0 to 4294967294
Introduced	21.5.R1
Platforms	All

redundant-source-list

Synopsis	Enter the redundant-source-list context
Context	configure service vprn <i>string</i> mvprn redundant-source-list
Tree	redundant-source-list
Introduced	19.5.R1
Platforms	All

source-prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for source-prefix
Context	configure service vprn <i>string</i> mvprn redundant-source-list source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	source-prefix
Max. Instances	16
Introduced	19.5.R1
Platforms	All

[[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Unicast address prefix and mask
Context	configure service vprn <i>string</i> mvprn redundant-source-list source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	source-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

rpf-select

Synopsis	Enter the rpf-select context
Context	configure service vprn <i>string</i> mvprn rpf-select
Tree	rpf-select
Introduced	19.5.R1
Platforms	All

core-mvpn [[core-mvpn-service-name](#)] *reference*

Synopsis	Enter the core-mvpn list instance
Context	configure service vprn <i>string</i> mvpn rpf-select core-mvpn <i>reference</i>
Tree	core-mvpn
Introduced	19.5.R1
Platforms	All

[core-mvpn-service-name] *reference*

Synopsis	Core MVPN service name
Context	configure service vprn <i>string</i> mvpn rpf-select core-mvpn <i>reference</i>
Tree	core-mvpn
Reference	configure service vprn <i>string</i>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

group-prefix [[ip-group-prefix](#)] *string*

Synopsis	Enter the group-prefix list instance
Context	configure service vprn <i>string</i> mvpn rpf-select core-mvpn <i>reference</i> group-prefix <i>string</i>
Tree	group-prefix
Min. Instances	1
Introduced	19.5.R1
Platforms	All

[ip-group-prefix] *string*

Synopsis	IPv4 multicast address prefix and mask
Context	configure service vprn <i>string</i> mvpn rpf-select core-mvpn <i>reference</i> group-prefix <i>string</i>
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1

Platforms All

starg *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Starg flag.

Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [rpf-select](#) [core-mvpn](#) [reference](#) [group-prefix](#) *string*
[starg](#) *boolean*

Tree [starg](#)

Default false

Introduced 19.5.R1

Platforms All

umh-pe-backup

Synopsis Enter the **umh-pe-backup** context

Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [umh-pe-backup](#)

Tree [umh-pe-backup](#)

Introduced 19.5.R1

Platforms All

umh-pe [[ip-address](#)] *string*

Synopsis Enter the **umh-pe** list instance

Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [umh-pe-backup](#) [umh-pe](#) *string*

Tree [umh-pe](#)

Introduced 19.5.R1

Platforms All

[[ip-address](#)] *string*

Synopsis IP address for the standby PE

Context **configure** [service](#) [vprn](#) *string* [mvpn](#) [umh-pe-backup](#) [umh-pe](#) *string*

Tree	umh-pe
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

standby string

Synopsis	ip-address.
Context	configure service vprn string mvpn umh-pe-backup umh-pe string standby string
Tree	standby
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

umh-selection keyword

Synopsis	UMH selection mechanism
Context	configure service vprn string mvpn umh-selection keyword
Tree	umh-selection
Default	highest-ip
Options	highest-ip, hash-based, tunnel-status, unicast-rt-pref
Introduced	19.5.R1
Platforms	All

vrf-export

Synopsis	Enter the vrf-export context
Context	configure service vprn string mvpn vrf-export
Tree	vrf-export
Introduced	19.5.R1
Platforms	All

policy (policy-expr-string | string)

Synopsis	Route policy name
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Context	configure service vprn string mvpn vrf-export policy (<i>policy-expr-string string</i>)
Tree	policy
Description	This command specifies the route policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed between double quotes.
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	The following elements are part of a choice: policy or unicast . This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

unicast *boolean*

Synopsis	Enable the unicast VRF export policy for the MVPN
Context	configure service vprn string mvpn vrf-export unicast <i>boolean</i>
Tree	unicast
Default	false
Notes	The following elements are part of a choice: policy or unicast .
Introduced	19.5.R1
Platforms	All

vrf-import

Synopsis	Enter the vrf-import context
Context	configure service vprn string mvpn vrf-import
Tree	vrf-import
Introduced	19.5.R1
Platforms	All

policy (*policy-expr-string | string*)

Synopsis	Route policy name
Context	configure service vprn string mvpn vrf-import policy (<i>policy-expr-string string</i>)

Tree	policy
Description	This command specifies the route policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed between double quotes.
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	The following elements are part of a choice: policy or unicast . This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

unicast *boolean*

Synopsis	Enable the unicast VRF import policy for the MVPN
Context	configure service vprn <i>string</i> mvpn vrf-import unicast <i>boolean</i>
Tree	unicast
Default	false
Notes	The following elements are part of a choice: policy or unicast .
Introduced	19.5.R1
Platforms	All

vrf-target

Synopsis	Enter the vrf-target context
Context	configure service vprn <i>string</i> mvpn vrf-target
Tree	vrf-target
Introduced	19.5.R1
Platforms	All

community *string*

Synopsis	Extended community name for the MVPN
Context	configure service vprn <i>string</i> mvpn vrf-target community <i>string</i>
Tree	community

String Length 10 to 28
Introduced 19.5.R1
Platforms All

export

Synopsis Enter the **export** context
Context **configure service vprn string mvpn vrf-target export**
Tree **export**
Introduced 19.5.R1
Platforms All

community *string*

Synopsis Extended community name for the MVPN
Context **configure service vprn string mvpn vrf-target export community string**
Tree **community**
String Length 10 to 28
Introduced 19.5.R1
Platforms All

unicast *boolean*

Synopsis Enable the unicast vrf-target for the MVPN
Context **configure service vprn string mvpn vrf-target export unicast boolean**
Tree **unicast**
Default false
Introduced 19.5.R1
Platforms All

import

Synopsis Enter the **import** context
Context **configure service vprn string mvpn vrf-target import**
Tree **import**

Introduced 19.5.R1
Platforms All

community *string*

Synopsis Extended community name for the MVPN
Context **configure service vprn string mvpn vrf-target import community string**
Tree **community**
String Length 10 to 28
Introduced 19.5.R1
Platforms All

unicast *boolean*

Synopsis Enable the unicast vrf-target for the MVPN
Context **configure service vprn string mvpn vrf-target import unicast boolean**
Tree **unicast**
Default false
Introduced 19.5.R1
Platforms All

unicast *boolean*

Synopsis Enable unicast vrf-target for the MVPN
Context **configure service vprn string mvpn vrf-target unicast boolean**
Tree **unicast**
Default false
Introduced 19.5.R1
Platforms All

nat

Synopsis Enable the **nat** context
Context **configure service vprn string nat**
Tree **nat**

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside

Synopsis Enter the **inside** context
Context **configure service vprn string nat inside**
Tree [inside](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2-aware

Synopsis Enter the **I2-aware** context
Context **configure service vprn string nat inside I2-aware**
Tree [I2-aware](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscribers [[prefix](#)] *string*

Synopsis Add a list entry for **subscribers**
Context **configure service vprn string nat inside I2-aware subscribers string**
Tree [subscribers](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[prefix\]](#) *string*

Synopsis Layer-2 Aware NAT subscriber prefix
Context **configure service vprn string nat inside I2-aware subscribers string**
Tree [subscribers](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the large-scale context
Context	configure service vprn string nat inside large-scale
Tree	large-scale
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis	Enter the dnat-only context
Context	configure service vprn string nat inside large-scale dnat-only
Tree	dnat-only
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-prefix-list *reference*

Synopsis	NAT prefix list that contains source IP addresses
Context	configure service vprn string nat inside large-scale dnat-only source-prefix-list reference
Tree	source-prefix-list
Reference	configure service nat prefix-list string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite

Synopsis	Enter the dual-stack-lite context
Context	configure service vprn string nat inside large-scale dual-stack-lite
Tree	dual-stack-lite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Dual Stack Lite
Context	configure service vprn <i>string</i> nat inside large-scale dual-stack-lite admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis	Enter the deterministic context
Context	configure service vprn <i>string</i> nat inside large-scale dual-stack-lite deterministic
Tree	deterministic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-map [[source-prefix](#)] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enter the policy-map list instance
Context	configure service vprn <i>string</i> nat inside large-scale dual-stack-lite deterministic policy-map <i>string</i>
Tree	policy-map
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[source-prefix] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Source prefix that adds traffic to NAT pool
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Context	configure service vprn string nat inside large-scale dual-stack-lite deterministic policy-map string
Tree	policy-map
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Administrative state of the prefix
Context	configure service vprn string nat inside large-scale dual-stack-lite deterministic policy-map string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [from] string to string



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the map list instance
Context	configure service vprn string nat inside large-scale dual-stack-lite deterministic policy-map string map string to string
Tree	map
Introduced	16.0.R1
Deprecated	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[from] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis Beginning of the range for IPv6 addresses

Context **configure** [service](#) [vprn](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [deterministic](#) [policy-map](#) *string* [map](#) *string* [to](#) *string*

Tree [map](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Deprecated 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis Inside end IPv6 address to map to outside IP addresses

Context **configure** [service](#) [vprn](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [deterministic](#) [policy-map](#) *string* [map](#) *string* [to](#) *string*

Tree [map](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Deprecated 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address *string*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	configure service vpn <i>string nat inside large-scale dual-stack-lite deterministic policy-map string map string to string first-outside-address string</i>
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT policy
Context	configure service vpn <i>string nat inside large-scale dual-stack-lite deterministic policy-map string nat-policy reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>string</i>
Notes	This element is mandatory.

Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-map [**source-prefix**] *string nat-policy reference*

Synopsis	Enter the prefix-map list instance
Context	configure service vprn string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference
Tree	prefix-map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[source-prefix] *string*

Synopsis	List containing source IP addresses on the private side
Context	configure service vprn string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy
Context	configure service vprn string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference
Tree	prefix-map
Reference	configure service nat nat-policy string
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	configure service vprn <i>string</i> nat inside large-scale dual-stack-lite deterministic prefix-map <i>string</i> nat-policy <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [*from*] *string to string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the map list instance
Context	configure service vprn <i>string</i> nat inside large-scale dual-stack-lite deterministic prefix-map <i>string</i> nat-policy <i>reference</i> map <i>string to string</i>
Tree	map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[from] *string*

Synopsis	Beginning of the range for IPv6 addresses
Context	configure service vprn <i>string</i> nat inside large-scale dual-stack-lite deterministic prefix-map <i>string</i> nat-policy <i>reference</i> map <i>string to string</i>
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to *string*

Synopsis	End of the range for IPv6 addresses
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Context	configure service vprn <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string</i>
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	configure service vprn <i>string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string first-outside-address string</i>
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

endpoint [[address](#)] *string*

Synopsis	Enter the endpoint list instance
Context	configure service vprn <i>string nat inside large-scale dual-stack-lite endpoint string</i>
Tree	endpoint
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[address] string

Synopsis	Dual Stack Lite IPv6 address
Context	configure service vprn string nat inside large-scale dual-stack-lite endpoint string
Tree	endpoint
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-fragmentation keyword

Synopsis	Fragmentation control of the AFTR originated downstream IPv6 traffic
Context	configure service vprn string nat inside large-scale dual-stack-lite endpoint string ip-fragmentation keyword
Tree	ip-fragmentation
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min-first-fragment-size-rx number

Synopsis	Minimum MTU size for upstream packets
Context	configure service vprn string nat inside large-scale dual-stack-lite endpoint string min-first-fragment-size-rx number
Tree	min-first-fragment-size-rx
Description	This command configures the minimum MTU size for the first fragment in the upstream direction. This command can be used to enable processing of first IPv6 fragments smaller than 1280 bytes. RFC 8200 recommends the minimum MTU in IPv6 be 1280 bytes which allows fragmentation only for packets that are larger than 1280 bytes. If a first fragment is smaller than 1280 bytes, DS-lite implementation in the SR OS, by default, drops the first fragment.
Range	512 to 1280
Default	1280
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassemble *boolean*

Synopsis	Reassembly of IPv6 payload datagrams
Context	configure service vprn <i>string</i> nat inside large-scale dual-stack-lite endpoint <i>string</i> reassemble <i>boolean</i>
Tree	reassemble
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-mtu *number*

Synopsis	DS-Lite tunnel MTU for this address
Context	configure service vprn <i>string</i> nat inside large-scale dual-stack-lite endpoint <i>string</i> tunnel-mtu <i>number</i>
Tree	tunnel-mtu
Description	This command configures the Dual Stack Lite (DS-Lite) tunnel MTU for this address.
Range	464 to 9212
Default	1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-subscriber-limit *number*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	configure service vprn <i>string</i> nat inside large-scale dual-stack-lite max-subscriber-limit <i>number</i>
Tree	max-subscriber-limit
Range	1 2 4 8 16 32 64 128 256 512 1024 2048 4096 8192 16384 32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-prefix-length *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix length of the Dual Stack Lite subscribers
Context	configure service vprn string nat inside large-scale dual-stack-lite subscriber-prefix-length number
Tree	subscriber-prefix-length
Range	32 to 64 128
Default	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filters

Synopsis	Enter the filters context
Context	configure service vprn string nat inside large-scale filters
Tree	filters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

downstream

Synopsis	Enter the downstream context
Context	configure service vprn string nat inside large-scale filters downstream
Tree	downstream
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 reference

Synopsis	IPv4 filter policy name
Context	configure service vprn string nat inside large-scale filters downstream ipv4 reference

Tree	ipv4
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy for LSN
Context	configure service vprn <i>string nat inside large-scale nat-policy reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44

Synopsis	Enter the nat44 context
Context	configure service vprn <i>string nat inside large-scale nat44</i>
Tree	nat44
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-prefix [[ip-prefix-length](#)] *string*

Synopsis	Enter the destination-prefix list instance
Context	configure service vprn <i>string nat inside large-scale nat44 destination-prefix string</i>
Tree	destination-prefix
Max. Instances	6144
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-prefix-length] *string*

Synopsis	Traffic sent to destinations within this prefix will be NATed
Context	configure service vprn <i>string nat inside large-scale nat44 destination-prefix string</i>
Tree	destination-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy
Context	configure service vprn <i>string nat inside large-scale nat44 destination-prefix string nat-policy reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis	Enter the deterministic context
Context	configure service vprn <i>string nat inside large-scale nat44 deterministic</i>
Tree	deterministic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-map [[source-prefix](#)] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enter the policy-map list instance
----------	---

Context	configure service vpn <i>string nat inside large-scale nat44 deterministic policy-map string</i>
Tree	policy-map
Description	Commands in this context configure the attributes of the policy map. The operator must fully specify the map statement, however the tools perform nat deterministic calculate-maps command is available to produce system generated maps, if desired. The calculate-maps command outputs a set of system-generated map statements and the operator can copy the map parameters into the MD-CLI candidate configuration.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[source-prefix] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Source prefix that adds traffic to NAT pool
Context	configure service vpn <i>string nat inside large-scale nat44 deterministic policy-map string</i>
Tree	policy-map
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Administrative state of the prefix
Context	configure service vpn <i>string nat inside large-scale nat44 deterministic policy-map string admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Deprecated 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [**from**] *string to string*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **map** list instance
Context **configure service vprn string nat inside large-scale nat44 deterministic policy-map string map string to string**
Tree **map**
Introduced 16.0.R1
Deprecated 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[from] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis Beginning of the range for IPv4 addresses
Context **configure service vprn string nat inside large-scale nat44 deterministic policy-map string map string to string**
Tree **map**
Notes This element is part of a list key.
Introduced 16.0.R1
Deprecated 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to string



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	End of the range for IPv4 addresses
Context	configure service vprn string nat inside large-scale nat44 deterministic policy-map string map string to string
Tree	map
Notes	This element is part of a list key.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address string



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	configure service vprn string nat inside large-scale nat44 deterministic policy-map string map string to string first-outside-address string
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT policy
Context	configure service vprn <i>string</i> nat inside large-scale nat44 deterministic policy-map <i>string</i> nat-policy reference
Tree	nat-policy
Reference	configure service nat nat-policy <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-map [[source-prefix](#)] *string nat-policy reference*

Synopsis	Enter the prefix-map list instance
Context	configure service vprn <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy reference
Tree	prefix-map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[source-prefix\]](#) *string*

Synopsis	Traffic sent from sources within this prefix will be NATed
----------	--

Context	configure service vprn <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy <i>reference</i>
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy
Context	configure service vprn <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy <i>reference</i>
Tree	prefix-map
Reference	configure service nat nat-policy <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	configure service vprn <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [*from*] *string to string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the map list instance
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Context	configure service vprn <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i>
Tree	map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[from] *string*

Synopsis	Beginning of the range for IPv4 addresses
Context	configure service vprn <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i>
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to *string*

Synopsis	End of the range for IPv4 addresses
Context	configure service vprn <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</i>
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
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Context	configure service vpn <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy reference map <i>string to string</i> first-outside-address <i>string</i>
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-subscriber-limit *number*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	configure service vpn <i>string</i> nat inside large-scale nat44 max-subscriber-limit <i>number</i>
Tree	max-subscriber-limit
Range	1 2 4 8 16 32 64 128 256 512 1024 2048 4096 8192 16384 32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-import *reference*

Synopsis	Import BGP-VPN routes in NAT inside routing context
Context	configure service vpn <i>string</i> nat inside large-scale nat44 nat-import <i>reference</i>
Tree	nat-import
Description	<p>This command references an import policy to determine the routes that should be installed in the routing table as NAT routes, which are used to steer traffic to NAT.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route is associated with a NAT policy that maps traffic destined into a NAT pool and outside routing context. If the NAT policy is not explicitly configured in the import route-policy, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into NAT inside routing context must be configured with action-type accept in the route policy.</p>
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat64

Synopsis Enable the **nat64** context
Context **configure service vprn string nat inside large-scale nat64**
Tree [nat64](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of NAT64
Context **configure service vprn string nat inside large-scale nat64 admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-zero-ipv4-checksum *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Drop UDP datagrams with zero IPv4 checksum
Context **configure service vprn string nat inside large-scale nat64 drop-zero-ipv4-checksum boolean**
Tree [drop-zero-ipv4-checksum](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

insert-ipv6-fragment-header *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include IPv6 fragment header to indicate that the sender allows fragmentation
Context	configure service vprn <i>string</i> nat inside large-scale nat64 insert-ipv6-fragment-header <i>boolean</i>
Tree	insert-ipv6-fragment-header
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-fragmentation *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Control fragmentation of originated downstream IPv6 traffic
Context	configure service vprn <i>string</i> nat inside large-scale nat64 ip-fragmentation <i>keyword</i>
Tree	ip-fragmentation
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the IPv6 downstream packet in NAT64
Context	configure service vprn <i>string</i> nat inside large-scale nat64 ipv6-mtu <i>number</i>
Tree	ipv6-mtu
Range	1280 to 9212
Default	1520

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis IPv6 prefix to derive the IPv6 address from the IPv4 address
Context **configure service vprn string nat inside large-scale nat64 prefix string**
Tree [prefix](#)
Default 64:ff9b::/96
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-prefix-length number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis IPv6 prefix length for the NAT64 subscribers
Context **configure service vprn string nat inside large-scale nat64 subscriber-prefix-length number**
Tree [subscriber-prefix-length](#)
Range 32 to 64 | 128
Default 128
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tos



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the tos context
Context	configure service vprn string nat inside large-scale nat64 tos
Tree	tos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

downstream



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the downstream context
Context	configure service vprn string nat inside large-scale nat64 tos downstream
Tree	downstream
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-ipv4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy TOS/DSCP bits from the incoming IPv4 frame to the outgoing IPv6 frame
Context	configure service vprn string nat inside large-scale nat64 tos downstream use-ipv4 boolean
Tree	use-ipv4
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upstream



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the upstream context
Context	configure service vprn string nat inside large-scale nat64 tos upstream
Tree	upstream
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

set-tos (*keyword* | *number*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TOS/DSCP bits in IPv4 frame in the upstream direction
Context	configure service vprn string nat inside large-scale nat64 tos upstream set-tos (<i>keyword</i> <i>number</i>)
Tree	set-tos
Range	0 to 255
Default	use-ipv6
Options	use-ipv6
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the redundancy context
Context	configure service vprn string nat inside large-scale redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer string

Synopsis	IP address of the NAT redundancy peer for this virtual router instance
Context	configure service vpn string nat inside large-scale redundancy peer string
Tree	peer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer6 string

Synopsis	IPv6 address of the NAT redundancy peer for this virtual router instance
Context	configure service vpn string nat inside large-scale redundancy peer6 string
Tree	peer6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

steering-route string

Synopsis	IP address and prefix length of the steering route
Context	configure service vpn string nat inside large-scale redundancy steering-route string
Tree	steering-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-identification

Synopsis	Enter the subscriber-identification context
Context	configure service vpn string nat inside large-scale subscriber-identification
Tree	subscriber-identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of subscriber identification
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Context	configure service vprn string nat inside large-scale subscriber-identification admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

attribute

Synopsis	Enter the attribute context
Context	configure service vprn string nat inside large-scale subscriber-identification attribute
Tree	attribute
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	RADIUS attribute used as subscriber identifier
Context	configure service vprn string nat inside large-scale subscriber-identification attribute type keyword
Tree	type
Default	alc-sub-string
Options	alc-sub-string, user-name, class, station-id, imsi, imei
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vendor keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The RADIUS Vendor
Context	configure service vprn string nat inside large-scale subscriber-identification attribute vendor keyword
Tree	vendor
Default	nokia
Options	standard, nokia, 3gpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure service vprn string nat inside large-scale subscriber-identification description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-unidentified-traffic boolean



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Drop traffic from unidentified flows
Context	configure service vprn string nat inside large-scale subscriber-identification drop-unidentified-traffic boolean
Tree	drop-unidentified-traffic
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-proxy-server

Synopsis	Enable the radius-proxy-server context
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Context	configure service vprn string nat inside large-scale subscriber-identification radius-proxy-server
Tree	radius-proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance
Context	configure service vprn string nat inside large-scale subscriber-identification radius-proxy-server router-instance string
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Server name
Context	configure service vprn string nat inside large-scale subscriber-identification radius-proxy-server server string
Tree	server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map

Synopsis	Enter the map context
Context	configure service vprn string nat map
Tree	map
Introduced	16.0.R1
Platforms	VSR

map-domain [domain-name] reference

Synopsis	Add a list entry for map-domain
Context	configure service vprn string nat map map-domain reference
Tree	map-domain
Introduced	16.0.R1
Platforms	VSR

[domain-name] reference

Synopsis	MAP domain template name
Context	configure service vprn string nat map map-domain reference
Tree	map-domain
Reference	configure service nat map-t domain string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	VSR

outside

Synopsis	Enter the outside context
Context	configure service vprn string nat outside
Tree	outside
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis	Enter the dnat-only context
Context	configure service vprn string nat outside dnat-only
Tree	dnat-only
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

route-limit *number*

Synopsis	Number that is used to limit internal routes for downstream traffic
Context	configure service vprn string nat outside dnat-only route-limit number
Tree	route-limit
Range	1 to 131072
Default	32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filters

Synopsis	Enter the filters context
Context	configure service vprn string nat outside filters
Tree	filters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

downstream

Synopsis	Enter the downstream context
Context	configure service vprn string nat outside filters downstream
Tree	downstream
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 reference

Synopsis	IPv4 filter policy name
Context	configure service vprn string nat outside filters downstream ipv4 reference
Tree	ipv4
Reference	configure filter ip-filter string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vprn string nat outside filters downstream ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter string
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

upstream

Synopsis	Enter the upstream context
Context	configure service vprn string nat outside filters upstream
Tree	upstream
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 reference

Synopsis	IPv4 filter policy name
Context	configure service vprn string nat outside filters upstream ipv4 reference
Tree	ipv4
Reference	configure filter ip-filter string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vprn string nat outside filters upstream ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter string
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu number

Synopsis	MTU for downstream traffic
Context	configure service vprn string nat outside mtu number
Tree	mtu
Range	512 to 9000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool [name] string

Synopsis	Enter the pool list instance
Context	configure service vprn string nat outside pool string
Tree	pool
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	NAT pool name
Context	configure service vprn string nat outside pool string
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-range *[start] string end string*

Synopsis Enter the **address-range** list instance
Context **configure service vprn string nat outside pool string address-range string end string**
Tree **address-range**
Max. 4096
Instances
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[start] *string*

Synopsis Lower bound of the NAT address range
Context **configure service vprn string nat outside pool string address-range string end string**
Tree **address-range**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis Upper bound of the NAT address range
Context **configure service vprn string nat outside pool string address-range string end string**
Tree **address-range**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure service vprn string nat outside pool string address-range string end string description string**
Tree **description**

String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis Start or stop draining this NAT address range
Context **configure** [service](#) [vprn](#) *string* [nat](#) [outside](#) [pool](#) *string* [address-range](#) *string* [end](#) *string* [drain](#) *boolean*
Tree [drain](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the outside routing NAT pool
Context **configure** [service](#) [vprn](#) *string* [nat](#) [outside](#) [pool](#) *string* [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

applications

Synopsis Enter the **applications** context
Context **configure** [service](#) [vprn](#) *string* [nat](#) [outside](#) [pool](#) *string* [applications](#)
Tree [applications](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

agnostic *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool to create in the outside routing context
Context	configure service vprn <i>string</i> nat outside pool <i>string</i> applications agnostic <i>boolean</i>
Tree	agnostic
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> nat outside pool <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-echo-reply *boolean*

Synopsis	Allow NAT pool IP addresses to respond to ICMP PINGs
Context	configure service vprn <i>string</i> nat outside pool <i>string</i> icmp-echo-reply <i>boolean</i>
Tree	icmp-echo-reply
Description	<p>This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use.</p> <p>In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it.</p> <p>In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present.</p> <p>In LSN, the reply from an outside IP address is generated regardless if a binding is present.</p>

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2-aware

Synopsis	Enter the I2-aware context
Context	configure service vpn string nat outside pool string I2-aware
Tree	I2-aware
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis	Enable the default-host context
Context	configure service vpn string nat outside pool string I2-aware default-host
Tree	default-host
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance string

Synopsis	Router instance of the DMZ
Context	configure service vpn string nat outside pool string I2-aware default-host inside-router-instance string
Tree	inside-router-instance
Description	This command configures the router instance on the inside where the default DMZ host resides.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address of the default DMZ host
Context	configure service vprn <i>string</i> nat outside pool <i>string</i> l2-aware default-host ip-address <i>string</i>
Tree	ip-address
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	configure service vprn <i>string</i> nat outside pool <i>string</i> l2-aware default-host rate-limit <i>number</i>
Tree	rate-limit
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host. Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

external-assignment *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	External IP address for Layer-2-aware
Context	configure service vprn string nat outside pool string l2-aware external-assignment boolean
Tree	external-assignment
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-block-extension



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the port-block-extension context
Context	configure service vprn string nat outside pool string l2-aware port-block-extension
Tree	port-block-extension
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ports *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of ports per dynamic port-block
Context	configure service vprn string nat outside pool string l2-aware port-block-extension ports number
Tree	ports
Range	10 to 5000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber

Synopsis	Enter the subscriber context
Context	configure service vprn string nat outside pool string l2-aware port-block-extension subscriber
Tree	subscriber
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure service vprn string nat outside pool string l2-aware port-block-extension subscriber watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark percentage
Context	configure service vprn string nat outside pool string l2-aware port-block-extension subscriber watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
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Context	configure service vprn <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension subscriber watermarks low <i>number</i>
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of L2-Aware NAT subscribers per outside address
Context	configure service vprn <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension subscriber-limit <i>number</i>
Tree	subscriber-limit
Description	<p>When port-block extensions for the L2-Aware subscribers are enabled, the port space for an outside IP address is divided into the following:</p> <ul style="list-style-type: none"> • well-known port (this is a fixed and permanently allocated block of ports for all NAT types) • static port-forwarding range (if enabled by configuration) • port range allocated for initial port blocks of each L2-Aware subscriber • port range allocated for extended port blocks for the remainder after the three previous port ranges <p>The number of L2-Aware NAT subscribers per an outside IP address multiplied by the size of the initial port-block size determines the size of the port range reserved for initial port-blocks of each subscriber.</p> <p>The lower boundary of the extended port range is determined by adding the upper boundary of the configured port forwarding range and the size of the port range allocated for initial port blocks.</p>
Range	2 to 2000
Notes	This element is mandatory.
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis Enable the **watermarks** context

Context **configure service vprn string nat outside pool string l2-aware port-block-extension watermarks**

Tree **watermarks**

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis High watermark percentage

Context **configure service vprn string nat outside pool string l2-aware port-block-extension watermarks high number**

Tree **high**

Description This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis Low watermark percentage

Context **configure service vprn string nat outside pool string l2-aware port-block-extension watermarks low number**

Tree **low**

Description This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the large-scale context
Context	configure service vprn string nat outside pool string large-scale
Tree	large-scale
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis	Enable the default-host context
Context	configure service vprn string nat outside pool string large-scale default-host
Tree	default-host
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	configure service vprn string nat outside pool string large-scale default-host inside-router-instance string
Tree	inside-router-instance
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis IP address of the default DMZ host

Context **configure** **service vprn** *string* **nat outside pool** *string* **large-scale default-host ip-address** *string*

Tree [ip-address](#)

Description This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis Rate limit for unknown traffic sent to default DMZ host

Context **configure** **service vprn** *string* **nat outside pool** *string* **large-scale default-host rate-limit** *number*

Tree [rate-limit](#)

Description This command configures the rate limit of the unknown traffic sent to the default DMZ host.

Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.

Range 1 to 10000

Default 10

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis Enter the **deterministic** context

Context **configure** **service vprn** *string* **nat outside pool** *string* **large-scale deterministic**

Tree [deterministic](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Number of ports per deterministic port-block
Context **configure** [service vprn string nat outside pool string large-scale deterministic port-reservation number](#)
Tree [port-reservation](#)
Range 1 to 65536
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis Enable the **watermarks** context
Context **configure** [service vprn string nat outside pool string large-scale deterministic watermarks](#)
Tree [watermarks](#)
Description Commands in this context monitor extended (dynamic) port-block utilization per outside IP in a NAT pool in deterministic LSN.
High and low thresholds are configured in percentages of total available extended port-blocks per outside IP in a pool. Both values represent extended port-block utilization or occupancy per outside IP in a pool.
For the system to generate those events, the NAT event-id 2045 must be enabled through configuration in the log event-control.
Introduced 22.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis High watermark percentage

Context	configure service vprn string nat outside pool string large-scale deterministic watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
Context	configure service vprn string nat outside pool string large-scale deterministic watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the redundancy context
Context	configure service vprn string nat outside pool string large-scale redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of NAT pool redundancy
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Context	configure service vprn string nat outside pool string large-scale redundancy admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Notes	The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-route string

Synopsis	Route to export to the peer
Context	configure service vprn string nat outside pool string large-scale redundancy export-route string
Tree	export-route
Notes	The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

follow

Synopsis	Enter the follow context
Context	configure service vprn string nat outside pool string large-scale redundancy follow
Tree	follow
Notes	The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name string

Synopsis	Name of the pool where activity is shared
Context	configure service vprn string nat outside pool string large-scale redundancy follow name string
Tree	name

String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis Router instance where the lead pool resides
Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [large-scale redundancy follow](#)
[router-instance](#) *string*
Tree [router-instance](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-route *string*

Synopsis Monitor the peer route
Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [large-scale redundancy monitor-](#)
[route](#) *string*
Tree [monitor-route](#)
Notes The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-**
route) or **follow**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *number*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Maximum number of subscribers per IP address
Context **configure** [service vprn](#) *string* [nat outside pool](#) *string* [large-scale subscriber-limit](#) *number*
Tree [subscriber-limit](#)
Range 1 to 65535
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Mode of operation of this NAT address pool
Context	configure <i>service vprn string nat outside pool string mode keyword</i>
Tree	<i>mode</i>
Options	auto, napt, one-to-one
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a NAT group
Context	configure <i>service vprn string nat outside pool string nat-group reference</i>
Tree	<i>nat-group</i>
Reference	configure <i>isa nat-group number</i>
Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-forwarding

Synopsis	Enter the port-forwarding context
Context	configure <i>service vprn string nat outside pool string port-forwarding</i>
Tree	<i>port-forwarding</i>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-block-reservation *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Reserve dynamic block for subscriber
Context	configure service vprn <i>string</i> nat outside pool <i>string</i> port-forwarding dynamic-block-reservation <i>boolean</i>
Tree	dynamic-block-reservation
Description	<p>When configured to true, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged.</p> <p>The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released.</p> <p>Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address.</p> <p>When configured to false, dynamic port blocks are not reserved when the first port forward for the subscriber is created.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range-end *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	End of the wildcard range for port forwards
Context	configure service vprn <i>string</i> nat outside pool <i>string</i> port-forwarding range-end <i>number</i>
Tree	range-end

Description	<p>This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the range-start command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the range-end implicit value is set to 1023, that represents the end of the well-known port range that is always enabled.</p> <p>Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.</p>
Range	0 1023 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range-start *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start of the wildcard range for port forwards
Context	configure service vprn <i>string</i> nat outside pool <i>string</i> port-forwarding range-start <i>number</i>
Tree	range-start
Description	<p>This command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the range-end command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the range-start implicit value is set to 1. Port 0 is always excluded from the port forwarding range.</p> <p>Port forwards are supported only in pools in Network Address and Port Translation (NAPT) mode. Pools in 1:1 mode do not support configured port forwards.</p>
Range	0 1 1025 to 65535
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation

Synopsis	Enter the port-reservation context
Context	configure service vprn <i>string</i> nat outside pool <i>string</i> port-reservation
Tree	port-reservation
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-blocks *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Port block size for NAT subscribers
Context	configure service vprn string nat outside pool string port-reservation port-blocks number
Tree	port-blocks
Description	<p>In CGN, this specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block.</p> <p>For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the l2-aware port-block-extension hierarchy in the NAT pool.</p>
Range	0 to 64512
Notes	The following elements are part of a choice: port-blocks or ports .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ports *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Size of the port block for NAT subscribers
Context	configure service vprn string nat outside pool string port-reservation ports number
Tree	ports
Description	For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribers in the NAT pool.

For L2-aware NAT, this command specifies the size of the initial port-block of a subscriber in the pool. Additional port blocks (extended port blocks) for the L2-aware subscriber must be explicitly enabled under the **I2-aware port-block-extension** hierarchy in the NAT pool.

This command does not affect the size of extended port blocks.

Range	1 to 64512
Notes	The following elements are part of a choice: port-blocks or ports .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool type
Context	configure service vprn string nat outside pool string type keyword
Tree	type
Options	large-scale, I2-aware, wlan-gw-anchor
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure service vprn string nat outside pool string watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark percentage
Context	configure service vprn string nat outside pool string watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
Context	configure service vprn string nat outside pool string watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group reference



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a WLAN GW group for NAT
Context	configure service vprn string nat outside pool string wlan-gw-group reference

Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

network

Synopsis	Enter the network context
Context	configure service vpn <i>string</i> network
Tree	network
Introduced	16.0.R4
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure service vpn <i>string</i> network ingress
Tree	ingress
Introduced	16.0.R4
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service vpn <i>string</i> network ingress filter
Tree	filter
Introduced	16.0.R4
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vpn <i>string</i> network ingress filter ip <i>reference</i>
Tree	ip

Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R4
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vprn <i>string</i> network ingress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R4
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> network ingress qos
Tree	qos
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group reference

Synopsis	The forwarding-plane queue group Policy for this VPRN
Context	configure service vprn <i>string</i> network ingress qos fp-redirect-group reference
Tree	fp-redirect-group
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

instance number

Synopsis	Forwarding plane ingress queue group instance
Context	configure service vprn <i>string</i> network ingress qos instance <i>number</i>
Tree	instance

Range	1 to 65535
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

network-policy *reference*

Synopsis	Network policy name associated with a VPRN
Context	configure service vprn <i>string</i> network ingress qos network-policy <i>reference</i>
Tree	network-policy
Reference	configure qos network <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

urpf-check *boolean*

Synopsis	Enable unicast RPF check of network ingress traffic
Context	configure service vprn <i>string</i> network ingress urpf-check <i>boolean</i>
Tree	urpf-check
Default	true
Introduced	16.0.R4
Platforms	All

network-interface [[interface-name](#)] *string*

Synopsis	Enter the network-interface list instance
Context	configure service vprn <i>string</i> network-interface <i>string</i>
Tree	network-interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Network interface name
Context	configure service vprn <i>string</i> network-interface <i>string</i>
Tree	network-interface

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

cflowd-parameters

Synopsis	Enter the cflowd-parameters context
Context	configure service vprn <i>string</i> network-interface <i>string</i> cflowd-parameters
Tree	cflowd-parameters
Introduced	16.0.R1
Platforms	All

sampling [[sampling-type](#)] *keyword*

Synopsis	Enter the sampling list instance
Context	configure service vprn <i>string</i> network-interface <i>string</i> cflowd-parameters sampling <i>keyword</i>
Tree	sampling
Introduced	16.0.R1
Platforms	All

[[sampling-type](#)] *keyword*

Synopsis	Traffic sampling type
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Context	configure service vprn <i>string</i> network-interface <i>string</i> cflowd-parameters sampling <i>keyword</i>
Tree	sampling
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	configure service vprn <i>string</i> network-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> direction <i>keyword</i>
Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Default	ingress-only
Options	ingress-only, egress-only, both
Introduced	16.0.R1
Platforms	All

sample-profile (*keyword* | *number*)

Synopsis	Sample profile ID
Context	configure service vprn <i>string</i> network-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> sample-profile (<i>keyword</i> <i>number</i>)
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	All

type *keyword*

Synopsis	Type of cflowd analysis
Context	configure service vprn <i>string</i> network-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> type <i>keyword</i>
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

cpu-protection *reference*

Synopsis	CPM Protection policy associated with an interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> cpu-protection <i>reference</i>
Tree	cpu-protection
Reference	configure system security cpu-protection <i>policy</i> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> network-interface <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy
Context	configure service vprn <i>string</i> network-interface <i>string</i> dist-cpu-protection <i>reference</i>
Tree	dist-cpu-protection
Reference	configure system security dist-cpu-protection <i>policy</i> <i>string</i>

Introduced 16.0.R1
Platforms All

egress

Synopsis Enter the **egress** context
Context **configure service vprn string network-interface string egress**
Tree **egress**
Introduced 16.0.R1
Platforms All

filter

Synopsis Enter the **filter** context
Context **configure service vprn string network-interface string egress filter**
Tree **filter**
Introduced 16.0.R1
Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure service vprn string network-interface string egress filter ip reference**
Tree **ip**
Reference **configure filter ip-filter string**
Introduced 16.0.R1
Platforms All

hold-time

Synopsis Enter the **hold-time** context
Context **configure service vprn string network-interface string hold-time**
Tree **hold-time**
Introduced 16.0.R1
Platforms All

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn string network-interface string hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the down context
Context	configure service vprn string network-interface string hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service vprn string network-interface string hold-time ipv4 down init-only boolean
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service vprn string network-interface string hold-time ipv4 down seconds number

Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the up context
Context	configure service vprn <i>string</i> network-interface <i>string</i> hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> hold-time ipv4 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>string</i> network-interface <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure service vprn string network-interface string ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn string network-interface string ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter string
Introduced	16.0.R1
Platforms	All

ingress-stats *boolean*

Synopsis	Collect ingress statistics
Context	configure service vprn string network-interface string ingress-stats boolean
Tree	ingress-stats
Default	false
Introduced	16.0.R1
Platforms	All

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	configure service vprn string network-interface string ip-mtu number
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

allow-directed-broadcasts *boolean*

Synopsis	Accept broadcasts that are directed to this interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 allow-directed-broadcasts <i>boolean</i>
Tree	allow-directed-broadcasts
Default	false
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 bfd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive *number*

Synopsis	BFD receive interval over this interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 bfd receive <i>number</i>
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1

Platforms All

transmit-interval *number*

Synopsis BFD transmit interval over this interface

Context **configure service vprn** *string* **network-interface** *string* **ipv4 bfd transmit-interval** *number*

Tree **transmit-interval**

Description This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 16.0.R1

Platforms All

type *keyword*

Synopsis Local termination point for the BFD session

Context **configure service vprn** *string* **network-interface** *string* **ipv4 bfd type** *keyword*

Tree **type**

Description This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.
The options to specify where the BFD session runs are:

- **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**.
- **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.
- **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.

Default auto

Options cpm-np, auto, fp

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

icmp

Synopsis	Enter the icmp context
Context	configure service vprn string network-interface string ipv4 icmp
Tree	icmp
Introduced	16.0.R1
Platforms	All

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	configure service vprn string network-interface string ipv4 icmp mask-reply boolean
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the param-problem context
Context	configure service vprn string network-interface string ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	configure service vprn string network-interface string ipv4 icmp param-problem admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

number *number*

Synopsis Maximum number of Parameter Problem messages to send

Context **configure** *service vprn string network-interface string ipv4 icmp param-problem number number*

Tree *number*

Range 10 to 1000

Default 100

Introduced 16.0.R1

Platforms All

seconds *number*

Synopsis Time used to limit number of Parameter Problem messages

Context **configure** *service vprn string network-interface string ipv4 icmp param-problem seconds number*

Tree *seconds*

Range 1 to 60

Default 10

Units seconds

Introduced 16.0.R1

Platforms All

redirects

Synopsis Enter the **redirects** context

Context **configure** *service vprn string network-interface string ipv4 icmp redirects*

Tree *redirects*

Description Commands in this context configure the settings for ICMP redirect messages generated by the interface.

The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp redirects admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp redirects number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp redirects seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

ttl-expired

Synopsis	Enter the ttl-expired context
Context	configure service vprn string network-interface string ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of sending TTL expired messages
Context	configure service vprn string network-interface string ipv4 icmp ttl-expired admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number number

Synopsis	Maximum number of TTL expired messages to send
Context	configure service vprn string network-interface string ipv4 icmp ttl-expired number number
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds number

Synopsis	Time used to limit the number of TTL expired messages
Context	configure service vprn string network-interface string ipv4 icmp ttl-expired seconds number

Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the unreachables context
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp unreachable
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp unreachable admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp unreachable number <i>number</i>
Tree	number
Range	10 to 2000
Default	100

Introduced 16.0.R1
Platforms All

seconds *number*

Synopsis Time to limit the number of ICMP unreachable messages
Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 icmp unreachable](#) [seconds](#) *number*
Tree [seconds](#)
Range 1 to 60
Default 10
Units seconds
Introduced 16.0.R1
Platforms All

neighbor-discovery

Synopsis Enter the **neighbor-discovery** context
Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 neighbor-discovery](#)
Tree [neighbor-discovery](#)
Introduced 16.0.R1
Platforms All

retry-timer *number*

Synopsis ARP retry interval
Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 neighbor-discovery](#) [retry-timer](#) *number*
Tree [retry-timer](#)
Range 1 to 300
Default 50
Units deciseconds
Introduced 16.0.R1
Platforms All

static-neighbor [ipv4-address] *string*

Synopsis	Enter the static-neighbor list instance
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

[ipv4-address] *string*

Synopsis	IPv4 address that corresponds to the physical address
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request

or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.

Range	0 to 65535
Default	14400
Units	seconds
Introduced	16.0.R1
Platforms	All

primary

Synopsis	Enable the primary context
Context	configure service vprn string network-interface string ipv4 primary
Tree	primary
Introduced	16.0.R1
Platforms	All

address string

Synopsis	Primary IPv4 address assigned to the interface
Context	configure service vprn string network-interface string ipv4 primary address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

broadcast keyword

Synopsis	Broadcast address format
Context	configure service vprn string network-interface string ipv4 primary broadcast keyword
Tree	broadcast
Default	host-ones
Options	all-ones, host-ones
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 primary prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

secondary [[address](#)] *string*

Synopsis	Enter the secondary list instance
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 secondary <i>string</i>
Tree	secondary
Introduced	16.0.R1
Platforms	All

[[address](#)] *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 secondary <i>string</i>
Tree	secondary
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 secondary <i>string</i> broadcast <i>keyword</i>
Tree	broadcast
Default	host-ones
Options	all-ones, host-ones
Introduced	16.0.R1

Platforms All

igp-inhibit *boolean*

Synopsis Disable the running IGP from recognizing secondary IP

Context **configure** *service vpn* *string network-interface* *string ipv4 secondary* *string igp-inhibit boolean*

Tree [igp-inhibit](#)

Description When configured to **true**, the running IGP does not recognize the secondary IP address as a local interface.

Default false

Introduced 16.0.R1

Platforms All

prefix-length *number*

Synopsis IPv4 address prefix length

Context **configure** *service vpn* *string network-interface* *string ipv4 secondary* *string prefix-length number*

Tree [prefix-length](#)

Range 0 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

tcp-mss *number*

Synopsis TCP maximum segment size for the interface

Context **configure** *service vpn* *string network-interface* *string ipv4 tcp-mss number*

Tree [tcp-mss](#)

Range 384 to 9746

Introduced 16.0.R1

Platforms All

urpf-check

Synopsis	Enable the urpf-check context
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 urpf-check ignore-default <i>boolean</i>
Tree	ignore-default
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure service vprn <i>string</i> network-interface <i>string</i> ipv4 urpf-check mode <i>keyword</i>
Tree	mode
Default	strict
Options	strict, loose, strict-no-ecmp
Introduced	16.0.R1
Platforms	All

lag

Synopsis	Enter the lag context
Context	configure service vprn <i>string</i> network-interface <i>string</i> lag
Tree	lag
Introduced	16.0.R1
Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> lag link-map-profile <i>number</i>
Tree	link-map-profile
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration. If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	16.0.R1
Platforms	All

per-link-hash

Synopsis	Enter the per-link-hash context
Context	configure service vprn <i>string</i> network-interface <i>string</i> lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	configure service vprn <i>string</i> network-interface <i>string</i> lag per-link-hash class <i>number</i>
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	configure service vprn <i>string</i> network-interface <i>string</i> lag per-link-hash weight <i>number</i>

Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

load-balancing

Synopsis	Enter the load-balancing context
Context	configure service vprn string network-interface string load-balancing
Tree	load-balancing
Introduced	16.0.R1
Platforms	All

flow-label-load-balancing *boolean*

Synopsis	Enable flow label load balancing
Context	configure service vprn string network-interface string load-balancing flow-label-load-balancing boolean
Tree	flow-label-load-balancing
Description	When configured to true , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface. When configured to false , the router disables load balancing in ECMP and LAG.
Default	false
Introduced	21.5.R1
Platforms	All

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	configure service vprn string network-interface string load-balancing ip-load-balancing keyword
Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the l4-load-balancing

command is enabled, this command also includes the source or destination port in the hash inputs.

Default	both
Options	both, destination, source, inner-ip
Introduced	16.0.R3
Platforms	All

lsr-load-balancing *keyword*

Synopsis	LSR load-balancing algorithm
Context	configure service vprn <i>string</i> network-interface <i>string</i> load-balancing lsr-load-balancing <i>keyword</i>
Tree	lsr-load-balancing
Description	This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting.
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid
Introduced	16.0.R1
Platforms	All

spi-load-balancing *boolean*

Synopsis	Enable SPI use in hashing
Context	configure service vprn <i>string</i> network-interface <i>string</i> load-balancing spi-load-balancing <i>boolean</i>
Tree	spi-load-balancing
Description	When configured to true , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.
Default	false
Introduced	16.0.R1
Platforms	All

teid-load-balancing *boolean*

Synopsis	Enable use of TEID in hashing
Context	configure service vprn <i>string</i> network-interface <i>string</i> load-balancing teid-load-balancing <i>boolean</i>
Tree	teid-load-balancing

Default	false
Introduced	16.0.R1
Platforms	All

loopback

Synopsis	Use interface as a loopback interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> loopback
Tree	loopback
Notes	The following elements are part of a choice: loopback or port .
Introduced	16.0.R1
Platforms	All

mac string

Synopsis	MAC address for the interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> mac <i>string</i>
Tree	mac
Introduced	16.0.R1
Platforms	All

port string

Synopsis	Port to bind the interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> port <i>string</i>
Tree	port
String Length	1 to 45
Notes	The following elements are part of a choice: loopback or port .
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> network-interface <i>string</i> qos

Tree	qos
Introduced	16.0.R1
Platforms	All

egress-instance *number*

Synopsis	Port egress queue group instance for this interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> qos egress-instance <i>number</i>
Tree	egress-instance
Description	This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

egress-port-redirect-group *reference*

Synopsis	QoS queue group name
Context	configure service vprn <i>string</i> network-interface <i>string</i> qos egress-port-redirect-group <i>reference</i>
Tree	egress-port-redirect-group
Description	This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an egress queue group applied to the egress context of the port associated with the IP interface.
Reference	configure qos queue-group-templates egress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

ingress-fp-redirect-group *reference*

Synopsis	Forwarding plane queue group policy for the interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> qos ingress-fp-redirect-group <i>reference</i>
Tree	ingress-fp-redirect-group

Description	This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface.
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

ingress-instance *number*

Synopsis	Forwarding plane ingress queue group for this interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> qos ingress-instance <i>number</i>
Tree	ingress-instance
Description	This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

network-policy *reference*

Synopsis	Network policy name associated with a network interface
Context	configure service vprn <i>string</i> network-interface <i>string</i> qos network-policy <i>reference</i>
Tree	network-policy
Description	This command associates an existing network policy name with the IP interface.
Reference	configure qos network <i>string</i>
Introduced	16.0.R1
Platforms	All

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	configure service vprn <i>string</i> network-interface <i>string</i> tos-marking-state <i>keyword</i>
Tree	tos-marking-state
Default	trusted

Options	trusted, untrusted
Introduced	16.0.R1
Platforms	All

ntp

Synopsis	Enable the ntp context
Context	configure service vprn string ntp
Tree	ntp
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of NTP execution
Context	configure service vprn string ntp admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authenticate boolean

Synopsis	Authentication of NTP PDUs when acting as a server
Context	configure service vprn string ntp authenticate boolean
Tree	authenticate
Default	false
Introduced	16.0.R1
Platforms	All

authentication-check boolean

Synopsis	Reject NTP PDUs that do not match the authentication key-id, type, or key requirements
Context	configure service vprn string ntp authentication-check boolean

Tree	authentication-check
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key [[key-id](#)] *number*

Synopsis	Enter the authentication-key list instance
Context	configure service vprn <i>string</i> ntp authentication-key <i>number</i>
Tree	authentication-key
Introduced	16.0.R1
Platforms	All

[key-id] *number*

Synopsis	Index of the NTP authentication key table that uniquely identifies an authentication key and type
Context	configure service vprn <i>string</i> ntp authentication-key <i>number</i>
Tree	authentication-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

key *string*

Synopsis	Key to authenticate NTP packets
Context	configure service vprn <i>string</i> ntp authentication-key <i>number</i> key <i>string</i>
Tree	key
String Length	1 to 71
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Type of authentication method to authenticate NTP packet
Context	configure service vprn <i>string</i> ntp authentication-key <i>number</i> type <i>keyword</i>
Tree	type
Options	des, message-digest
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

broadcast [[interface-name](#)] *reference*

Synopsis	Enter the broadcast list instance
Context	configure service vprn <i>string</i> ntp broadcast <i>reference</i>
Tree	broadcast
Introduced	16.0.R1
Platforms	All

[[interface-name](#)] *reference*

Synopsis	Local interface used to transmit NTP broadcast packets
Context	configure service vprn <i>string</i> ntp broadcast <i>reference</i>
Tree	broadcast
Reference	configure service vprn <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

key-id *reference*

Synopsis	Authentication key and type used by the node
Context	configure service vprn <i>string</i> ntp broadcast <i>reference</i> key-id <i>reference</i>
Tree	key-id
Reference	configure service vprn <i>string</i> ntp authentication-key <i>number</i>
Introduced	16.0.R1

Platforms All

t*ttl number*

Synopsis TTL value of messages transmitted by this broadcast address
 Context **configure** *service vprn string ntp broadcast reference ttl number*
 Tree **ttl**
 Range 1 to 255
 Default 127
 Introduced 16.0.R1
 Platforms All

v*ersion number*

Synopsis NTP version number generated or accepted by this node in NTP packets
 Context **configure** *service vprn string ntp broadcast reference version number*
 Tree **version**
 Range 2 to 4
 Default 4
 Introduced 16.0.R1
 Platforms All

ospf [*ospf-instance*] *number*

Synopsis Enter the **ospf** list instance
 Context **configure** *service vprn string ospf number*
 Tree **ospf**
 Max. Instances 32
 Introduced 16.0.R1
 Platforms All

[ospf-instance] *number*

Synopsis Specifies the value of the integrated OSPF instance.
 Context **configure** *service vprn string ospf number*

Tree	ospf
Range	0
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF instance
Context	configure service vprn <i>string</i> ospf <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	configure service vprn <i>string</i> ospf <i>number</i> advertise-router-capability <i>keyword</i>
Tree	advertise-router-capability
Default	false
Options	false, link, area, as
Introduced	16.0.R1
Platforms	All

area [[area-id](#)] *string*

Synopsis	Enter the area list instance
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i>
Tree	area
Introduced	16.0.R1
Platforms	All

[area-id] string

Synopsis	Area-ID attribute
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i>
Tree	area
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise-ne-profile reference

Synopsis	Network element profile to be advertised
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> advertise-ne-profile <i>reference</i>
Tree	advertise-ne-profile
Reference	configure system network-element-discovery <i>profile</i> <i>string</i>
Introduced	19.5.R1
Platforms	All

advertise-router-capability boolean

Synopsis	Allow router advertisement capabilities
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

area-range [ip-prefix-mask] string

Synopsis	Enter the area-range list instance
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> area-range <i>string</i>
Tree	area-range
Introduced	16.0.R1
Platforms	All

[ip-prefix-mask] *string*

Synopsis	IPv4 unicast address prefix and mask
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> area-range <i>string</i>
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> area-range <i>string</i> advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> blackhole-aggregate <i>boolean</i>
Tree	blackhole-aggregate
Default	true
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context	configure service vprn <i>string ospf number area string import-policy reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [[interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>string ospf number area string interface string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	IP interface name
Context	configure service vprn <i>string ospf number area string interface string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

advertise-subnet *boolean*

Synopsis	Advertise point-to-point interfaces as subnet routes
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> advertise-subnet <i>boolean</i>
Tree	advertise-subnet
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-key <i>string</i>

Tree	authentication-key
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used on OSPF interface
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

remain-down-on-failure *boolean*

Synopsis	Force adjacency down on failure until session returns
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Context	configure service vprn <i>string</i> ospf number area <i>string</i> interface <i>string</i> bfd-liveness remain-down-on-failure <i>boolean</i>
Tree	remain-down-on-failure
Default	false
Introduced	16.0.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure service vprn <i>string</i> ospf number area <i>string</i> interface <i>string</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure service vprn <i>string</i> ospf number area <i>string</i> interface <i>string</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

interface-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
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Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> interface-type <i>keyword</i>
Tree	interface-type
Description	<p>This command specifies the interface type.</p> <p>Use this command to set the interface type of an Ethernet link to point-to-point to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided the link is used as a point-to-point.</p> <p>If the interface type is not known at the time the interface is added to OSPF and subsequently the IP interface is bound (or moved) to a different interface type, this command must be entered manually.</p> <p>Configuring the interface type to secondary, allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p>
Options	broadcast, non-broadcast, point-to-point, secondary
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Configure load-balancing-weight.
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	configure service vprn <i>string</i> ospf number area <i>string</i> interface <i>string</i> loopfree-alternate exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the policy-map context
Context	configure service vprn <i>string</i> ospf number area <i>string</i> interface <i>string</i> loopfree-alternate policy-map
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template that is applied to interface
Context	configure service vprn <i>string</i> ospf number area <i>string</i> interface <i>string</i> loopfree-alternate policy-map route-nh-template <i>reference</i>
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	configure service vprn <i>string</i> ospf number area <i>string</i> interface <i>string</i> lsa-filter-out <i>keyword</i>
Tree	lsa-filter-out
Default	none

Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Introduced	16.0.R1
Platforms	All

message-digest-key [[key-id](#)] *number*

Synopsis	Enter the message-digest-key list instance
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> message-digest-key <i>number</i>
Tree	message-digest-key
Introduced	16.0.R1
Platforms	All

[key-id] *number*

Synopsis	Message digest index
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> message-digest-key <i>number</i>
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

md5 *string*

Synopsis	MD5 hash key
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> message-digest-key <i>number</i> md5 <i>string</i>
Tree	md5
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Explicit route cost metric that is applied to the interface
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> metric <i>number</i>
Tree	metric
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	MTU for the OSPF to use on the interface
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> mtu <i>number</i>
Tree	mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

neighbor [[address](#)] *string*

Synopsis	Add a list entry for neighbor
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> neighbor <i>string</i>
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[[address](#)] *string*

Synopsis	IPv4 address of the OSPFv2 neighbor
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> neighbor <i>string</i>
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Allow interface to be advertised as an OSPF interface without running the OSPF protocol
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> passive <i>boolean</i>
Tree	passive
Introduced	16.0.R1
Platforms	All

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> poll-interval <i>number</i>
Tree	poll-interval
Max. Range	0 to 4294967295
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> priority <i>number</i>
Tree	priority
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> retransmit-interval <i>number</i>
Tree	retransmit-interval

Range	1 to 1800
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> rib-priority <i>keyword</i>
Tree	rib-priority
Options	high
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> loopfree-alternate-exclude <i>boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1

Platforms All

nssa

Synopsis Enable the **nssa** context
Context **configure service vprn string ospf number area string nssa**
Tree **nssa**
Introduced 16.0.R1
Platforms All

area-range [ip-prefix-mask] string

Synopsis Enter the **area-range** list instance
Context **configure service vprn string ospf number area string nssa area-range string**
Tree **area-range**
Introduced 16.0.R1
Platforms All

[ip-prefix-mask] string

Synopsis IPv4 unicast address prefix and mask
Context **configure service vprn string ospf number area string nssa area-range string**
Tree **area-range**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

advertise boolean

Synopsis Advertise summarized range of addresses to other areas
Context **configure service vprn string ospf number area string nssa area-range string advertise boolean**
Tree **advertise**
Default true
Introduced 16.0.R1

Platforms All

originate-default-route

Synopsis Enable the **originate-default-route** context
Context **configure service vprn string ospf number area string nssa originate-default-route**
Tree [originate-default-route](#)
Introduced 16.0.R1
Platforms All

adjacency-check boolean

Synopsis Perform adjacency checks before originating a default route
Context **configure service vprn string ospf number area string nssa originate-default-route adjacency-check boolean**
Tree [adjacency-check](#)
Default false
Introduced 16.0.R1
Platforms All

type-nssa boolean

Synopsis Generate a default route using NSSA-LSA type
Context **configure service vprn string ospf number area string nssa originate-default-route type-nssa boolean**
Tree [type-nssa](#)
Default false
Introduced 16.0.R1
Platforms All

redistribute-external boolean

Synopsis Redistribute external routes into the NSSA
Context **configure service vprn string ospf number area string nssa redistribute-external boolean**
Tree [redistribute-external](#)
Default true

Introduced 16.0.R1
Platforms All

summaries *boolean*

Synopsis Send summary (Type 3) LSAs into the NSSA on an ABR
Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [nssa](#) [summaries](#) *boolean*
Tree [summaries](#)
Default true
Introduced 16.0.R1
Platforms All

sham-link [[interface](#)] *string* [ip-address](#) *string*

Synopsis Enter the **sham-link** list instance
Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [sham-link](#) *string* [ip-address](#) *string*
Tree [sham-link](#)
Introduced 16.0.R1
Platforms All

[[interface](#)] *string*

Synopsis Local interface name used for the sham-link
Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [sham-link](#) *string* [ip-address](#) *string*
Tree [sham-link](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

ip-address *string*

Synopsis IP address of the sham-link neighbor
Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [sham-link](#) *string* [ip-address](#) *string*
Tree [sham-link](#)

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key to send and receive OSPF packets
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type to be used
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

message-digest-key [*key-id*] *number*

Synopsis	Enter the message-digest-key list instance
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Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> message-digest-key <i>number</i>
Tree	message-digest-key
Introduced	16.0.R1
Platforms	All

[key-id] *number*

Synopsis	Message digest index
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> message-digest-key <i>number</i>
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

md5 *string*

Synopsis	MD5 key or hash key
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> message-digest-key <i>number</i> md5 <i>string</i>
Tree	md5
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Explicit route cost metric that is applied to the sham link
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> metric <i>number</i>
Tree	metric
Range	1 to 65535
Default	1

Introduced 16.0.R1
Platforms All

retransmit-interval *number*

Synopsis Time before OSPF retransmits an unacknowledged LSA
Context **configure** *service vprn string ospf number area string sham-link string ip-address string retransmit-interval number*
Tree *retransmit-interval*
Range 1 to 1800
Default 5
Units seconds
Introduced 16.0.R1
Platforms All

transit-delay *number*

Synopsis Required LSA transmit time
Context **configure** *service vprn string ospf number area string sham-link string ip-address string transit-delay number*
Tree *transit-delay*
Range 1 to 1800
Default 1
Units seconds
Introduced 16.0.R1
Platforms All

stub

Synopsis Enable the **stub** context
Context **configure** *service vprn string ospf number area string stub*
Tree *stub*
Introduced 16.0.R1
Platforms All

default-metric *number*

Synopsis	Metric used by the ABR for the default route into the stub area
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> stub default-metric <i>number</i>
Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> stub summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

virtual-link [**router-id**] *string* **transit-area** *reference*

Synopsis	Enter the virtual-link list instance
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i>
Tree	virtual-link
Introduced	16.0.R1
Platforms	All

[**router-id**] *string*

Synopsis	Router identity of the virtual link neighbor
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i>
Tree	virtual-link
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

transit-area *reference*

Synopsis Transit area that links backbone area to area without physical connection with the backbone

Context **configure** [service vprn string ospf number area string virtual-link string transit-area reference](#)

Tree [virtual-link](#)

Reference **configure** [service vprn string ospf number area string](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the OSPF interface

Context **configure** [service vprn string ospf number area string virtual-link string transit-area reference admin-state keyword](#)

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms All

authentication-key *string*

Synopsis Authentication key

Context **configure** [service vprn string ospf number area string virtual-link string transit-area reference authentication-key string](#)

Tree [authentication-key](#)

String Length 1 to 38

Introduced 16.0.R1

Platforms All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure service vprn <i>string</i> ospf number area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used on OSPF interface
Context	configure service vprn <i>string</i> ospf number area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure service vprn <i>string</i> ospf number area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure service vprn <i>string</i> ospf number area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> hello-interval <i>number</i>
Tree	hello-interval

Range	1 to 65535
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

message-digest-key [[key-id](#)] *number*

Synopsis	Enter the message-digest-key list instance
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> message-digest-key <i>number</i>
Tree	message-digest-key
Introduced	16.0.R1
Platforms	All

[key-id] *number*

Synopsis	Message digest index
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> message-digest-key <i>number</i>
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

md5 *string*

Synopsis	MD5 hash key
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> message-digest-key <i>number</i> md5 <i>string</i>
Tree	md5
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

compatible-rfc1583 *boolean*

Synopsis	OSPF summary and external route calculations
Context	configure service vprn <i>string</i> ospf <i>number</i> compatible-rfc1583 <i>boolean</i>
Tree	compatible-rfc1583
Default	true
Introduced	16.0.R1
Platforms	All

export-limit

Synopsis	Enable the export-limit context
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Context	configure service vprn string ospf number export-limit
Tree	export-limit
Introduced	16.0.R1
Platforms	All

log-percent number

Synopsis	Export limit before warning and SNMP notification sent
Context	configure service vprn string ospf number export-limit log-percent number
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number number

Synopsis	Maximum routes or prefixes exported from route table
Context	configure service vprn string ospf number export-limit number number
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy reference

Synopsis	Export policies that determine exported routes
Context	configure service vprn string ospf number export-policy reference
Tree	export-policy
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>

If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied.

Routing policies are created in the **configure router policy-options** context.

Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

external-db-overflow

Synopsis	Enable the external-db-overflow context
Context	configure service vprn <i>string</i> ospf <i>number</i> external-db-overflow
Tree	external-db-overflow
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time during which the router operates in overload
Context	configure service vprn <i>string</i> ospf <i>number</i> external-db-overflow <i>interval number</i>
Tree	interval
Range	0 to 2147483647
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	configure service vprn <i>string</i> ospf <i>number</i> external-db-overflow <i>limit number</i>
Tree	limit
Range	0 to 2147483647

Default	0
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	Preference for OSPF external routes
Context	configure service vprn <i>string</i> ospf <i>number</i> external-preference <i>number</i>
Tree	external-preference
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure service vprn <i>string</i> ospf <i>number</i> graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	configure service vprn <i>string</i> ospf <i>number</i> graceful-restart helper-mode <i>boolean</i>
Tree	helper-mode
Default	true
Introduced	16.0.R1
Platforms	All

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart helper
Context	configure service vprn <i>string</i> ospf <i>number</i> graceful-restart strict-lsa-checking <i>boolean</i>

Tree	strict-lsa-checking
Default	true
Introduced	16.0.R1
Platforms	All

ignore-dn-bit *boolean*

Synopsis	Ignore the DN bit for OSPF LSA packets for the instance
Context	configure service vprn <i>string</i> ospf <i>number</i> ignore-dn-bit <i>boolean</i>
Tree	ignore-dn-bit
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure service vprn <i>string</i> ospf <i>number</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure service vprn <i>string</i> ospf <i>number</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

exclude

Synopsis	Enter the exclude context
Context	configure service vprn string ospf number loopfree-alternate exclude
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure service vprn string ospf number loopfree-alternate exclude prefix-policy reference
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	configure service vprn string ospf number multicast-import <i>boolean</i>
Tree	multicast-import
Default	false
Introduced	16.0.R1
Platforms	All

overload *boolean*

Synopsis	Change local router state to appear overloaded
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Context	configure service vprn <i>string ospf number overload boolean</i>
Tree	overload
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure service vprn <i>string ospf number overload-include-ext-1 boolean</i>
Tree	overload-include-ext-1
Default	false
Introduced	19.7.R1
Platforms	All

overload-include-ext-2 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure service vprn <i>string ospf number overload-include-ext-2 boolean</i>
Tree	overload-include-ext-2
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	configure service vprn <i>string ospf number overload-include-stub boolean</i>
Tree	overload-include-stub
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure service vprn string ospf number overload-on-boot
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state before reestablishing normal operations
Context	configure service vprn string ospf number overload-on-boot timeout number
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference for OSPF internal routes
Context	configure service vprn string ospf number preference number
Tree	preference
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

reference-bandwidth *number*

Synopsis	Bandwidth to reference the default costing of interfaces
Context	configure service vprn string ospf number reference-bandwidth number
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Default	100000000

Units	kilobps
Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the rib-priority context
Context	configure service vprn <i>string</i> ospf <i>number</i> rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the high context
Context	configure service vprn <i>string</i> ospf <i>number</i> rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	configure service vprn <i>string</i> ospf <i>number</i> rib-priority high prefix-list <i>reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

router-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
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Context	configure service vprn <i>string</i> ospf <i>number</i> router-id <i>string</i>
Tree	router-id
Introduced	16.0.R1
Platforms	All

rtr-adv-lsa-limit

Synopsis	Enable the rtr-adv-lsa-limit context
Context	configure service vprn <i>string</i> ospf <i>number</i> rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	configure service vprn <i>string</i> ospf <i>number</i> rtr-adv-lsa-limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	configure service vprn <i>string</i> ospf <i>number</i> rtr-adv-lsa-limit max-lsa-count <i>number</i>
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

overload-timeout (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
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Context	configure service vprn <i>string ospf number rtr-adv-lsa-limit overload-timeout (number keyword)</i>
Tree	overload-timeout
Range	1 to 1800
Default	forever
Units	seconds
Options	forever
Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	configure service vprn <i>string ospf number rtr-adv-lsa-limit warning-threshold number</i>
Tree	warning-threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

super-backbone *boolean*

Synopsis	Enable/disable super-backbone functionality.
Context	configure service vprn <i>string ospf number super-backbone boolean</i>
Tree	super-backbone
Default	false
Introduced	16.0.R1
Platforms	All

suppress-dn-bit *boolean*

Synopsis	Suppress the DN bit setting for OSPF LSA packets
Context	configure service vprn <i>string ospf number suppress-dn-bit boolean</i>
Tree	suppress-dn-bit

Default	false
Introduced	16.0.R1
Platforms	All

timers

Synopsis	Enter the timers context
Context	configure service vprn string ospf number timers
Tree	timers
Introduced	16.0.R1
Platforms	All

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	configure service vprn string ospf number timers incremental-spf-wait number
Tree	incremental-spf-wait
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	configure service vprn string ospf number timers lsa-accumulate number
Tree	lsa-accumulate
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

Isa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	configure service vprn string ospf number timers isa-arrival number
Tree	isa-arrival
Range	0 to 600000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

Isa-generate

Synopsis	Enter the isa-generate context
Context	configure service vprn string ospf number timers isa-generate
Tree	isa-generate
Introduced	16.0.R1
Platforms	All

Isa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	configure service vprn string ospf number timers isa-generate isa-initial-wait number
Tree	isa-initial-wait
Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

Isa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	configure service vprn string ospf number timers isa-generate isa-second-wait number
Tree	isa-second-wait
Range	10 to 600000

Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	configure service vprn string ospf number timers lsa-generate max-lsa-wait number
Tree	max-lsa-wait
Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	configure service vprn string ospf number timers redistribute-delay number
Tree	redistribute-delay
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the spf-wait context
Context	configure service vprn string ospf number timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure service vprn <i>string</i> ospf number timers spf-wait spf-initial-wait <i>number</i>
Tree	spf-initial-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	configure service vprn <i>string</i> ospf number timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Default	10000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	configure service vprn <i>string</i> ospf number timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	configure <i>service vpn</i> <i>string ospf number unicast-import boolean</i>
Tree	<i>unicast-import</i>
Default	true
Introduced	16.0.R1
Platforms	All

vpn-domain

Synopsis	Enable the vpn-domain context
Context	configure <i>service vpn</i> <i>string ospf number vpn-domain</i>
Tree	<i>vpn-domain</i>
Introduced	16.0.R1
Platforms	All

id *string*

Synopsis	OSPF VPN domain ID
Context	configure <i>service vpn</i> <i>string ospf number vpn-domain id string</i>
Tree	<i>id</i>
Description	This command specifies the OSPF VPN domain. This is exchanged using BGP in the Extended Community attribute associated with a prefix.
String Length	14
Default	0000.0000.0000
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	VPN domain type
Context	configure <i>service vpn</i> <i>string ospf number vpn-domain type keyword</i>
Tree	<i>type</i>
Options	0005, 0105, 0205, 8005
Notes	This element is mandatory.

Introduced 16.0.R1
Platforms All

vpn-tag *number*

Synopsis OSPF VPN tag
Context **configure service vprn** *string ospf number vpn-tag number*
Tree **vpn-tag**
Max. Range 0 to 4294967295
Default 0
Introduced 16.0.R1
Platforms All

ospf3 [**ospf-instance**] *number*

Synopsis Enter the **ospf3** list instance
Context **configure service vprn** *string ospf3 number*
Tree **ospf3**
Max. Instances 32
Introduced 16.0.R1
Platforms All

[ospf-instance] *number*

Synopsis Specifies the value of the integrated OSPF instance.
Context **configure service vprn** *string ospf3 number*
Tree **ospf3**
Range 0 to 31 | 64 to 95
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis	Administrative state of the OSPF instance
Context	configure service vprn <i>string</i> ospf3 <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	configure service vprn <i>string</i> ospf3 <i>number</i> advertise-router-capability <i>keyword</i>
Tree	advertise-router-capability
Default	false
Options	false, link, area, as
Introduced	16.0.R1
Platforms	All

area [[area-id](#)] *string*

Synopsis	Enter the area list instance
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i>
Tree	area
Introduced	16.0.R1
Platforms	All

[[area-id](#)] *string*

Synopsis	Area-ID attribute
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i>
Tree	area
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure service vpn <i>string</i> ospf3 <i>number</i> area <i>string</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

area-range [[ip-prefix-mask](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the area-range list instance
Context	configure service vpn <i>string</i> ospf3 <i>number</i> area <i>string</i> area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	area-range
Introduced	16.0.R1
Platforms	All

[ip-prefix-mask] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Address ranges to create on an ABR for route summarization or suppression
Context	configure service vpn <i>string</i> ospf3 <i>number</i> area <i>string</i> area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure service vpn <i>string</i> ospf3 <i>number</i> area <i>string</i> area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) advertise <i>boolean</i>
Tree	advertise
Default	true

Introduced 16.0.R1
Platforms All

blackhole-aggregate *boolean*

Synopsis Install a low priority blackhole route to avoid loops
Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* **blackhole-aggregate** *boolean*
Tree [blackhole-aggregate](#)
Default true
Introduced 16.0.R1
Platforms All

export-policy *reference*

Synopsis Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* **export-policy** *reference*
Tree [export-policy](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

import-policy *reference*

Synopsis Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* **import-policy** *reference*
Tree [import-policy](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

interface [[interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	IP interface name
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true

Introduced 16.0.R1
Platforms All

authentication

Synopsis Enable the **authentication** context
Context **configure** [service vprn](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* [authentication](#)
Tree [authentication](#)
Introduced 16.0.R6
Platforms All

inbound reference

Synopsis sa-name
Context **configure** [service vprn](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* [authentication](#)
[inbound](#) *reference*
Tree [inbound](#)
Reference **configure** [ipsec static-sa](#) *string*
Notes This element is mandatory.
Introduced 16.0.R6
Platforms All

outbound reference

Synopsis sa-name
Context **configure** [service vprn](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* [authentication](#)
[outbound](#) *reference*
Tree [outbound](#)
Reference **configure** [ipsec static-sa](#) *string*
Notes This element is mandatory.
Introduced 16.0.R6
Platforms All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service vprn string ospf3 number area string interface string bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

remain-down-on-failure boolean

Synopsis	Force adjacency down on failure until session returns
Context	configure service vprn string ospf3 number area string interface string bfd-liveness remain-down-on-failure boolean
Tree	remain-down-on-failure
Default	false
Introduced	16.0.R1
Platforms	All

dead-interval number

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure service vprn string ospf3 number area string interface string dead-interval number
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval number

Synopsis	Time between OSPF Hellos of this interface
Context	configure service vprn string ospf3 number area string interface string hello-interval number
Tree	hello-interval
Range	1 to 65535
Default	10

Units	seconds
Introduced	16.0.R1
Platforms	All

interface-type *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> interface-type <i>keyword</i>
Tree	interface-type
Description	<p>This command specifies the interface type.</p> <p>Use this command to set the interface type of an Ethernet link to point-to-point to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided the link is used as a point-to-point.</p> <p>If the interface type is not known at the time the interface is added to OSPF and subsequently the IP interface is bound (or moved) to a different interface type, this command must be entered manually.</p> <p>Configuring the interface type to secondary, allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p>
Options	broadcast, non-broadcast, point-to-point, secondary
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Configure load-balancing-weight.
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure service vprn string ospf3 number area string interface string loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	configure service vprn string ospf3 number area string interface string loopfree-alternate exclude boolean
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the policy-map context
Context	configure service vprn string ospf3 number area string interface string loopfree-alternate policy-map
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template that is applied to interface
Context	configure service vprn string ospf3 number area string interface string loopfree-alternate policy-map route-nh-template reference
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template string
Notes	This element is mandatory.

Introduced 16.0.R3
Platforms All

lsa-filter-out *keyword*

Synopsis LSA flooding reduction
Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **lsa-filter-out** *keyword*
Tree [lsa-filter-out](#)
Default none
Options none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Introduced 16.0.R1
Platforms All

metric *number*

Synopsis Explicit route cost metric that is applied to the interface
Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **metric** *number*
Tree [metric](#)
Range 1 to 65535
Introduced 16.0.R1
Platforms All

mtu *number*

Synopsis MTU for the OSPF to use on the interface
Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **mtu** *number*
Tree [mtu](#)
Range 512 to 9786
Introduced 16.0.R1
Platforms All

neighbor [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Add a list entry for **neighbor**

Context	configure service vprn <i>string ospf3 number area string interface string neighbor</i> (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IPv6 link local address of the OSPFv3 neighbor
Context	configure service vprn <i>string ospf3 number area string interface string neighbor</i> (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Allow interface to be advertised as an OSPF interface without running the OSPF protocol
Context	configure service vprn <i>string ospf3 number area string interface string passive</i> <i>boolean</i>
Tree	passive
Introduced	16.0.R1
Platforms	All

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	configure service vprn <i>string ospf3 number area string interface string poll-interval</i> <i>number</i>
Tree	poll-interval
Max. Range	0 to 4294967295
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> priority <i>number</i>
Tree	priority
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> rib-priority <i>keyword</i>
Tree	rib-priority
Options	high
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
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Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

key-rollover-interval *number*

Synopsis	Key rollover interval
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> key-rollover-interval <i>number</i>
Tree	key-rollover-interval
Range	10 to 300
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> loopfree-alternate-exclude <i>boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

nssa

Synopsis	Enable the nssa context
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> nssa
Tree	nssa
Introduced	16.0.R1

Platforms All

area-range [**ip-prefix-mask**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **area-range** list instance

Context **configure service vprn string ospf3 number area string nssa area-range** (*ipv4-prefix* | *ipv6-prefix*)

Tree [area-range](#)

Introduced 16.0.R1

Platforms All

[ip-prefix-mask] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Address ranges to create on an ABR for route summarization or suppression

Context **configure service vprn string ospf3 number area string nssa area-range** (*ipv4-prefix* | *ipv6-prefix*)

Tree [area-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

advertise *boolean*

Synopsis Advertise summarized range of addresses to other areas

Context **configure service vprn string ospf3 number area string nssa area-range** (*ipv4-prefix* | *ipv6-prefix*) **advertise** *boolean*

Tree [advertise](#)

Default true

Introduced 16.0.R1

Platforms All

originate-default-route

Synopsis Enable the **originate-default-route** context

Context **configure service vprn string ospf3 number area string nssa originate-default-route**

Tree [originate-default-route](#)

Introduced 16.0.R1
Platforms All

adjacency-check *boolean*

Synopsis Perform adjacency checks before originating a default route
Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* [nssa](#) [originate-default-route](#)
[adjacency-check](#) *boolean*
Tree [adjacency-check](#)
Default false
Introduced 16.0.R1
Platforms All

type-nssa *boolean*

Synopsis Generate a default route using NSSA-LSA type
Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* [nssa](#) [originate-default-route](#)
[type-nssa](#) *boolean*
Tree [type-nssa](#)
Default false
Introduced 16.0.R1
Platforms All

redistribute-external *boolean*

Synopsis Redistribute external routes into the NSSA
Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* [nssa](#) [redistribute-external](#)
boolean
Tree [redistribute-external](#)
Default true
Introduced 16.0.R1
Platforms All

summaries *boolean*

Synopsis Send summary (Type 3) LSAs into the NSSA on an ABR

Context	configure service vprn <i>string ospf3 number area string nssa summaries boolean</i>
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

stub

Synopsis	Enable the stub context
Context	configure service vprn <i>string ospf3 number area string stub</i>
Tree	stub
Introduced	16.0.R1
Platforms	All

default-metric *number*

Synopsis	Metric used by the ABR for the default route into the stub area
Context	configure service vprn <i>string ospf3 number area string stub default-metric number</i>
Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	configure service vprn <i>string ospf3 number area string stub summaries boolean</i>
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

virtual-link [**router-id**] *string transit-area reference*

Synopsis	Enter the virtual-link list instance
Context	configure service vprn string ospf3 number area string virtual-link string transit-area reference
Tree	virtual-link
Introduced	16.0.R1
Platforms	All

[router-id] *string*

Synopsis	Router identity of the virtual link neighbor
Context	configure service vprn string ospf3 number area string virtual-link string transit-area reference
Tree	virtual-link
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

transit-area *reference*

Synopsis	Transit area that links backbone area to area without physical connection with the backbone
Context	configure service vprn string ospf3 number area string virtual-link string transit-area reference
Tree	virtual-link
Reference	configure service vprn string ospf3 number area string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure service vprn string ospf3 number area string virtual-link string transit-area reference admin-state keyword
Tree	admin-state

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication

Synopsis	Enable the authentication context
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> authentication
Tree	authentication
Introduced	16.0.R6
Platforms	All

inbound *reference*

Synopsis	sa-name
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> authentication inbound <i>reference</i>
Tree	inbound
Reference	configure ipsec static-sa <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

outbound *reference*

Synopsis	sa-name
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> authentication outbound <i>reference</i>
Tree	outbound
Reference	configure ipsec static-sa <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

export-limit

Synopsis	Enable the export-limit context
Context	configure service vprn <i>string</i> ospf3 <i>number</i> export-limit
Tree	export-limit
Introduced	16.0.R1
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure service vprn <i>string</i> ospf3 <i>number</i> export-limit log-percent <i>number</i>
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure service vprn <i>string</i> ospf3 <i>number</i> export-limit number <i>number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure service vprn <i>string</i> ospf3 <i>number</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p>
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

external-db-overflow

Synopsis	Enable the external-db-overflow context
Context	configure service vprn <i>string</i> ospf3 <i>number</i> external-db-overflow
Tree	external-db-overflow
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time during which the router operates in overload
Context	configure service vprn <i>string</i> ospf3 <i>number</i> external-db-overflow interval <i>number</i>

Tree	interval
Range	0 to 2147483647
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	configure service vprn <i>string</i> ospf3 <i>number</i> external-db-overflow limit <i>number</i>
Tree	limit
Range	0 to 2147483647
Default	0
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	Preference for OSPF external routes
Context	configure service vprn <i>string</i> ospf3 <i>number</i> external-preference <i>number</i>
Tree	external-preference
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure service vprn <i>string</i> ospf3 <i>number</i> graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	configure service vprn <i>string</i> ospf3 <i>number</i> graceful-restart helper-mode <i>boolean</i>
Tree	helper-mode
Default	true
Introduced	16.0.R1
Platforms	All

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart helper
Context	configure service vprn <i>string</i> ospf3 <i>number</i> graceful-restart strict-lsa-checking <i>boolean</i>
Tree	strict-lsa-checking
Default	true
Introduced	16.0.R1
Platforms	All

ignore-dn-bit *boolean*

Synopsis	Ignore the DN bit for OSPF LSA packets for the instance
Context	configure service vprn <i>string</i> ospf3 <i>number</i> ignore-dn-bit <i>boolean</i>
Tree	ignore-dn-bit
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure service vprn <i>string</i> ospf3 <i>number</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure service vprn string ospf3 number loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

exclude

Synopsis	Enter the exclude context
Context	configure service vprn string ospf3 number loopfree-alternate exclude
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure service vprn string ospf3 number loopfree-alternate exclude prefix-policy reference
Tree	prefix-policy
Description	<p>This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.</p> <p>An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.</p>
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	configure service vprn <i>string ospf3 number multicast-import boolean</i>
Tree	multicast-import
Default	false
Introduced	16.0.R1
Platforms	All

overload *boolean*

Synopsis	Change local router state to appear overloaded
Context	configure service vprn <i>string ospf3 number overload boolean</i>
Tree	overload
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure service vprn <i>string ospf3 number overload-include-ext-1 boolean</i>
Tree	overload-include-ext-1
Default	false
Introduced	19.7.R1
Platforms	All

overload-include-ext-2 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure service vprn <i>string ospf3 number overload-include-ext-2 boolean</i>
Tree	overload-include-ext-2
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	configure service vprn <i>string ospf3 number overload-include-stub boolean</i>
Tree	overload-include-stub
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure service vprn <i>string ospf3 number overload-on-boot</i>
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state before reestablishing normal operations
Context	configure service vprn <i>string ospf3 number overload-on-boot timeout number</i>
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference for OSPF internal routes
Context	configure service vprn <i>string ospf3 number preference number</i>
Tree	preference
Range	1 to 255
Default	10

Introduced 16.0.R1
Platforms All

reference-bandwidth *number*

Synopsis Bandwidth to reference the default costing of interfaces
Context **configure** *service vprn string ospf3 number reference-bandwidth number*
Tree [reference-bandwidth](#)
Range 1 to 18446744073709551615
Default 100000000
Units kilobps
Introduced 16.0.R1
Platforms All

rib-priority

Synopsis Enter the **rib-priority** context
Context **configure** *service vprn string ospf3 number rib-priority*
Tree [rib-priority](#)
Introduced 16.0.R1
Platforms All

high

Synopsis Enter the **high** context
Context **configure** *service vprn string ospf3 number rib-priority high*
Tree [high](#)
Introduced 16.0.R1
Platforms All

prefix-list *reference*

Synopsis Higher priority list used during OSPF route calculation
Context **configure** *service vprn string ospf3 number rib-priority high prefix-list reference*
Tree [prefix-list](#)

Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

router-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	configure service vprn <i>string</i> ospf3 <i>number</i> router-id <i>string</i>
Tree	router-id
Introduced	16.0.R1
Platforms	All

rtr-adv-lsa-limit

Synopsis	Enable the rtr-adv-lsa-limit context
Context	configure service vprn <i>string</i> ospf3 <i>number</i> rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	configure service vprn <i>string</i> ospf3 <i>number</i> rtr-adv-lsa-limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
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Context	configure service vprn <i>string ospf3 number rtr-adv-lsa-limit max-lsa-count number</i>
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

overload-timeout (*number | keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
Context	configure service vprn <i>string ospf3 number rtr-adv-lsa-limit overload-timeout (number keyword)</i>
Tree	overload-timeout
Range	1 to 1800
Default	forever
Units	seconds
Options	forever
Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	configure service vprn <i>string ospf3 number rtr-adv-lsa-limit warning-threshold number</i>
Tree	warning-threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

suppress-dn-bit *boolean*

Synopsis	Suppress the DN bit setting for OSPF LSA packets
Context	configure service vprn <i>string ospf3 number suppress-dn-bit boolean</i>

Tree	suppress-dn-bit
Default	false
Introduced	16.0.R1
Platforms	All

timers

Synopsis	Enter the timers context
Context	configure service vprn string ospf3 number timers
Tree	timers
Introduced	16.0.R1
Platforms	All

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	configure service vprn string ospf3 number timers incremental-spf-wait number
Tree	incremental-spf-wait
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	configure service vprn string ospf3 number timers lsa-accumulate number
Tree	lsa-accumulate
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	configure service vprn string ospf3 number timers lsa-arrival number
Tree	lsa-arrival
Range	0 to 600000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-generate

Synopsis	Enter the lsa-generate context
Context	configure service vprn string ospf3 number timers lsa-generate
Tree	lsa-generate
Introduced	16.0.R1
Platforms	All

lsa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	configure service vprn string ospf3 number timers lsa-generate lsa-initial-wait number
Tree	lsa-initial-wait
Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	configure service vprn string ospf3 number timers lsa-generate lsa-second-wait number
Tree	lsa-second-wait

Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	configure service vprn <i>string</i> ospf3 <i>number</i> timers lsa-generate max-lsa-wait <i>number</i>
Tree	max-lsa-wait
Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	configure service vprn <i>string</i> ospf3 <i>number</i> timers redistribute-delay <i>number</i>
Tree	redistribute-delay
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the spf-wait context
Context	configure service vprn <i>string</i> ospf3 <i>number</i> timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure service vprn <i>string</i> ospf3 <i>number</i> timers spf-wait spf-initial-wait <i>number</i>
Tree	spf-initial-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	configure service vprn <i>string</i> ospf3 <i>number</i> timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Default	10000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	configure service vprn <i>string</i> ospf3 <i>number</i> timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	configure <i>service vprn string ospf3 number unicast-import boolean</i>
Tree	<i>unicast-import</i>
Default	true
Introduced	16.0.R1
Platforms	All

pcp

Synopsis	Enter the pcp context
Context	configure <i>service vprn string pcp</i>
Tree	<i>pcp</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [*name*] *string*

Synopsis	Enter the server list instance
Context	configure <i>service vprn string pcp server string</i>
Tree	<i>server</i>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis	PCP server name
Context	configure <i>service vprn string pcp server string</i>
Tree	<i>server</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the PCP server
Context	configure service vpn <i>string</i> pcp server <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vpn <i>string</i> pcp server <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite-address *string*

Synopsis	Inside Dual Stack Lite AFTR address
Context	configure service vpn <i>string</i> pcp server <i>string</i> dual-stack-lite-address <i>string</i>
Tree	dual-stack-lite-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fwd-inside-router *string*

Synopsis	PCP forwarding inside virtual router instance
Context	configure service vpn <i>string</i> pcp server <i>string</i> fwd-inside-router <i>string</i>
Tree	fwd-inside-router
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface [[name](#)] *reference*

Synopsis	Add a list entry for interface
Context	configure service vpn <i>string</i> pcp server <i>string</i> interface <i>reference</i>
Tree	interface
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *reference*

Synopsis	Interface name
Context	configure service vpn <i>string</i> pcp server <i>string</i> interface <i>reference</i>
Tree	interface
Reference	configure service vpn <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	PCP server policy
Context	configure service vpn <i>string</i> pcp server <i>string</i> policy <i>reference</i>
Tree	policy
Reference	configure service nat pcp-server-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim

Synopsis	Enable the pim context
Context	configure service vpn <i>string</i> pim
Tree	pim
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of PIM
 Context **configure service vprn string pim admin-state keyword**
 Tree **admin-state**
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

apply-to *keyword*

Synopsis IES and non-IES interfaces to create in PIM
 Context **configure service vprn string pim apply-to keyword**
 Tree **apply-to**
 Default none
 Options all, none
 Introduced 16.0.R1
 Platforms All

bgp-nh-override *boolean*

Synopsis Disable VRF import EC support for next-hop resolution
 Context **configure service vprn string pim bgp-nh-override boolean**
 Tree **bgp-nh-override**
 Description When configured to **true**, the RPF check is performed using IPv4 VPN AF next-hop instead of IPv4 AF VRF import extended community (EC).
 When configured to **false**, the RPF check is performed using IPv4 AF VRF import EC.
 Default false
 Introduced 19.7.R1
 Platforms All

import

Synopsis	Enter the import context
Context	configure service vprn string pim import
Tree	import
Introduced	16.0.R1
Platforms	All

join-policy *reference*

Synopsis	Policy name
Context	configure service vprn string pim import join-policy reference
Tree	join-policy
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

register-policy *reference*

Synopsis	Policy name
Context	configure service vprn string pim import register-policy reference
Tree	register-policy
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [*interface-name*] *string*

Synopsis	Enter the interface list instance
Context	configure service vprn string pim interface string

Tree	interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	configure service vprn <i>string</i> pim interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the PIM interface
Context	configure service vprn <i>string</i> pim interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

assert-period *number*

Synopsis	Time for periodic refreshes of PIM Assert messages on an interface
Context	configure service vprn <i>string</i> pim interface <i>string</i> assert-period <i>number</i>
Tree	assert-period
Range	1 to 300
Default	60
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure service vprn string pim interface string bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

ipv4 boolean

Synopsis	Use Bidirectional Forwarding Detection for IPv4 on PIM interface
Context	configure service vprn string pim interface string bfd-liveness ipv4 boolean
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 boolean

Synopsis	Use Bidirectional Forwarding Detection for IPv6 on PIM interface
Context	configure service vprn string pim interface string bfd-liveness ipv6 boolean
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

bsm-check-rtr-alert boolean

Synopsis	Check router alert option in bootstrap messages received
Context	configure service vprn string pim interface string bsm-check-rtr-alert boolean
Tree	bsm-check-rtr-alert
Default	false
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Frequency at which PIM Hello messages are sent over this interface
Context	configure service vprn <i>string</i> pim interface <i>string</i> hello-interval <i>number</i>
Tree	hello-interval
Range	0 to 255
Default	30
Introduced	16.0.R1
Platforms	All

hello-multiplier *number*

Synopsis	Multiplier to determine the hold time for PIM neighbor
Context	configure service vprn <i>string</i> pim interface <i>string</i> hello-multiplier <i>number</i>
Tree	hello-multiplier
Range	20 to 100
Default	35
Introduced	16.0.R1
Platforms	All

improved-assert *boolean*

Synopsis	Allow improved assert processing on interface
Context	configure service vprn <i>string</i> pim interface <i>string</i> improved-assert <i>boolean</i>
Tree	improved-assert
Default	true
Introduced	16.0.R1
Platforms	All

instant-prune-echo *boolean*

Synopsis	Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface
Context	configure service vprn <i>string</i> pim interface <i>string</i> instant-prune-echo <i>boolean</i>
Tree	instant-prune-echo
Default	false

Introduced 16.0.R1
Platforms All

ipv4

Synopsis Enter the **ipv4** context
Context **configure** [service vprn string pim interface string ipv4](#)
Tree [ipv4](#)
Introduced 16.0.R1
Platforms All

monitor-oper-group

Synopsis Enter the **monitor-oper-group** context
Context **configure** [service vprn string pim interface string ipv4 monitor-oper-group](#)
Tree [monitor-oper-group](#)
Introduced 16.0.R1
Platforms All

name *reference*

Synopsis Operational group identifier
Context **configure** [service vprn string pim interface string ipv4 monitor-oper-group name reference](#)
Tree [name](#)
Reference **configure** [service oper-group string](#)
Introduced 16.0.R1
Platforms All

operation *keyword*

Synopsis Operation performed when operational group is active
Context **configure** [service vprn string pim interface string ipv4 monitor-oper-group operation keyword](#)
Tree [operation](#)
Options add, subtract, set

Introduced 16.0.R1
Platforms All

priority-delta *number*

Synopsis Delta priority with operation when operational group is active
Context **configure** [service vprn](#) *string* [pim interface](#) *string* [ipv4 monitor-oper-group](#) [priority-delta](#) *number*
Tree [priority-delta](#)
Range 1 to 4294967295
Introduced 16.0.R1
Platforms All

multicast *boolean*

Synopsis Enable PIM interface operation
Context **configure** [service vprn](#) *string* [pim interface](#) *string* [ipv4 multicast](#) *boolean*
Tree [multicast](#)
Default true
Introduced 16.0.R1
Platforms All

ipv6

Synopsis Enter the **ipv6** context
Context **configure** [service vprn](#) *string* [pim interface](#) *string* [ipv6](#)
Tree [ipv6](#)
Introduced 16.0.R1
Platforms All

monitor-oper-group

Synopsis Enter the **monitor-oper-group** context
Context **configure** [service vprn](#) *string* [pim interface](#) *string* [ipv6 monitor-oper-group](#)
Tree [monitor-oper-group](#)
Introduced 16.0.R1

Platforms All

name *reference*

Synopsis Operational group identifier

Context **configure** [service](#) [vprn](#) *string* [pim](#) [interface](#) *string* [ipv6](#) [monitor-oper-group](#) *name reference*

Tree [name](#)

Reference **configure** [service](#) [oper-group](#) *string*

Introduced 16.0.R1

Platforms All

operation *keyword*

Synopsis Operation performed when operational group is active

Context **configure** [service](#) [vprn](#) *string* [pim](#) [interface](#) *string* [ipv6](#) [monitor-oper-group](#) *operation keyword*

Tree [operation](#)

Options add, subtract, set

Introduced 16.0.R1

Platforms All

priority-delta *number*

Synopsis Delta priority with operation when operational group is active

Context **configure** [service](#) [vprn](#) *string* [pim](#) [interface](#) *string* [ipv6](#) [monitor-oper-group](#) *priority-delta number*

Tree [priority-delta](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

multicast *boolean*

Synopsis Enable PIM interface operation

Context **configure** [service](#) [vprn](#) *string* [pim](#) [interface](#) *string* [ipv6](#) [multicast](#) *boolean*

Tree	multicast
Default	true
Introduced	16.0.R1
Platforms	All

max-groups *number*

Synopsis	Maximum number of groups for the interface
Context	configure service vprn <i>string</i> pim interface <i>string</i> max-groups <i>number</i>
Tree	max-groups
Range	0 1 to 16000
Default	0
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the mcac context
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)

Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the mc-constraints context
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the multicast CAC constraints
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

level [[level-id](#)] *number*

Synopsis	Enter the level list instance
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Introduced	16.0.R1
Platforms	All

[[level-id](#)] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints level <i>number</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 2147483647

Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [[number-lag-port-down](#)] *number*

Synopsis	Enter the number-down list instance
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down
Introduced	16.0.R1
Platforms	All

[number-lag-port-down] *number*

Synopsis	Number of ports that are down in this LAG link
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints number-down <i>number</i> level <i>number</i>
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

use-lag-port-weight *boolean*

Synopsis Use LAG port weight in calculating MCAC constraints

Context **configure service vprn string pim interface string mcac mc-constraints use-lag-port-weight boolean**

Tree **use-lag-port-weight**

Description When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.

Default false

Introduced 16.0.R1

Platforms All

policy *reference*

Synopsis Multicast CAC policy name

Context **configure service vprn string pim interface string mcac policy reference**

Tree **policy**

Description This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.

Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference **configure mcac policy string**

Introduced 16.0.R1

Platforms All

multicast-senders *keyword*

Synopsis	Subnet matching for the incoming data packets
Context	configure service vprn <i>string</i> pim interface <i>string</i> multicast-senders <i>keyword</i>
Tree	multicast-senders
Default	auto
Options	auto, always, never
Introduced	16.0.R1
Platforms	All

p2mp-ldp-tree-join

Synopsis	Enter the p2mp-ldp-tree-join context
Context	configure service vprn <i>string</i> pim interface <i>string</i> p2mp-ldp-tree-join
Tree	p2mp-ldp-tree-join
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv4 *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv4 PIM joins
Context	configure service vprn <i>string</i> pim interface <i>string</i> p2mp-ldp-tree-join ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6 *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv6 PIM joins
Context	configure service vprn <i>string</i> pim interface <i>string</i> p2mp-ldp-tree-join ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis	DR election priority for this interface
Context	configure service vprn string pim interface string priority number
Tree	priority
Range	1 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

sticky-dr

Synopsis	Enable the sticky-dr context
Context	configure service vprn string pim interface string sticky-dr
Tree	sticky-dr
Introduced	16.0.R1
Platforms	All

priority number

Synopsis	DR election priority for this interface
Context	configure service vprn string pim interface string sticky-dr priority number
Tree	priority
Range	1 to 4294967295
Default	1024
Introduced	16.0.R1
Platforms	All

three-way-hello boolean

Synopsis	Allow three-way hello compatibility mode
Context	configure service vprn string pim interface string three-way-hello boolean
Tree	three-way-hello
Default	false
Introduced	16.0.R1

Platforms All

tracking-support *boolean*

Synopsis Allow upstream routers to explicitly track join membership
Context **configure** [service vprn](#) *string* [pim interface](#) *string* **tracking-support** *boolean*
Tree [tracking-support](#)
Default false
Introduced 16.0.R1
Platforms All

ipv4

Synopsis Enter the **ipv4** context
Context **configure** [service vprn](#) *string* [pim ipv4](#)
Tree [ipv4](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of PIM operation for IPv4
Context **configure** [service vprn](#) *string* [pim ipv4](#) **admin-state** *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

grt-extranet

Synopsis Enter the **grt-extranet** context
Context **configure** [service vprn](#) *string* [pim ipv4](#) **grt-extranet**
Tree [grt-extranet](#)
Introduced 16.0.R1

Platforms All

any

Synopsis GRT or VRF extranet for this instance
Context **configure service vprn string pim ipv4 grt-extranet any**
Tree **any**
Notes The following elements are part of a choice: **any** or **group-prefix**.
Introduced 16.0.R1
Platforms All

group-prefix [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **group-prefix** list instance
Context **configure service vprn string pim ipv4 grt-extranet group-prefix (*ipv4-prefix* | *ipv6-prefix*)**
Tree **group-prefix**
Notes The following elements are part of a choice: **any** or **group-prefix**.
Introduced 16.0.R1
Platforms All

[**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP address and mask length
Context **configure service vprn string pim ipv4 grt-extranet group-prefix (*ipv4-prefix* | *ipv6-prefix*)**
Tree **group-prefix**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

starg *boolean*

Synopsis Add a static (*,G) entry
Context **configure service vprn string pim ipv4 grt-extranet group-prefix (*ipv4-prefix* | *ipv6-prefix*) starg *boolean***
Tree **starg**

Default	false
Introduced	16.0.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route table for RPF lookup
Context	configure service vprn <i>string</i> pim ipv4 rpf-table <i>keyword</i>
Tree	rpf-table
Default	rtable-u
Options	rtable-m, rtable-u, both
Introduced	16.0.R1
Platforms	All

ssm-assert-compatible-mode *boolean*

Synopsis	Enable SSM assert compatible mode
Context	configure service vprn <i>string</i> pim ipv4 ssm-assert-compatible-mode <i>boolean</i>
Tree	ssm-assert-compatible-mode
Default	false
Introduced	16.0.R1
Platforms	All

ssm-default-range *boolean*

Synopsis	SSM default range
Context	configure service vprn <i>string</i> pim ipv4 ssm-default-range <i>boolean</i>
Tree	ssm-default-range
Default	true
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
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Context	configure service vprn string pim ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv6
Context	configure service vprn string pim ipv6 admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route table for RPF lookup
Context	configure service vprn string pim ipv6 rpf-table keyword
Tree	rpf-table
Default	rtable-u
Options	rtable-m, rtable-u, both
Introduced	16.0.R1
Platforms	All

ssm-default-range *boolean*

Synopsis	SSM default range
Context	configure service vprn string pim ipv6 ssm-default-range boolean
Tree	ssm-default-range
Default	true
Introduced	16.0.R1
Platforms	All

mc-ecmp-balance *boolean*

Synopsis	Enable multicast balancing of traffic over ECMP links
Context	configure service vprn <i>string</i> pim mc-ecmp-balance <i>boolean</i>
Tree	mc-ecmp-balance
Default	true
Introduced	16.0.R1
Platforms	All

mc-ecmp-balance-hold *number*

Synopsis	Hold time for multicast balancing over ECMP links
Context	configure service vprn <i>string</i> pim mc-ecmp-balance-hold <i>number</i>
Tree	mc-ecmp-balance-hold
Range	2 to 600
Units	minutes
Introduced	16.0.R1
Platforms	All

mc-ecmp-hashing

Synopsis	Enable the mc-ecmp-hashing context
Context	configure service vprn <i>string</i> pim mc-ecmp-hashing
Tree	mc-ecmp-hashing
Introduced	16.0.R1
Platforms	All

rebalance *boolean*

Synopsis	Rebalance flows to newly added links immediately instead of waiting until they are pruned
Context	configure service vprn <i>string</i> pim mc-ecmp-hashing rebalance <i>boolean</i>
Tree	rebalance
Default	false
Introduced	16.0.R1
Platforms	All

mtu-over-head *number*

Synopsis	MVPN tunnel MTU size reduction to allow for BIER header
Context	configure service vprn <i>string pim mtu-over-head</i> <i>number</i>
Tree	mtu-over-head
Description	This command subtracts the specified value from the MVPN tunnel MTU to allow a BIER header to be added without exceeding the network MTU.
Range	0 44 76 140 268 536
Default	0
Introduced	20.5.R1
Platforms	All

non-dr-attract-traffic *boolean*

Synopsis	Attract traffic when the router is not the designated one
Context	configure service vprn <i>string pim non-dr-attract-traffic</i> <i>boolean</i>
Tree	non-dr-attract-traffic
Default	false
Introduced	16.0.R1
Platforms	All

rp

Synopsis	Enter the rp context
Context	configure service vprn <i>string pim rp</i>
Tree	rp
Introduced	16.0.R1
Platforms	All

bootstrap

Synopsis	Enter the bootstrap context
Context	configure service vprn <i>string pim rp bootstrap</i>
Tree	bootstrap
Introduced	16.0.R1

Platforms All

export *reference*

Synopsis Export policy to control the flow of bootstrap messages
Context **configure** [service vprn](#) *string* [pim rp bootstrap export reference](#)
Tree [export](#)
Reference **configure** [policy-options policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

import *reference*

Synopsis Import policy to control the flow of bootstrap messages
Context **configure** [service vprn](#) *string* [pim rp bootstrap import reference](#)
Tree [import](#)
Reference **configure** [policy-options policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

ipv4

Synopsis Enter the **ipv4** context
Context **configure** [service vprn](#) *string* [pim rp ipv4](#)
Tree [ipv4](#)
Introduced 16.0.R1
Platforms All

anycast [ipv4-address] *string rp-set-peer string*

Synopsis	Add a list entry for anycast
Context	configure service vprn string pim rp ipv4 anycast string rp-set-peer string
Tree	anycast
Introduced	16.0.R1
Platforms	All

[ipv4-address] *string*

Synopsis	Loopback IP address shared by routes in RP set
Context	configure service vprn string pim rp ipv4 anycast string rp-set-peer string
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-set-peer *string*

Synopsis	Configure a peer in the anycast rp-set.
Context	configure service vprn string pim rp ipv4 anycast string rp-set-peer string
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

auto-rp-discovery *boolean*

Synopsis	Enable auto RP discovery
Context	configure service vprn string pim rp ipv4 auto-rp-discovery boolean
Tree	auto-rp-discovery
Default	false
Introduced	16.0.R1
Platforms	All

bsr-candidate

Synopsis	Enter the bsr-candidate context
Context	configure service vprn string pim rp ipv4 bsr-candidate
Tree	bsr-candidate
Introduced	16.0.R1
Platforms	All

address string

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	configure service vprn string pim rp ipv4 bsr-candidate address string
Tree	address
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the Candidate BSR
Context	configure service vprn string pim rp ipv4 bsr-candidate admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

hash-mask-len number

Synopsis	Length for bootstrap hash mask
Context	configure service vprn string pim rp ipv4 bsr-candidate hash-mask-len number
Tree	hash-mask-len
Range	0 to 32
Default	30
Introduced	16.0.R1
Platforms	All

priority number

Synopsis	Bootstrap priority of the router
Context	configure service vprn string pim rp ipv4 bsr-candidate priority number
Tree	priority
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

candidate boolean

Synopsis	Enable auto-RP to advertise candidate RP information
Context	configure service vprn string pim rp ipv4 candidate boolean
Tree	candidate
Description	<p>When configured to true, the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery.</p> <p>When configured to false, the candidate RP information is not specified.</p>
Default	false
Introduced	20.10.R1
Platforms	All

mapping-agent boolean

Synopsis	Enable the mapping agent on the node
Context	configure service vprn string pim rp ipv4 mapping-agent boolean
Tree	mapping-agent
Description	<p>When configured to true, the mapping agent is enabled on the node. The auto-RP MA observes the auto-rp-announcement messages, selects the RP and generates the RP discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality.</p>
Default	false
Introduced	20.10.R1
Platforms	All

rp-candidate

Synopsis	Enter the rp-candidate context
Context	configure service vprn string pim rp ipv4 rp-candidate
Tree	rp-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Local RP address
Context	configure service vprn string pim rp ipv4 rp-candidate address string
Tree	address
Description	This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	configure service vprn string pim rp ipv4 rp-candidate admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group-range [*ipv4-prefix*] *string*

Synopsis	Add a list entry for group-range
Context	configure service vprn string pim rp ipv4 rp-candidate group-range string
Tree	group-range
Introduced	16.0.R1
Platforms	All

[ipv4-prefix] *string*

Synopsis	IPv4 address and prefix length
Context	configure service vprn <i>string</i> pim rp ipv4 rp-candidate group-range <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	configure service vprn <i>string</i> pim rp ipv4 rp-candidate holdtime <i>number</i>
Tree	holdtime
Range	5 to 255
Default	150
Units	seconds
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Candidate RP priority
Context	configure service vprn <i>string</i> pim rp ipv4 rp-candidate priority <i>number</i>
Tree	priority
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the static context
Context	configure service vprn <i>string</i> pim rp ipv4 static
Tree	static

Introduced 16.0.R1
Platforms All

address [ipv4-address] *string*

Synopsis Enter the **address** list instance
Context **configure service vprn string pim rp ipv4 static address string**
Tree [address](#)
Introduced 16.0.R1
Platforms All

[ipv4-address] *string*

Synopsis IPv4 address for the static RP
Context **configure service vprn string pim rp ipv4 static address string**
Tree [address](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

group-prefix [ipv4-prefix] *string*

Synopsis Add a list entry for **group-prefix**
Context **configure service vprn string pim rp ipv4 static address string group-prefix string**
Tree [group-prefix](#)
Introduced 16.0.R1
Platforms All

[ipv4-prefix] *string*

Synopsis IPv4 address and prefix length
Context **configure service vprn string pim rp ipv4 static address string group-prefix string**
Tree [group-prefix](#)
Notes This element is part of a list key.
Introduced 16.0.R1

Platforms All

override *boolean*

Synopsis Change the precedence for static RP over dynamically learnt RP
Context **configure** *service vprn string pim rp ipv4 static address string override boolean*
Tree *override*
Default false
Introduced 16.0.R1
Platforms All

ipv6

Synopsis Enter the **ipv6** context
Context **configure** *service vprn string pim rp ipv6*
Tree *ipv6*
Introduced 16.0.R1
Platforms All

anycast [*ipv6-address*] *string rp-set-peer string*

Synopsis Add a list entry for **anycast**
Context **configure** *service vprn string pim rp ipv6 anycast string rp-set-peer string*
Tree *anycast*
Introduced 16.0.R1
Platforms All

[ipv6-address] *string*

Synopsis Loopback IP address shared by routes in RP set
Context **configure** *service vprn string pim rp ipv6 anycast string rp-set-peer string*
Tree *anycast*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

rp-set-peer *string*

Synopsis	Peer in the anycast RP set
Context	configure service vprn <i>string</i> pim rp ipv6 anycast <i>string</i> rp-set-peer <i>string</i>
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bsr-candidate

Synopsis	Enter the bsr-candidate context
Context	configure service vprn <i>string</i> pim rp ipv6 bsr-candidate
Tree	bsr-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	configure service vprn <i>string</i> pim rp ipv6 bsr-candidate <i>address</i> <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	configure service vprn <i>string</i> pim rp ipv6 bsr-candidate <i>admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

hash-mask-len *number*

Synopsis	Length for bootstrap hash mask
Context	configure service vprn <i>string</i> pim rp ipv6 bsr-candidate hash-mask-len <i>number</i>
Tree	hash-mask-len
Range	0 to 128
Default	126
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Bootstrap priority of the router
Context	configure service vprn <i>string</i> pim rp ipv6 bsr-candidate priority <i>number</i>
Tree	priority
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

embedded-rp

Synopsis	Enable the embedded-rp context
Context	configure service vprn <i>string</i> pim rp ipv6 embedded-rp
Tree	embedded-rp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of embedded RP
Context	configure service vprn <i>string</i> pim rp ipv6 embedded-rp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
Platforms All

group-range [ipv6-prefix] *string*

Synopsis Add a list entry for **group-range**
Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [embedded-rp](#) [group-range](#) *string*
Tree [group-range](#)
Introduced 16.0.R1
Platforms All

[ipv6-prefix] *string*

Synopsis IPv6 address and prefix length
Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [embedded-rp](#) [group-range](#) *string*
Tree [group-range](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

rp-candidate

Synopsis Enter the **rp-candidate** context
Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [rp-candidate](#)
Tree [rp-candidate](#)
Introduced 16.0.R1
Platforms All

address *string*

Synopsis Local RP address
Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [rp-candidate](#) [address](#) *string*
Tree [address](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	configure service vprn <i>string pim rp ipv6 rp-candidate admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group-range [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for group-range
Context	configure service vprn <i>string pim rp ipv6 rp-candidate group-range string</i>
Tree	group-range
Introduced	16.0.R1
Platforms	All

[ipv6-prefix] *string*

Synopsis	IPv6 address and prefix length
Context	configure service vprn <i>string pim rp ipv6 rp-candidate group-range string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	configure service vprn <i>string pim rp ipv6 rp-candidate holdtime number</i>
Tree	holdtime
Range	5 to 255
Default	150
Units	seconds

Introduced 16.0.R1
Platforms All

priority *number*

Synopsis Candidate RP priority
Context **configure** [service vprn](#) *string* [pim rp ipv6 rp-candidate](#) *priority number*
Tree [priority](#)
Range 0 to 255
Default 192
Introduced 16.0.R1
Platforms All

static

Synopsis Enter the **static** context
Context **configure** [service vprn](#) *string* [pim rp ipv6 static](#)
Tree [static](#)
Introduced 16.0.R1
Platforms All

address [[ipv6-address](#)] *string*

Synopsis Enter the **address** list instance
Context **configure** [service vprn](#) *string* [pim rp ipv6 static address](#) *string*
Tree [address](#)
Introduced 16.0.R1
Platforms All

[ipv6-address] *string*

Synopsis Static IP address of the RP
Context **configure** [service vprn](#) *string* [pim rp ipv6 static address](#) *string*
Tree [address](#)
Notes This element is part of a list key.

Introduced 16.0.R1
Platforms All

group-prefix [ipv6-prefix] *string*

Synopsis Add a list entry for **group-prefix**
Context **configure** [service vprn string pim rp ipv6 static address string group-prefix string](#)
Tree [group-prefix](#)
Introduced 16.0.R1
Platforms All

[ipv6-prefix] *string*

Synopsis IPv6 address and prefix length
Context **configure** [service vprn string pim rp ipv6 static address string group-prefix string](#)
Tree [group-prefix](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

override *boolean*

Synopsis Change the precedence for static RP over dynamically learnt RP
Context **configure** [service vprn string pim rp ipv6 static address string override boolean](#)
Tree [override](#)
Default false
Introduced 16.0.R1
Platforms All

spt-switchover [ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **spt-switchover** list instance
Context **configure** [service vprn string pim spt-switchover \(ipv4-prefix | ipv6-prefix\)](#)
Tree [spt-switchover](#)
Introduced 16.0.R1

Platforms All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP address and mask length
Context **configure** *service* *vprn* *string* *pim* *spt-switchover* (*ipv4-prefix* | *ipv6-prefix*)
Tree *spt-switchover*
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

threshold (*number* | *keyword*)

Synopsis SPT switchover threshold
Context **configure** *service* *vprn* *string* *pim* *spt-switchover* (*ipv4-prefix* | *ipv6-prefix*) **threshold** (*number* | *keyword*)
Tree *threshold*
Range 1 to 4294967294
Units kilobps
Options infinity
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

ssm-groups

Synopsis Enter the **ssm-groups** context
Context **configure** *service* *vprn* *string* *pim* *ssm-groups*
Tree *ssm-groups*
Introduced 16.0.R1
Platforms All

group-range [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Add a list entry for **group-range**

Context	configure service vpn <i>string</i> pim ssm-groups group-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-range
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address and mask length
Context	configure service vpn <i>string</i> pim ssm-groups group-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

radius

Synopsis	Enter the radius context
Context	configure service vpn <i>string</i> radius
Tree	radius
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy [*name*] *string*

Synopsis	Enter the proxy list instance
Context	configure service vpn <i>string</i> radius proxy <i>string</i>
Tree	proxy
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	RADIUS proxy name
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Context	configure service vpn <i>string</i> radius proxy <i>string</i>
Tree	proxy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of RADIUS proxy
Context	configure service vpn <i>string</i> radius proxy <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-matching

Synopsis	Enter the attribute-matching context
Context	configure service vpn <i>string</i> radius proxy <i>string</i> attribute-matching
Tree	attribute-matching
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*index*] *number*

Synopsis	Enter the entry list instance
Context	configure service vpn <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[index] *number*

Synopsis	Index of this entry
Context	configure service vpn <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i>
Tree	entry
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-server-policy *string*

Synopsis	Accounting server policy
Context	configure service vpn <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> accounting-server-policy <i>string</i>
Tree	accounting-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-server-policy *string*

Synopsis	Authentication server policy
Context	configure service vpn <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> authentication-server-policy <i>string</i>
Tree	authentication-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis	Prefix string
Context	configure service vpn <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> prefix-string <i>string</i>
Tree	prefix-string
String Length	1 to 128

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix-string *string*

Synopsis Prefix string
Context **configure** [service vprn string](#) [radius proxy string](#) [attribute-matching entry number](#) [suffix-string string](#)
Tree [suffix-string](#)
String Length 1 to 128
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis Matching attribute type to RADIUS server policy
Context **configure** [service vprn string](#) [radius proxy string](#) [attribute-matching type number](#)
Tree [type](#)
Range 1 to 255
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number | keyword*)

Synopsis Matching Vendor ID to RADIUS server policy
Context **configure** [service vprn string](#) [radius proxy string](#) [attribute-matching vendor \(number | keyword\)](#)
Tree [vendor](#)
Range 1 to 16777215
Options nokia
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cache

Synopsis Enter the **cache** context

Context	configure service vprn string radius proxy string cache
Tree	cache
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the RADIUS proxy cache
Context	configure service vprn string radius proxy string cache admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

key

Synopsis	Enable the key context
Context	configure service vprn string radius proxy string cache key
Tree	key
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-type *number*

Synopsis	RADIUS attribute type to cache for this RADIUS proxy server
Context	configure service vprn string radius proxy string cache key attribute-type number
Tree	attribute-type
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-type *keyword*

Synopsis	Packet type of the RADIUS messages
Context	configure service vprn <i>string</i> radius proxy <i>string</i> cache key packet-type <i>keyword</i>
Tree	packet-type
Options	access-request, access-accept
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis	RADIUS Vendor ID
Context	configure service vprn <i>string</i> radius proxy <i>string</i> cache key vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Idle timeout value
Context	configure service vprn <i>string</i> radius proxy <i>string</i> cache timeout <i>number</i>
Tree	timeout
Range	60 to 3600
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-accounting

Synopsis	Enter the track-accounting context
Context	configure service vprn <i>string</i> radius proxy <i>string</i> cache track-accounting
Tree	track-accounting

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-off *boolean*

Synopsis Remove all ESM hosts associated with the RADIUS client
Context **configure** [service](#) [vprn](#) *string* [radius proxy](#) *string* [cache track-accounting](#) [accounting-off](#) *boolean*
Tree [accounting-off](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-on *boolean*

Synopsis Remove all ESM hosts associated with the RADIUS client
Context **configure** [service](#) [vprn](#) *string* [radius proxy](#) *string* [cache track-accounting](#) [accounting-on](#) *boolean*
Tree [accounting-on](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis Update the ESM host with the RADIUS client that generated the interim update
Context **configure** [service](#) [vprn](#) *string* [radius proxy](#) *string* [cache track-accounting](#) [interim-update](#) *boolean*
Tree [interim-update](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *boolean*

Synopsis Update host with client that generated accounting-start

Context **configure service vprn string radius proxy string cache track-accounting start boolean**
Tree **start**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop boolean

Synopsis Remove ESM host and forward accounting-stop packet
Context **configure service vprn string radius proxy string cache track-accounting stop boolean**
Tree **stop**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-authentication

Synopsis Enter the **track-authentication** context
Context **configure service vprn string radius proxy string cache track-authentication**
Tree **track-authentication**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept boolean

Synopsis Track Access-Accept message for mobility
Context **configure service vprn string radius proxy string cache track-authentication accept boolean**
Tree **accept**
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-delete-hold-time number

Synopsis Delete hold time

Context	configure service vprn <i>string</i> radius proxy <i>string</i> cache track-delete-hold-time <i>number</i>
Tree	track-delete-hold-time
Range	0 to 6000
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the defaults context
Context	configure service vprn <i>string</i> radius proxy <i>string</i> defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-server-policy *string*

Synopsis	Default accounting RADIUS server policy
Context	configure service vprn <i>string</i> radius proxy <i>string</i> defaults accounting-server-policy <i>string</i>
Tree	accounting-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-server-policy *string*

Synopsis	Default authentication RADIUS server policy
Context	configure service vprn <i>string</i> radius proxy <i>string</i> defaults authentication-server-policy <i>string</i>
Tree	authentication-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> radius proxy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [[interface-name](#)] *reference*

Synopsis	Add a list entry for interface
Context	configure service vprn <i>string</i> radius proxy <i>string</i> interface <i>reference</i>
Tree	interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[interface-name] *reference*

Synopsis	IP interface name
Context	configure service vprn <i>string</i> radius proxy <i>string</i> interface <i>reference</i>
Tree	interface
Reference	configure service vprn <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

load-balance-key

Synopsis	Enter the load-balance-key context
Context	configure service vprn <i>string</i> radius proxy <i>string</i> load-balance-key
Tree	load-balance-key
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-1

Synopsis	Enter the attribute-1 context
Context	configure service vprn string radius proxy string load-balance-key attribute-1
Tree	attribute-1
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type number

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure service vprn string radius proxy string load-balance-key attribute-1 type number
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (number | keyword)

Synopsis	Vendor-Id attribute
Context	configure service vprn string radius proxy string load-balance-key attribute-1 vendor (number keyword)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-2

Synopsis	Enter the attribute-2 context
Context	configure service vprn string radius proxy string load-balance-key attribute-2
Tree	attribute-2

Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type number

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure service vprn string radius proxy string load-balance-key attribute-2 type number
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (number | keyword)

Synopsis	Vendor-Id attribute
Context	configure service vprn string radius proxy string load-balance-key attribute-2 vendor (number keyword)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-3

Synopsis	Enter the attribute-3 context
Context	configure service vprn string radius proxy string load-balance-key attribute-3
Tree	attribute-3
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type number

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure service vprn string radius proxy string load-balance-key attribute-3 type number
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (number | keyword)

Synopsis	Vendor-Id attribute
Context	configure service vprn string radius proxy string load-balance-key attribute-3 vendor (number keyword)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-4

Synopsis	Enter the attribute-4 context
Context	configure service vprn string radius proxy string load-balance-key attribute-4
Tree	attribute-4
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type number

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure service vprn string radius proxy string load-balance-key attribute-4 type number

Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	configure service vprn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-4 vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-5

Synopsis	Enter the attribute-5 context
Context	configure service vprn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-5
Tree	attribute-5
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure service vprn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-5 type <i>number</i>
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	configure service vprn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-5 vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-udp

Synopsis	Key to consist of the source IP address and source UDP port of the RADIUS message
Context	configure service vprn <i>string</i> radius proxy <i>string</i> load-balance-key source-ip-udp
Tree	source-ip-udp
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

purpose *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Purpose of the RADIUS proxy
Context	configure service vprn <i>string</i> radius proxy <i>string</i> purpose <i>keyword</i>
Tree	purpose
Options	accounting, authentication, accounting-authentication
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	configure service vprn <i>string</i> radius proxy <i>string</i> python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Format of the secret key to access the RADIUS proxy server
Context	configure service vprn <i>string</i> radius proxy <i>string</i> secret <i>string</i>
Tree	secret
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-accounting-response *boolean*

Synopsis	Allow RADIUS proxy server to respond to Accounting-Response messages
Context	configure service vprn <i>string</i> radius proxy <i>string</i> send-accounting-response <i>boolean</i>
Tree	send-accounting-response
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the wlan-gw context
Context	configure service vprn <i>string</i> radius proxy <i>string</i> wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

address string

Synopsis	IPv4 address of the distributed RADIUS proxy server
Context	configure service vprn string radius proxy string wlan-gw address string
Tree	address
Description	This command configures the IPv4 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address string

Synopsis	IPv6 address of the distributed RADIUS proxy server
Context	configure service vprn string radius proxy string wlan-gw ipv6-address string
Tree	ipv6-address
Description	This command configures the IPv6 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN gateway group
Context	configure service vprn string radius proxy string wlan-gw-group reference
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group number
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [name] string

Synopsis	Enter the server list instance
Context	configure service vprn string radius server string

Tree	server
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	External RADIUS server name
Context	configure service vpn <i>string</i> radius server <i>string</i>
Tree	server
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept-coa *boolean*

Synopsis	Process Change of Authorization (CoA) messages
Context	configure service vpn <i>string</i> radius server <i>string</i> accept-coa <i>boolean</i>
Tree	accept-coa
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-port *number*

Synopsis	UDP port number of the RADIUS for accounting events
Context	configure service vpn <i>string</i> radius server <i>string</i> acct-port <i>number</i>
Tree	acct-port
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	configure service vprn <i>string</i> radius server <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auth-port *number*

Synopsis	UDP port number of the RADIUS to be used as match criteria
Context	configure service vprn <i>string</i> radius server <i>string</i> auth-port <i>number</i>
Tree	auth-port
Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> radius server <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pending-requests-limit *number*

Synopsis	Limit of the number for pending RADIUS requests
Context	configure service vprn <i>string</i> radius server <i>string</i> pending-requests-limit <i>number</i>
Tree	pending-requests-limit
Range	1 to 4096
Default	4096

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis Python script policy to modify CoA messages
Context **configure** [service vprn string radius server string python-policy reference](#)
Tree [python-policy](#)
Reference **configure** [python python-policy string](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis Secret key associated with this RADIUS server
Context **configure** [service vprn string radius server string secret string](#)
Tree [secret](#)
String Length 1 to 115
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reassembly

Synopsis Enable the **reassembly** context
Context **configure** [service vprn string reassembly](#)
Tree [reassembly](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group (including WLAN Gateway group) that executes the reassembly
Context	configure service vprn <i>string reassembly nat-group number</i>
Tree	nat-group
Max. Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to-base-network *boolean*

Synopsis	Allow reassembled traffic sent to network interface
Context	configure service vprn <i>string reassembly to-base-network boolean</i>
Tree	to-base-network
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundant-interface [[interface-name](#)] *string*

Synopsis	Enter the redundant-interface list instance
Context	configure service vprn <i>string redundant-interface string</i>
Tree	redundant-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[interface-name] *string*

Synopsis	Interface name
Context	configure service vprn <i>string redundant-interface string</i>
Tree	redundant-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis	Enter the hold-time context
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis	Enter the down context
Context	configure service vprn string redundant-interface string hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service vprn string redundant-interface string hold-time ipv4 down init-only boolean
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service vprn string redundant-interface string hold-time ipv4 down seconds number
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the up context
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Context	configure service vprn string redundant-interface string hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds number

Synopsis	Up hold time for the IP interface
Context	configure service vprn string redundant-interface string hold-time ipv4 up seconds number
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu number

Synopsis	IP MTU applied to outgoing packets
Context	configure service vprn string redundant-interface string ip-mtu number
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn string redundant-interface string ipv4
Tree	ipv4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis	Enable the primary context
Context	configure service vprn string redundant-interface string ipv4 primary
Tree	primary
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address string

Synopsis	IPv4 address to be assigned to the interface
Context	configure service vprn string redundant-interface string ipv4 primary address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length number

Synopsis	IPv4 address prefix length
Context	configure service vprn string redundant-interface string ipv4 primary prefix-length number
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-ip string

Synopsis	Remote IP address for the interface
Context	configure service vprn string redundant-interface string ipv4 primary remote-ip string
Tree	remote-ip
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [**sdp-bind-id**] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sdp-bind-id] *string*

Synopsis	SDP binding ID
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

control-word *boolean*

Synopsis	Use the control word as preferred
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i>

Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress filter ip reference

Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vc-label number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip

Synopsis	Enable the rip context
Context	configure service vprn <i>string</i> rip
Tree	rip
Introduced	16.0.R4
Platforms	All

admin-state keyword

Synopsis	Administrative state of the RIP instance
Context	configure service vprn <i>string</i> rip admin-state <i>keyword</i>
Tree	admin-state

Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	configure service vprn <i>string</i> rip authentication-key <i>string</i>
Tree	authentication-key
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used between RIP neighbors
Context	configure service vprn <i>string</i> rip authentication-type <i>keyword</i>
Tree	authentication-type
Description	<p>This command sets the type of authentication to be used between RIP neighbors.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Default	none
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure service vprn <i>string</i> rip bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure service vprn <i>string</i> rip check-zero <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> rip description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-limit

Synopsis	Enable the export-limit context
Context	configure service vprn string rip export-limit
Tree	export-limit
Introduced	16.0.R4
Platforms	All

log-percent number

Synopsis	Export limit before warning and SNMP notification sent
Context	configure service vprn string rip export-limit log-percent number
Tree	log-percent
Range	1 to 100
Introduced	16.0.R4
Platforms	All

number number

Synopsis	Maximum routes or prefixes exported from route table
Context	configure service vprn string rip export-limit number number
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

export-policy reference

Synopsis	Policies to determine exported routes
Context	configure service vprn string rip export-policy reference
Tree	export-policy
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.

Introduced 16.0.R4
Platforms All

group [group-name] *string*

Synopsis Enter the **group** list instance
Context **configure** [service](#) [vprn](#) *string* [rip](#) [group](#) *string*
Tree [group](#)
Introduced 16.0.R4
Platforms All

[group-name] *string*

Synopsis RIP group name
Context **configure** [service](#) [vprn](#) *string* [rip](#) [group](#) *string*
Tree [group](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

admin-state *keyword*

Synopsis Administrative state of RIP neighbor interface group
Context **configure** [service](#) [vprn](#) *string* [rip](#) [group](#) *string* **admin-state** *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R4
Platforms All

authentication-key *string*

Synopsis Authentication password passed between RIP neighbors
Context **configure** [service](#) [vprn](#) *string* [rip](#) [group](#) *string* **authentication-key** *string*

Tree	authentication-key
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
Context	configure service vprn <i>string</i> rip group <i>string</i> authentication-type <i>keyword</i>
Tree	authentication-type
Description	<p>This command configures the type of authentication to be used.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure service vprn <i>string</i> rip group <i>string</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to false, this command removes BFD from the associated protocol adjacency.</p>
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure service vprn <i>string</i> rip group <i>string</i> check-zero <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> rip group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure service vprn <i>string</i> rip group <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure service vprn <i>string</i> rip group <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	configure service vprn <i>string</i> rip group <i>string</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure service vprn <i>string</i> rip group <i>string</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure service vprn <i>string</i> rip group <i>string</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

neighbor [[interface-name](#)] *string*

Synopsis	Enter the neighbor list instance
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i>
Tree	neighbor
Introduced	16.0.R4
Platforms	All

[interface-name] *string*

Synopsis	IP interface name
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i>
Tree	neighbor
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIP neighbor interface
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> authentication-type <i>keyword</i>
Tree	authentication-type
Description	<p>This command configures the type of authentication to be used.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency.

When configured to **false**, this command removes BFD from the associated protocol adjacency.

Introduced 16.0.R4
Platforms All

check-zero *boolean*

Synopsis Enable checking of mandatory zero fields
Context **configure** [service vprn](#) *string* [rip group](#) *string* [neighbor](#) *string* **check-zero** *boolean*
Tree [check-zero](#)
Description When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.
When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced 16.0.R4
Platforms All

description *string*

Synopsis Text description
Context **configure** [service vprn](#) *string* [rip group](#) *string* [neighbor](#) *string* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R4
Platforms All

export-policy *reference*

Synopsis Policies used to rule which routes are exported to RIP
Context **configure** [service vprn](#) *string* [rip group](#) *string* [neighbor](#) *string* **export-policy** *reference*
Tree [export-policy](#)
Description This command specifies the export route policies used to determine which routes are exported to RIP.
If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference **configure** [policy-options](#) [policy-statement](#) *string*

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> metric-in <i>number</i>
Tree	metric-in

Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> receive <i>keyword</i>
Tree	receive
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> send <i>keyword</i>

Tree	send
Options	none, version-1, broadcast, multicast, unicast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

unicast-address [[address](#)] *string*

Synopsis	Add a list entry for unicast-address
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> unicast-address <i>string</i>

Tree	unicast-address
Introduced	16.0.R4
Platforms	All

[address] *string*

Synopsis	Unicast IPv6 address for the neighbor
Context	configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> unicast-address <i>string</i>
Tree	unicast-address
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure service vprn <i>string</i> rip group <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure service vprn <i>string</i> rip group <i>string</i> receive <i>keyword</i>
Tree	receive
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	configure service vprn <i>string</i> rip group <i>string</i> send <i>keyword</i>

Tree	send
Options	none, version-1, broadcast, multicast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn <i>string</i> rip group <i>string</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure service vprn <i>string</i> rip group <i>string</i> timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	configure service vprn <i>string</i> rip group <i>string</i> timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure service vprn <i>string</i> rip group <i>string</i> timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure service vprn <i>string</i> rip group <i>string</i> timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	configure service vprn <i>string</i> rip import-policy <i>reference</i>

Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the RIP message
Context	configure service vprn <i>string</i> rip message-size <i>number</i>
Tree	message-size
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure service vprn <i>string</i> rip metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure service vprn <i>string</i> rip metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Default	1

Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure service vprn <i>string rip preference number</i>
Tree	preference
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

propagate-metric *boolean*

Synopsis	Enable the BGP MED used to configure the RIP metric
Context	configure service vprn <i>string rip propagate-metric boolean</i>
Tree	propagate-metric
Description	When configured to true , this command enables the BGP MED to be used to configure the RIP metric at the BGP to RIP transition on egress routers. When configured to false , this command sets the RIP metric to the optional value configured with the metric-out command plus one.
Default	false
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure service vprn <i>string rip receive keyword</i>
Tree	receive
Default	both
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send keyword

Synopsis	RIP version and method used to send RIP updates
Context	configure service vprn string rip send keyword
Tree	send
Default	broadcast
Options	none, version-1, broadcast, multicast
Introduced	16.0.R4
Platforms	All

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn string rip split-horizon boolean
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure service vprn string rip timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	configure service vprn <i>string</i> rip timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure service vprn <i>string</i> rip timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure service vprn <i>string</i> rip timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.

Introduced	16.0.R4
Platforms	All

ripng

Synopsis	Enable the ripng context
Context	configure service vprn string ripng
Tree	ripng
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIPng instance
Context	configure service vprn string ripng admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure service vprn string ripng bfd-liveness boolean
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure service vprn <i>string</i> ripng check-zero <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> ripng description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-limit

Synopsis	Enable the export-limit context
Context	configure service vprn <i>string</i> ripng export-limit
Tree	export-limit
Introduced	16.0.R4
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure service vprn <i>string</i> ripng export-limit log-percent <i>number</i>
Tree	log-percent
Range	1 to 100

Introduced 16.0.R4
Platforms All

number *number*

Synopsis Maximum routes or prefixes exported from route table
Context **configure** [service vprn](#) *string* [ripng export-limit](#) *number* *number*
Tree [number](#)
Range 1 to 4294967295
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

export-policy *reference*

Synopsis Policies to determine exported routes
Context **configure** [service vprn](#) *string* [ripng export-policy](#) *reference*
Tree [export-policy](#)
Reference **configure** [policy-options policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R4
Platforms All

group [[group-name](#)] *string*

Synopsis Enter the **group** list instance
Context **configure** [service vprn](#) *string* [ripng group](#) *string*
Tree [group](#)
Introduced 16.0.R4
Platforms All

[group-name] *string*

Synopsis	RIP group name
Context	configure service vprn <i>string</i> ripng group <i>string</i>
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RIPng neighbor interface group
Context	configure service vprn <i>string</i> ripng group <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure service vprn <i>string</i> ripng group <i>string</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure service vprn <i>string</i> ripng group <i>string</i> check-zero <i>boolean</i>

Tree	check-zero
Description	<p>When configured to true, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.</p> <p>When configured to false, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.</p>
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> ripng group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure service vprn <i>string</i> ripng group <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command specifies the export route policies used to determine which routes are exported to RIP.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
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Context	configure service vprn <i>string ripng group string import-policy reference</i>
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure service vprn <i>string ripng group string message-size number</i>
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure service vprn <i>string ripng group string metric-in number</i>
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure service vprn <i>string ripng group string metric-out number</i>
Tree	metric-out

Range	1 to 16
Introduced	16.0.R4
Platforms	All

neighbor [[interface-name](#)] *reference*

Synopsis	Enter the neighbor list instance
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i>
Tree	neighbor
Introduced	16.0.R4
Platforms	All

[interface-name] *reference*

Synopsis	IP interface name
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i>
Tree	neighbor
Reference	configure service vprn <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIPng neighbor
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure service vprn <i>string ripng group</i> <i>string neighbor</i> <i>reference</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure service vprn <i>string ripng group</i> <i>string neighbor</i> <i>reference</i> check-zero <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string ripng group</i> <i>string neighbor</i> <i>reference</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
----------	--

Context	configure service vprn string ripng group string neighbor reference export-policy reference
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy reference

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure service vprn string ripng group string neighbor reference import-policy reference
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement string
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size number

Synopsis	Maximum number of routes in the message
Context	configure service vprn string ripng group string neighbor reference message-size number
Tree	message-size

Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> receive <i>keyword</i>

Tree	receive
Options	none, ripng
Introduced	16.0.R4
Platforms	All

send keyword

Synopsis	RIPng version and method used to send RIPng updates
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference send <i>keyword</i>
Tree	send
Options	none, ripng, unicast
Introduced	16.0.R4
Platforms	All

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference timers
Tree	timers
Introduced	16.0.R4

Platforms All

flush *number*

Synopsis RIP flush timer

Context **configure** *service vprn string ripng group string neighbor reference timers flush number*

Tree *flush*

Description This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

timeout *number*

Synopsis RIP timeout timer

Context **configure** *service vprn string ripng group string neighbor reference timers timeout number*

Tree *timeout*

Description This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

update *number*

Synopsis Timer that controls the frequency of updates

Context **configure** *service vprn string ripng group string neighbor reference timers update number*

Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

unicast-address [[address](#)] *string*

Synopsis	Add a list entry for unicast-address
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference unicast-address <i>string</i>
Tree	unicast-address
Introduced	16.0.R4
Platforms	All

[address] *string*

Synopsis	Unicast IPv6 address for the neighbor
Context	configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference unicast-address <i>string</i>
Tree	unicast-address
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure service vprn <i>string</i> ripng group <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure service vprn <i>string</i> ripng group <i>string</i> receive <i>keyword</i>
Tree	receive
Options	none, ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	configure service vprn <i>string</i> ripng group <i>string</i> send <i>keyword</i>
Tree	send
Options	none, ripng
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn <i>string</i> ripng group <i>string</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure service vprn <i>string</i> ripng group <i>string</i> timers

Tree	timers
Introduced	16.0.R4
Platforms	All

flush number

Synopsis	RIP flush timer
Context	configure service vprn <i>string</i> ripng group <i>string</i> timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout number

Synopsis	RIP timeout timer
Context	configure service vprn <i>string</i> ripng group <i>string</i> timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update number

Synopsis	Timer that controls the frequency of updates
Context	configure service vprn <i>string</i> ripng group <i>string</i> timers update <i>number</i>

Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	configure service vprn <i>string</i> ripng import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure service vprn <i>string</i> ripng message-size <i>number</i>
Tree	message-size
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure service vprn <i>string</i> ripng metric-in <i>number</i>
Tree	metric-in
Range	1 to 16

Default	1
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure service vprn <i>string ripng metric-out number</i>
Tree	metric-out
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure service vprn <i>string ripng preference number</i>
Tree	preference
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure service vprn <i>string ripng receive keyword</i>
Tree	receive
Default	ripng
Options	none, ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	configure service vprn <i>string</i> ripng send <i>keyword</i>
Tree	send
Default	ripng
Options	none, ripng
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn <i>string</i> ripng split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure service vprn <i>string</i> ripng timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
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Context	configure service vprn string ripng timers flush number
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout number

Synopsis	RIP timeout timer
Context	configure service vprn string ripng timers timeout number
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update number

Synopsis	Timer that controls the frequency of updates
Context	configure service vprn string ripng timers update number
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

router-id *string*

Synopsis	Unique router ID for the router in the AS
Context	configure service vpn <i>string</i> router-id <i>string</i>
Tree	router-id
Introduced	16.0.R1
Platforms	All

segment-routing-v6 [[instance](#)] *number*

Synopsis	Enter the segment-routing-v6 list instance
Context	configure service vpn <i>string</i> segment-routing-v6 <i>number</i>
Tree	segment-routing-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[[instance](#)] *number*

Synopsis	Segment routing IPv6 instance
Context	configure service vpn <i>string</i> segment-routing-v6 <i>number</i>
Tree	segment-routing-v6
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [[locator-name](#)] *reference*

Synopsis	Enter the locator list instance
Context	configure service vpn <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i>
Tree	locator
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis	SRv6 locator name
Context	configure service vprn <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i>
Tree	locator
Reference	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the function context
Context	configure service vprn <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> function
Tree	function
Description	Commands in this context configure the End SID functions for each SRH mode. The end-dt4 configuration and the end-dt46 configuration are mutually exclusive. The end-dt6 configuration and the end-dt46 configuration are mutually exclusive.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt4

Synopsis	Enable the end-dt4 context
Context	configure service vprn <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> function end-dt4
Tree	end-dt4
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	configure service vprn <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> function end-dt4 <i>value</i> <i>number</i>
Tree	value

Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt46

Synopsis	Enable the end-dt46 context
Context	configure service vprn <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> function end-dt46
Tree	end-dt46
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	configure service vprn <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> function end-dt46 value <i>number</i>
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt6

Synopsis	Enable the end-dt6 context
Context	configure service vprn <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> function end-dt6
Tree	end-dt6
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis SRv6 function value

Context **configure service vprn** *string segment-routing-v6 number locator reference function end-dt6 value number*

Tree [value](#)

Description This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.
When unconfigured, the system allocates a value dynamically.

Range 1 to 1048575

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [[locator-name](#)] *reference*

Synopsis Enter the **micro-segment-locator** list instance

Context **configure service vprn** *string segment-routing-v6 number micro-segment-locator reference*

Tree [micro-segment-locator](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis Micro-segment SRv6 locator name

Context **configure service vprn** *string segment-routing-v6 number micro-segment-locator reference*

Tree [micro-segment-locator](#)

Description This command associates a pre-defined micro-segment SRv6 locator (defined in the **configure router segment-routing segment-routing-v6** context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN.

Reference **configure router** *string segment-routing segment-routing-v6 micro-segment-locator string*

Notes This element is part of a list key.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the function context
Context	configure service vprn string segment-routing-v6 number micro-segment-locator reference function
Tree	function
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt4

Synopsis	Enable the udt4 context
Context	configure service vprn string segment-routing-v6 number micro-segment-locator reference function udt4
Tree	udt4
Description	Commands in this context configure the SRv6 uDT4 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv4 prefixes occur in the VPRN service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure service vprn string segment-routing-v6 number micro-segment-locator reference function udt4 value number
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt46

Synopsis	Enable the udt46 context
Context	configure service vprn <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function udt46
Tree	udt46
Description	The commands in this context configure the SRv6 uDT46 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv4 and IPv6 prefixes occur in the VPRN service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	configure service vprn <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function udt46 value <i>number</i>
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt6

Synopsis	Enable the udt6 context
Context	configure service vprn <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function udt6
Tree	udt6
Description	Commands in this context configure the SRv6 uDT6 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occur in the VPRN service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	configure service vprn <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function udt6 <i>value</i> <i>number</i>
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-fib *boolean*

Synopsis	Enable selective FIB
Context	configure service vprn <i>string</i> selective-fib <i>boolean</i>
Tree	selective-fib
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure service vprn <i>string</i> service-id <i>number</i>
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

sfm-overload

Synopsis	Enable the sfm-overload context
Context	configure service vprn string sfm-overload
Tree	sfm-overload
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

holdoff-time *number*

Synopsis	Delay in detecting SFM failures and setting overload
Context	configure service vprn string sfm-overload holdoff-time number
Tree	holdoff-time
Range	1 to 600
Units	seconds
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

sgt-qos

Synopsis	Enter the sgt-qos context
Context	configure service vprn string sgt-qos
Tree	sgt-qos
Introduced	16.0.R1
Platforms	All

dot1p

Synopsis	Enter the dot1p context
Context	configure service vprn string sgt-qos dot1p
Tree	dot1p
Introduced	16.0.R1
Platforms	All

application [*dot1p-app-name*] *keyword*

Synopsis	Enter the application list instance
Context	configure service vprn string sgt-qos dot1p application keyword
Tree	application
Introduced	16.0.R1
Platforms	All

[dot1p-app-name] *keyword*

Synopsis	Dot1p application ID that generates control traffic
Context	configure service vprn string sgt-qos dot1p application keyword
Tree	application
Options	arp, isis, pppoe
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dot1p (*keyword* | *number*)

Synopsis	Dot1p value to the traffic generated by this application
Context	configure service vprn string sgt-qos dot1p application keyword dot1p (keyword number)
Tree	dot1p
Range	0 to 7
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

dscp

Synopsis	Enter the dscp context
Context	configure service vprn string sgt-qos dscp
Tree	dscp
Introduced	16.0.R1
Platforms	All

application [*dscp-app-name*] *keyword*

Synopsis	Enter the application list instance
Context	configure service vprn <i>string sgt-qos dscp application keyword</i>
Tree	application
Introduced	16.0.R1
Platforms	All

[dscp-app-name] *keyword*

Synopsis	DSCP application ID that generates control traffic
Context	configure service vprn <i>string sgt-qos dscp application keyword</i>
Tree	application
Options	bgp, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, gtp, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, pfc, ibcp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dscp (*keyword* | *number*)

Synopsis	DSCP value to the traffic generated by this application
Context	configure service vprn <i>string sgt-qos dscp application keyword dscp (keyword number)</i>
Tree	dscp
Range	0 to 63
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dscp-map [**dscp-name**] *keyword*

Synopsis	Enter the dscp-map list instance
Context	configure service vprn string sgt-qos dscp dscp-map keyword
Tree	dscp-map
Introduced	16.0.R2
Platforms	All

[dscp-name] *keyword*

Synopsis	DSCP name mapped to forwarding class
Context	configure service vprn string sgt-qos dscp dscp-map keyword
Tree	dscp-map
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

fc *keyword*

Synopsis	Value for the forwarding class for this mapping
Context	configure service vprn string sgt-qos dscp dscp-map keyword fc keyword
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R2
Platforms	All

snmp

Synopsis	Enter the snmp context
Context	configure service vprn string snmp
Tree	snmp
Introduced	16.0.R5

Platforms All

access *boolean*

Synopsis Enable SNMP access for the VPRN service
Context **configure** *service vprn string snmp access boolean*
Tree [access](#)
Default false
Introduced 16.0.R5
Platforms All

community [[community-string](#)] *string*

Synopsis Enter the **community** list instance
Context **configure** *service vprn string snmp community string*
Tree [community](#)
Description Commands in this context set the SNMP community names to be used with the associated VPRN instance. These VPRN community names are used to associate SNMP v1/v2c requests with a particular VPRN context and to return a reply that contains VPRN-specific data or limit SNMP access to data in a specific VPRN instance.

VPRN SNMP communities configured with an access permission of 'r' are automatically associated with the default access group "snmp-vprn-ro" and the "vprn-view" view (read only). VPRN SNMP communities configured with an access permission of 'rw' are automatically associated with the default access group "snmp-vprn" and the "vprn-view" view (read/write).

The community in an SNMP v1/v2 request determines the SNMP context (that is, the VPRN number for accessing SNMP tables) and not the VPRN of the incoming interface on which the request was received. For example, when an SNMP request arrives on VPRN 5 interface "ringo" with a destination IP address equal to the "ringo" interface, but the community in the SNMP request is the community configured against VPRN 101, the SNMP request is processed using the VPRN 101 context. (the response contains information about VPRN 101). Nokia recommends avoiding the use of a simple series of VPRN SNMP community values that are similar to each other (for example, avoid my-vprncomm-1, my-vprn-comm-2, and so on).

Introduced 16.0.R5
Platforms All

[community-string] *string*

Synopsis SNMP v1/v2c community name associated with the VPRN

Context	configure service vprn string snmp community string
Tree	community
String Length	1 to 114
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

access-permissions keyword

Synopsis	Access permissions to MIB objects
Context	configure service vprn string snmp community string access-permissions keyword
Tree	access-permissions
Options	r, rw
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

source-access-list reference

Synopsis	List name used to validate the source IP address
Context	configure service vprn string snmp community string source-access-list reference
Tree	source-access-list
Description	This command specifies the SNMP source access list to use with the SNMP community. The source access list is used to validate the source IP address of all received SNMP requests that use the community.
Reference	configure system security snmp source-access-list string
Introduced	16.0.R5
Platforms	All

version keyword

Synopsis	SNMP version
Context	configure service vprn string snmp community string version keyword
Tree	version
Default	both

Options	v1, v2c, both
Introduced	16.0.R5
Platforms	All

source-address

Synopsis	Enter the source-address context
Context	configure service vprn string source-address
Tree	source-address
Introduced	16.0.R1
Platforms	All

ipv4 [[application](#)] *keyword*

Synopsis	Enter the ipv4 list instance
Context	configure service vprn string source-address ipv4 keyword
Tree	ipv4
Introduced	16.0.R1
Platforms	All

[[application](#)] *keyword*

Synopsis	Source IP address for the application
Context	configure service vprn string source-address ipv4 keyword
Tree	ipv4
Options	telnet, ssh, snmptrap, ping, traceroute, ntp, cflowd, ptp, icmp-error
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source IPv4 address
Context	configure service vprn <i>string</i> source-address ipv4 <i>keyword</i> address <i>string</i>
Tree	address
Notes	The following elements are part of a mandatory choice: address or interface-name .
Introduced	16.0.R1
Platforms	All

interface-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP interface name
Context	configure service vprn <i>string</i> source-address ipv4 <i>keyword</i> interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: address or interface-name .
Introduced	16.0.R1
Platforms	All

ipv6 [**application**] *keyword*

Synopsis	Enter the ipv6 list instance
Context	configure service vprn <i>string</i> source-address ipv6 <i>keyword</i>
Tree	ipv6
Introduced	16.0.R1
Platforms	All

[application] *keyword*

Synopsis	Source IPv6 address for the application
Context	configure service vprn <i>string</i> source-address ipv6 <i>keyword</i>
Tree	ipv6
Options	telnet, snmptrap, ping, traceroute, cflowd, ntp, icmp6-error

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source IPv6 address
Context	configure service vprn <i>string</i> source-address ipv6 <i>keyword</i> address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure service vprn <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[sdp-bind-id] *string*

Synopsis	SDP binding ID
Context	configure service vprn <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> spoke-sdp <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

static-routes

Synopsis	Enter the static-routes context
Context	configure service vprn <i>string</i> static-routes
Tree	static-routes
Introduced	16.0.R1
Platforms	All

hold-down

Synopsis	Enable the hold-down context
Context	configure service vprn <i>string</i> static-routes hold-down
Tree	hold-down
Introduced	16.0.R1
Platforms	All

initial *number*

Synopsis	Value for the initial hold down time
Context	configure service vprn <i>string</i> static-routes hold-down initial <i>number</i>
Tree	initial
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

max-value *number*

Synopsis	Maximum value of the hold down time
Context	configure service vprn string static-routes hold-down max-value <i>number</i>
Tree	max-value
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Value by which the previous hold-down time is multiplied to calculate the new one
Context	configure service vprn string static-routes hold-down multiplier <i>number</i>
Tree	multiplier
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

route [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*) *route-type* *keyword*

Synopsis	Enter the route list instance
Context	configure service vprn string static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) <i>route-type</i> <i>keyword</i>
Tree	route
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the static routes
Context	configure service vprn string static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) <i>route-type</i> <i>keyword</i>
Tree	route
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

route-type *keyword*

Synopsis	Static route type
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword
Tree	route
Options	unicast, multicast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

backup-tag *number*

Synopsis	Static route backup tag
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword backup-tag number
Tree	backup-tag
Description	<p>This command associates a 4-byte backup route tag with the static route when the backup next-hop functionality is activated. The tag value is used in route policies to control distribution of the static route into other protocols when the backup next-hop function is activated for the associated static route.</p> <p>The tag specified at this level of the static route causes the tag values that are configured under the next-hop, black-hole, and indirect contexts of the static route to be ignored.</p>
Range	1 to 4294967295
Introduced	21.2.R1
Platforms	All

blackhole

Synopsis	Enable the blackhole context
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole
Tree	blackhole

Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the static route operation
Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **blackhole** **admin-state** *keyword*
Tree **admin-state**
Options enable, disable
Introduced 16.0.R1
Platforms All

community *string*

Synopsis Community ID associated with the static route
Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **blackhole** **community** *string*
Tree **community**
String Length 1 to 72
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **blackhole** **description** *string*
Tree **description**
String Length 1 to 80
Introduced 16.0.R1
Platforms All

generate-icmp *boolean*

Synopsis Send ICMP unreachable messages when received packets match a static route with black-hole next-hop

Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type <i>keyword blackhole generate-icmp boolean</i>
Tree	generate-icmp
Default	false
Introduced	16.0.R1
Platforms	All

metric number

Synopsis	Static route metric
Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type <i>keyword blackhole metric number</i>
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference number

Synopsis	Priority of this static route over the routes from different sources
Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type <i>keyword blackhole preference number</i>
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the prefix-list context
Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type <i>keyword blackhole prefix-list</i>
Tree	prefix-list
Introduced	16.0.R1

Platforms All

flag *keyword*

Synopsis Static route match condition from prefix list

Context **configure** **service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **blackhole prefix-list flag** *keyword*

Tree **flag**

Default any

Options any, all, none

Introduced 16.0.R1

Platforms All

name *reference*

Synopsis Prefix list name

Context **configure** **service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **blackhole prefix-list name** *reference*

Tree **name**

Reference **configure** **policy-options prefix-list** *string*

Introduced 16.0.R1

Platforms All

tag *number*

Synopsis Static route tag

Context **configure** **service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **blackhole tag** *number*

Tree **tag**

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

community *string*

Synopsis Community ID associated with the static route

Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword community <i>string</i>
Tree	community
String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

grt

Synopsis	Enable the grt context
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword grt
Tree	grt
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword grt admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword grt description <i>string</i>
Tree	description
String Length	1 to 80

Introduced 16.0.R1
Platforms All

metric *number*

Synopsis Static route metric
Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **grt** **metric** *number*
Tree **metric**
Range 0 to 65535
Default 1
Introduced 16.0.R1
Platforms All

preference *number*

Synopsis Priority of this static route over the routes from different sources
Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **grt** **preference** *number*
Tree **preference**
Range 1 to 255
Default 5
Introduced 16.0.R1
Platforms All

indirect [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **indirect** list instance
Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree **indirect**
Introduced 16.0.R1
Platforms All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address used to reach the destination
Context	configure service vprn string static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	indirect
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure service vprn string static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	configure service vprn string static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) community string
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

cpe-check [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure service vprn string static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check

Description	<p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p>Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of cpe-ping, the node paces these minor events.</p>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure service vpn <i>string static-routes route (ipv4-prefix ipv6-prefix) route-type keyword indirect (ipv4-address-no-zone ipv6-address-no-zone) cpe-check (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure service vpn <i>string static-routes route (ipv4-prefix ipv6-prefix) route-type keyword indirect (ipv4-address-no-zone ipv6-address-no-zone) cpe-check (ipv4-address-no-zone ipv6-address-no-zone) drop-count number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1

Platforms All

interval *number*

Synopsis Interval between ICMP pings to the target CPE IP address

Context **configure service vprn string static-routes route** (*ipv4-prefix | ipv6-prefix*) **route-type** *keyword indirect* (*ipv4-address-no-zone | ipv6-address-no-zone*) **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*) **interval** *number*

Tree **interval**

Range 1 to 255

Default 1

Units seconds

Introduced 16.0.R1

Platforms All

log *boolean*

Synopsis Log CPE connectivity checks transitions

Context **configure service vprn string static-routes route** (*ipv4-prefix | ipv6-prefix*) **route-type** *keyword indirect* (*ipv4-address-no-zone | ipv6-address-no-zone*) **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*) **log** *boolean*

Tree **log**

Default false

Introduced 16.0.R1

Platforms All

padding-size *number*

Synopsis Padding size for CPE connectivity checks

Context **configure service vprn string static-routes route** (*ipv4-prefix | ipv6-prefix*) **route-type** *keyword indirect* (*ipv4-address-no-zone | ipv6-address-no-zone*) **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*) **padding-size** *number*

Tree **padding-size**

Range 0 to 16384

Default 56

Units bytes

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **description** *string*

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms All

destination-class *number*

Synopsis Destination class for this static route

Context **configure service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **destination-class** *number*

Tree **destination-class**

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

metric *number*

Synopsis Static route metric

Context **configure service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **metric** *number*

Tree **metric**

Range 0 to 65535

Default 1

Introduced 16.0.R1

Platforms All

preference *number*

Synopsis Priority of this static route over the routes from different sources

Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) preference <i>number</i>
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the prefix-list context
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag keyword

Synopsis	Static route match condition from prefix list
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list flag <i>keyword</i>
Tree	flag
Default	any
Options	any, all, none
Introduced	16.0.R1
Platforms	All

name reference

Synopsis	Prefix list name
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list name <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>string</i>

Introduced 16.0.R1
Platforms All

qos

Synopsis Enter the **qos** context
Context **configure service vpn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **qos**
Tree **qos**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis Forwarding class associated with the static route
Context **configure service vpn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **qos forwarding-class**
keyword
Tree **forwarding-class**
Options be, l2, af, l1, h2, ef, h1, nc
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis Static route priority
Context **configure service vpn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **qos priority keyword**
Tree **priority**
Options low, high
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis Source class for this static route

Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-class number
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tag number
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

interface [**interface-name**] *string*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Router interface name.
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> community <i>string</i>
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

cpe-check [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check

Description When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.

This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.

Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-

priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.

Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**address**] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword interface string cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword interface string cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) drop-count number
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to the target CPE IP address
Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword interface string cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) interval number
Tree	interval
Range	1 to 255

Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Default	56
Units	bytes
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

destination-class *number*

Synopsis Destination class for this static route

Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **interface** *string* **destination-class** **number**

Tree **destination-class**

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

load-balancing-weight *number*

Synopsis Load-balancing weight for all of the ECMP next hops

Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **interface** *string* **load-balancing-weight** **number**

Tree **load-balancing-weight**

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

metric *number*

Synopsis Static route metric

Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **interface** *string* **metric** **number**

Tree **metric**

Range 0 to 65535

Default 1

Introduced 16.0.R1

Platforms All

preference *number*

Synopsis Priority of this static route over the routes from different sources

Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the prefix-list context
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> prefix-list flag <i>keyword</i>
Tree	flag
Default	any
Options	any, all, none
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> prefix-list name <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1

Platforms All

qos

Synopsis Enter the **qos** context

Context **configure service vprn string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword interface string qos**

Tree **qos**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis Forwarding class associated with the static route

Context **configure service vprn string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword interface string qos forwarding-class keyword**

Tree **forwarding-class**

Options be, l2, af, l1, h2, ef, h1, nc

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis Static route priority

Context **configure service vprn string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword interface string qos priority keyword**

Tree **priority**

Options low, high

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis Source class for this static route

Context **configure service vprn string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword interface string source-class number**

Tree **source-class**

Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	configure service vpn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

ipsec-tunnel [**ipsec-tunnel-name**] *string*

Synopsis	Enter the ipsec-tunnel list instance
Context	configure service vpn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>string</i>
Tree	ipsec-tunnel
Introduced	16.0.R1
Platforms	All

[**ipsec-tunnel-name**] *string*

Synopsis	Ipssec tunnel name.
Context	configure service vpn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>string</i>
Tree	ipsec-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword ipsec-tunnel string admin-state keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword ipsec-tunnel string community string</i>
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword ipsec-tunnel string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword ipsec-tunnel string destination-class number</i>
Tree	destination-class
Range	1 to 255

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

metric *number*

Synopsis	Static route metric
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i> metric <i>number</i>
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i> qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>string</i> qos forwarding-class keyword
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>string</i> qos priority keyword
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for this static route
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>string</i> source-class number
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>string</i> tag number
Tree	tag
Range	1 to 4294967295

Introduced 16.0.R1
Platforms All

next-hop [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis Enter the **next-hop** list instance
Context **configure service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
Tree [next-hop](#)
Introduced 16.0.R1
Platforms All

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis Next-hop IP address used to reach the destination
Context **configure service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
Tree [next-hop](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the static route operation
Context **configure service vprn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **admin-state**
keyword
Tree [admin-state](#)
Options enable, disable
Introduced 16.0.R1
Platforms All

backup-next-hop

Synopsis Enter the **backup-next-hop** context

Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) backup-next-hop
Tree	backup-next-hop
Description	Commands in this context configure static route entry fast failover.
Introduced	21.2.R1
Platforms	All

address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Backup next-hop IP address
Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) backup-next-hop address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	address
Description	<p>This command specifies the backup IP forwarding address that is used for static route Fast ReRoute (FRR). The configured address, if reachable, acts as pre-installed backup forwarding information that can be used when the primary IP next-hop suddenly fails.</p> <p>The configured backup next-hop IP address can be directly or indirectly connected (using an IGP or tunnel) to the node. The backup next-hop forwarding information or the Next-hop Label Forwarding Entry (NHLFE) tunnel forwarding information from the IP Routing Table Manager (RTM) is used to preconfigure an IP fast-reroute backup path.</p> <p>One backup next-hop address can protect a single primary static route entry next-hop address without ECMP and it is only activated when the primary next-hop has no active ECMP.</p> <p>The configured IP address can be either on the network or the access side.</p>
Introduced	21.2.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Use Bidirectional Forwarding Detection on this static route
Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) bfd-liveness boolean
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

community string

Synopsis	Community ID associated with the static route
Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) community string
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

cpe-check [address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	cpe-check
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count number

Synopsis	Consecutive ping replies missed before CPE deemed down
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Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to the target CPE IP address
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
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Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Default	56
Units	bytes
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) destination-class <i>number</i>
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) load-balancing-weight <i>number</i>

Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

metric number

Synopsis	Static route metric
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) metric number
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference number

Synopsis	Priority of this static route over the routes from different sources
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) preference number
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the prefix-list context
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list flag keyword
Tree	flag
Default	any
Options	any, all, none
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list name reference
Tree	name
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
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Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos forwarding-class keyword
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos priority keyword
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for this static route
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) source-class number
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) tag number
Tree	tag
Range	1 to 4294967295

Introduced 16.0.R1
Platforms All

validate-next-hop *boolean*

Synopsis Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache
Context **configure** [service vprn](#) *string* [static-routes route](#) (*ipv4-prefix* | *ipv6-prefix*) [route-type](#) [keyword next-hop](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [validate-next-hop](#) *boolean*
Tree [validate-next-hop](#)
Default false
Introduced 16.0.R1
Platforms All

tag *number*

Synopsis Static route tag
Context **configure** [service vprn](#) *string* [static-routes route](#) (*ipv4-prefix* | *ipv6-prefix*) [route-type](#) [keyword tag](#) *number*
Tree [tag](#)
Range 1 to 4294967295
Introduced 16.0.R1
Platforms All

subscriber-interface [[interface-name](#)] *string*

Synopsis Enter the **subscriber-interface** list instance
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string*
Tree [subscriber-interface](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[interface-name](#)] *string*

Synopsis Subscriber interface name
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string*

Tree	subscriber-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the subscriber interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Configure the forwarding service.
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> fwd-service <i>reference</i>
Tree	fwd-service
Reference	configure service vprn <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-subscriber-interface *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Forwarding subscriber interface name

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [fwd-subscriber-interface](#) *reference*

Tree [fwd-subscriber-interface](#)

Reference **configure** [service vprn](#) *string* [subscriber-interface](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface [[group-interface-name](#)] *string*

Synopsis Enter the **group-interface** list instance

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string*

Tree [group-interface](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[group-interface-name] *string*

Synopsis Group interface name

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string*

Tree [group-interface](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bonding-parameters

Synopsis	Enter the bonding-parameters context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters
Tree	bonding-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of ESM connection bonding
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

connection [[connection-index](#)] *number*

Synopsis	Enter the connection list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters connection <i>number</i>
Tree	connection

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**connection-index**] *number*

Synopsis Bonding connection index
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [bonding-parameters](#) [connection](#) *number*
Tree [connection](#)
Range 1 to 2
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service *string*

Synopsis Connection service
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [bonding-parameters](#) [connection](#) *number* [service](#) *string*
Tree [service](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FPE that provisions bonding functionality
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [bonding-parameters](#) [fpe](#) *reference*
Tree [fpe](#)
Reference **configure** [fwd-path-ext](#) [fpe](#) *number*
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multicast

Synopsis Enter the **multicast** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **bonding-parameters multicast**

Tree **multicast**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

connection (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Multicast connection

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **bonding-parameters multicast connection** (*number* | *keyword*)

Tree **connection**

Range 1 to 2

Default use-incoming

Options use-incoming

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

brg

Synopsis Enter the **brg** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **brg**

Tree **brg**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BRG
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authenticated-brg-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow BRGs that have been pre-authenticated
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg authenticated-brg-only <i>boolean</i>
Tree	authenticated-brg-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-brg-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default BRG profile that can be overridden during authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg default-brg-profile <i>reference</i>
Tree	default-brg-profile
Reference	configure subscriber-mgmt vrgw brg-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd-parameters

Synopsis	Enter the cflowd-parameters context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters
Tree	cflowd-parameters
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sampling [**sampling-type**] *keyword*

Synopsis	Enter the sampling list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i>
Tree	sampling
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sampling-type**] *keyword*

Synopsis	Traffic sampling type
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i>
Tree	sampling
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> direction <i>keyword</i>

Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Default	ingress-only
Options	ingress-only, egress-only, both
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sample-profile (*keyword* | *number*)

Synopsis	Sample profile ID
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> sample-profile (<i>keyword</i> <i>number</i>)
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Type of cflowd analysis
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> type <i>keyword</i>
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data-trigger

Synopsis	Enter the data-trigger context
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> data-trigger
Tree	data-trigger
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of data-triggered host creation
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> data-trigger admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-routes-track-srrp

Synopsis	Enable the dynamic-routes-track-srrp context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> dynamic-routes-track-srrp
Tree	dynamic-routes-track-srrp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Delay before updating the route state after the last SRRP transition
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> dynamic-routes-track-srrp hold-time <i>number</i>
Tree	hold-time
Range	1 to 50
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-parameters

Synopsis	Enter the gtp-parameters context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> gtp-parameters
Tree	gtp-parameters
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of GTP access
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> gtp-parameters admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PE that provisions the GTP user interface
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> gtp-parameters <i>fpe</i> <i>reference</i>
Tree	fpe
Reference	configure fwd-path-ext <i>fpe</i> <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gx-policy *reference*

Synopsis	Diameter application policy
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> gx-policy <i>reference</i>
Tree	gx-policy
Reference	configure subscriber-mgmt diameter-gx-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ingress
Tree	ingress
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-accounting *reference*

Synopsis	Ingress policy accounting template name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ingress policy-accounting <i>reference</i>
Tree	policy-accounting
Reference	configure routing-options policy-accounting policy-acct-template <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s

ingress-stats *boolean*

Synopsis	Collect ingress interface statistics
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ingress-stats <i>boolean</i>
Tree	ingress-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	Interface IP MTU
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-linking

Synopsis	Enter the ipoe-linking context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-linking
Tree	ipoe-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IPoE host linking
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-linking admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gratuitous-router-advertisement *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send unsolicited router advertisement after DHCP setup
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-linking gratuitous-router-advertisement <i>boolean</i>
Tree	gratuitous-router-advertisement
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shared-circuit-id *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable circuit ID in DHCPv4 Option82 to validate DHCPv6
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-linking shared-circuit-id <i>boolean</i>
Tree	shared-circuit-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session

Synopsis	Enter the ipoe-session context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session
Tree	ipoe-session

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of IPoE session management
Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **admin-state** *keyword*
Tree **admin-state**
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **description** *string*
Tree **description**
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-auth

Synopsis Enter the **force-auth** context
Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **force-auth**
Tree **force-auth**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cid-change *boolean*

Synopsis Ignore min-auth-interval when circuit ID changed
Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-session** **force-auth** **cid-change** *boolean*

Tree	cid-change
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rid-change *boolean*

Synopsis	Ignore min-auth-interval when remote ID changed
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session force-auth rid-change <i>boolean</i>
Tree	rid-change
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPoE Session policy to be used for new sessions
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session ipoe-session-policy <i>reference</i>
Tree	ipoe-session-policy
Reference	configure subscriber-mgmt ipoe-session-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval (*keyword* | *number*)

Synopsis	Minimum time between two authentication attempts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session min-auth-interval (<i>keyword</i> <i>number</i>)
Tree	min-auth-interval
Range	1 to 32000000
Default	infinite
Units	seconds
Options	infinite, always-reauthenticate

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-session-timeout *keyword*

Synopsis Session timeout attribute to be interpreted
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipoe-session](#) [radius-session-timeout](#) *keyword*
Tree [radius-session-timeout](#)
Options absolute, ignore, backwards-compatible
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-session-limit *number*

Synopsis Maximum number of sessions per SAP
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipoe-session](#) [sap-session-limit](#) *number*
Tree [sap-session-limit](#)
Range 1 to 131071
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis Maximum number of sessions on this group interface
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipoe-session](#) [session-limit](#) *number*
Tree [session-limit](#)
Range 1 to 500000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stateless-redundancy *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remove IPoE sessions when the system becomes stand-by in a stateless multi-chassis redundancy setup
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session stateless-redundancy <i>boolean</i>
Tree	stateless-redundancy
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database that is used to (pre-)authenticate new sessions
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-host

Synopsis	Enter the arp-host context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host
Tree	arp-host
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of ARP hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis	Maximum number of ARP hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host host-limit <i>number</i>
Tree	host-limit
Range	1 to 524287
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis	Minimum authentication interval
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host min-auth-interval <i>number</i>
Tree	min-auth-interval
Range	1 to 6000
Default	15

Units	minutes
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-host-limit *number*

Synopsis	Maximum number of ARP hosts per SAP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host sap-host-limit <i>number</i>
Tree	sap-host-limit
Range	1 to 131071
Default	1
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the bfd context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd
Tree	bfd
Description	Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive *number*

Synopsis	BFD receive interval over this interface
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd receive <i>number</i>
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000
Default	100
Units	milliseconds

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd transmit-interval <i>number</i>
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Local termination point for the BFD session
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd type <i>keyword</i>
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none">• auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np.• cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.• fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Default	auto
Options	cpm-np, auto, fp
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

dhcp

Synopsis Enter the **dhcp** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp](#)

Tree [dhcp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of DHCP

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp](#)
[admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis Enter the **client-applications** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp](#)
[client-applications](#)

Tree [client-applications](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis Enable IPoE clients to use DHCP relay or proxy server

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp](#)
[client-applications dhcp](#) *boolean*

Tree [dhcp](#)

Default true

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis Enable PPPoE clients to use DHCP relay or proxy server
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp client-applications](#) [ppp](#) *boolean*
Tree [ppp](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis DHCP filter ID for the group interface
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp filter](#) *reference*
Tree [filter](#)
Reference **configure** [filter dhcp-filter](#) *number*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address *string*

Synopsis GI address for the DHCP relay

Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp gi-address <i>string</i>
Tree	gi-address
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

I2-header

Synopsis	Enable the I2-header context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate I2-header
Tree	I2-header
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	IEEE address used in anti-spoofing entries for the SAP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate I2-header mac <i>string</i>
Tree	mac

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-leases *number*

Synopsis Maximum number of DHCPv4 leases
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp lease-populate](#) **max-leases** *number*
Tree [max-leases](#)
Range 1 to 511999
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-circuit-id *boolean*

Synopsis Enable Option 82 circuit ID on relayed DHCP packets
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp match-circuit-id](#) *boolean*
Tree [match-circuit-id](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

offer-selection

Synopsis Enter the **offer-selection** context
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp offer-selection](#)
Tree [offer-selection](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis Enter the **client-mac** context
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp offer-selection](#) **client-mac**

Tree	client-mac
Notes	The following elements are part of a choice: client-mac or server .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection client-mac discover-delay <i>number</i>
Tree	discover-delay
Description	This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis	Designated client MAC addresses for Offer selection
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection client-mac mac-address <i>keyword</i>
Tree	mac-address
Description	This command specifies the client MAC addresses for which the Discover delay applies.
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection discover-delay <i>number</i>
Tree	discover-delay

Description	This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [ipv4-address] *string*

Synopsis	Enter the server list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i>
Tree	server
Max. Instances	8
Notes	The following elements are part of a choice: client-mac or server .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv4-address] *string*

Synopsis	IP address of the DHCP server
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i>
Tree	server
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i> discover-delay <i>number</i>
Tree	discover-delay

Description	This command configures the time to delay DHCP Discover messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-82

Synopsis	Enter the option-82 context
Context	configure service vprn string subscriber-interface string group-interface string ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action keyword

Synopsis	Action to take with received DHCP Option 82
Context	configure service vprn string subscriber-interface string group-interface string ipv4 dhcp option-82 action keyword
Tree	action
Default	keep
Options	replace, drop, keep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Enter the circuit-id context
Context	configure service vprn string subscriber-interface string group-interface string ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-tuple

Synopsis Use the ASCII-encoded tuple for the circuit ID

Context **configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id **ascii-tuple**

Tree **ascii-tuple**

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ifindex

Synopsis Use the interface index for the circuit ID

Context **configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id **ifindex**

Tree **ifindex**

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

none

Synopsis Do not include the circuit ID

Context **configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id **none**

Tree **none**

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use the SAP ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enter the remote-id context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac

Synopsis	Use the MAC address for the remote ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

none

Synopsis	Do not include the remote ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-specific-option

Synopsis	Enter the vendor-specific-option context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option

Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i>
Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option pool-name <i>boolean</i>
Tree	pool-name
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option sap-id <i>boolean</i>
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i>
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option string <i>string</i>
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option system-id <i>boolean</i>
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the proxy-server context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the DHCP proxy server

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 dhcp proxy-server admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

Synopsis IP address used as DHCP server address in SAP context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 dhcp proxy-server emulated-server** *string*

Tree [emulated-server](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis Enter the **lease-time** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 dhcp proxy-server lease-time**

Tree [lease-time](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-override *boolean*

Synopsis Use lease time information provided by RADIUS server

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 dhcp proxy-server lease-time radius-override** *boolean*

Tree [radius-override](#)

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	DHCP lease time
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp proxy-server lease-time <i>value</i> <i>number</i>
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp python-policy <i>reference</i>
Tree	python-policy
Description	This command associates a Python policy name with the interface.
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay-proxy

Synopsis	Enable the relay-proxy context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp relay-proxy
Tree	relay-proxy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp relay-proxy release-update-src-ip <i>boolean</i>
Tree	release-update-src-ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

siaddr-override *string*

Synopsis	DHCP server IP address for address hiding function
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp relay-proxy siaddr-override <i>string</i>
Tree	siaddr-override
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-include-gi-address *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp release-include-gi-address <i>boolean</i>
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	IP addresses for DHCP server requests
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp server <i>string</i>
Tree	server
Description	This command configures a list of servers that this interface forwards requests to.

The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.

Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	configure service vpn <i>string subscriber-interface string group-interface string ipv4 dhcp src-ip-addr keyword</i>
Tree	src-ip-addr
Default	auto
Options	auto, gi-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trusted *boolean*

Synopsis	Relay untrusted packets
Context	configure service vpn <i>string subscriber-interface string group-interface string ipv4 dhcp trusted boolean</i>
Tree	trusted
Description	<p>When configured to true, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the icmp context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp mask-reply <i>boolean</i>
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

param-problem

Synopsis	Enter the param-problem context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem

Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10

Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redirects

Synopsis	Enter the redirects context
Context	configure service vprn string subscriber-interface string group-interface string ipv4 icmp redirects
Tree	redirects
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	configure service vprn string subscriber-interface string group-interface string ipv4 icmp redirects admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	configure service vprn string subscriber-interface string group-interface string ipv4 icmp redirects number number
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis Time used to limit the number of ICMP redirect messages

Context **configure** *service* *vprn* *string* *subscriber-interface* *string* *group-interface* *string* *ipv4* *icmp* *redirects* **seconds** *number*

Tree **seconds**

Range 1 to 60

Default 10

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-expired

Synopsis Enter the **ttl-expired** context

Context **configure** *service* *vprn* *string* *subscriber-interface* *string* *group-interface* *string* *ipv4* *icmp* **ttl-expired**

Tree **ttl-expired**

Description Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of sending TTL expired messages

Context **configure** *service* *vprn* *string* *subscriber-interface* *string* *group-interface* *string* *ipv4* *icmp* **ttl-expired** **admin-state** *keyword*

Tree **admin-state**

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp tll-expired number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp tll-expired seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-matching-address *boolean*

Synopsis	Use the subscriber interface address as source address
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp tll-expired use-matching-address <i>boolean</i>
Tree	use-matching-address
Description	<p>When configured to true, the system uses a matching subscriber interface address as the source address of the ICMP TTL expired message.</p> <p>For matching to occur, the source address of the offending packet must be in the same subnet of the subscriber interface address.</p> <p>When configured to false, the system uses the first configured address.</p>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unreachables

Synopsis	Enter the unreachables context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachables admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachables number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachable <i>seconds</i> <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-df-bit *boolean*

Synopsis	Ignore DF bit in the IPv4 header when fragmenting
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 ignore-df-bit <i>boolean</i>
Tree	ignore-df-bit
Description	When configured to true , fragmentation is applied according to the applicable egress MTU instead of the DF bit for frames egressing the WLAN-GW group. The DF bit is reset for frames that are fragmented. When configured to false , the router fragments a packet larger than the MTU if the DF bit is set to 0 and drops the packet if the DF bit is set to 1.
Default	false
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery local-proxy-arp <i>boolean</i>
Tree	local-proxy-arp
Description	When configured to true , the router enables local proxy ARP on the interface. When configured to false , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

populate *boolean*

Synopsis	Allow static and dynamic hosts to be populated in system ARP cache
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery populate <i>boolean</i>
Tree	populate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i>
Tree	proxy-arp-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i>
Tree	remote-proxy-arp

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Range	0 to 65535
Default	14400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos-route-lookup *keyword*

Synopsis	QoS route lookup
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 qos-route-lookup <i>keyword</i>
Tree	qos-route-lookup
Options	destination
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

urpf-check

Synopsis	Enable the urpf-check context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 urpf-check mode <i>keyword</i>
Tree	mode
Default	strict
Options	strict, loose, strict-no-ecmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enable the ipv6 context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-multiple-wan-addresses *boolean*

Synopsis	Allow multiple WAN addresses
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 allow-multiple-wan-addresses <i>boolean</i>
Tree	allow-multiple-wan-addresses
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-reply

Synopsis	Enter the auto-reply context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply
Tree	auto-reply
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-solicitation *boolean*

Synopsis	Enable auto-reply for NS
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply neighbor-solicitation <i>boolean</i>
Tree	neighbor-solicitation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicitation *boolean*

Synopsis	Enable auto-reply for RS
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply router-solicitation <i>boolean</i>
Tree	router-solicitation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the bfd context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd
Tree	bfd
Description	Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive *number*

Synopsis	BFD receive interval over this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd receive <i>number</i>
Tree	receive

Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd transmit-interval <i>number</i>
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Local termination point for the BFD session
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd type <i>keyword</i>
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none">• auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np.• cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.

- **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.

Default	auto
Options	cpm-np, auto, fp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis	DHCPv6 filter
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 filter reference
Tree	filter
Reference	configure filter dhcp6-filter <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option

Synopsis	Enter the option context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-id

Synopsis	Enter the interface-id context
Context	configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 option interface-id
Tree	interface-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 option interface-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

if-index

Synopsis	Use interface index in interface ID option in DHCPv6 relay packet
Context	configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 option interface-id if-index
Tree	if-index
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use SAP ID in interface ID option in DHCPv6 relay packet
Context	configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 option interface-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis String for interface ID option in DHCPv6 relay packet

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 option interface-id** *string* *string*

Tree [string](#)

String Length 1 to 80

Notes The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis Allow remote ID option to be sent in the DHCPv6 relay packet

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 option remote-id** *boolean*

Tree [remote-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

override-slaac *boolean*

Synopsis Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 override-slaac** *boolean*

Tree [override-slaac](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-managed-route

Synopsis	Enable the pd-managed-route context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 pd-managed-route
Tree	pd-managed-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-hop *keyword*

Synopsis	Next hop type
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 pd-managed-route next-hop <i>keyword</i>
Tree	next-hop
Default	ipv6
Options	ipv4, ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the proxy-server context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 proxy server
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis Enter the **client-applications** context
Context **configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server client-applications**
Tree [client-applications](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis Enable IPoE clients to use the DHCP proxy server
Context **configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server client-applications dhcp boolean**
Tree [dhcp](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis Allow the PPP application to use DHCP relay functionality
Context **configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server client-applications ppp boolean**
Tree [ppp](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number* | *keyword*)

Synopsis Time for prefix to remain preferred on this interface
Context **configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server preferred-lifetime (*number* | *keyword*)**

Tree	preferred-lifetime
Range	300 to 4294967294
Default	3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-timer *number*

Synopsis	Rebind timer (T2) for this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server rebind-timer <i>number</i>
Tree	rebind-timer
Range	0 to 1209600
Default	2880
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-timer *number*

Synopsis	Renew timer (T1)
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server renew-timer <i>number</i>
Tree	renew-timer
Range	0 to 604800
Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis	Enter the server-id context
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id
Tree	server-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-ascii *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-en-ascii <i>string</i>
Tree	duid-en-ascii
String Length	1 to 58
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-hex *string*

Synopsis	DUID system ID in hexadecimal format
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-en-hex <i>string</i>
Tree	duid-en-hex
String Length	1 to 118
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-ll

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-ll
Tree	duid-ll
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis Time for prefix to remain valid on this interface

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 dhcp6 proxy-server valid-lifetime](#) (*number* | *keyword*)

Tree [valid-lifetime](#)

Range 300 to 4294967294

Default 86400

Units seconds

Options infinite

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis Python policy

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 dhcp6 python-policy reference](#)

Tree [python-policy](#)

Reference **configure** [python python-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay

Synopsis Enter the **relay** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 dhcp6 relay](#)

Tree [relay](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

advertise-selection

Synopsis	Enter the advertise-selection context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection
Tree	advertise-selection
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis	Enter the client-mac context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac
Tree	client-mac
Notes	The following elements are part of a choice: client-mac or server .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis	Designated client MAC addresses for Advertise selection
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac mac-address <i>keyword</i>
Tree	mac-address
Options	odd, even

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis Enter the **preference-option** context
Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 relay advertise-selection client-mac preference-option**
Tree [preference-option](#)
Description Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis Preference option value for DHCPv6 Advertise messages
Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 relay advertise-selection client-mac preference-option value** *number*
Tree [value](#)
Range 0 to 255
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay number

Synopsis Delay before sending DHCPv6 Solicit messages
Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 relay advertise-selection client-mac solicit-delay** *number*
Tree [solicit-delay](#)
Description This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.
Range 1 to 100
Units deciseconds
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the preference-option context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection preference-option value <i>number</i>
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [*ipv6-address*] *string*

Synopsis	Enter the server list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i>
Tree	server
Max. Instances	8
Notes	The following elements are part of a choice: client-mac or server .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*ipv6-address*] *string*

Synopsis	IP address of the DHCPv6 server
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i>
Tree	server
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the preference-option context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> preference-option value <i>number</i>
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> solicit-delay <i>number</i>
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages sent to the server.
Range	1 to 100

Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection solicit-delay <i>number</i>
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the server instance or the client-mac context.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay client-applications dhcp <i>boolean</i>
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Allow the PPP application to use DHCP relay functionality
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay client-applications ppp <i>boolean</i>
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-split

Synopsis	Enter the lease-split context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay lease-split
Tree	lease-split
Description	<p>Commands in this context configure DHCPv6 lease split.</p> <p>DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:</p> <ul style="list-style-type: none"> the renew time T1 committed by the server (long renew time) half of the preferred lifetime committed by the server when T1 committed by the server equals zero
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 lease split
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay lease-split admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	DHCPv6 lease split valid lifetime (short lease time)
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay lease-split valid-lifetime <i>number</i>
Tree	valid-lifetime
Range	300 to 315446399
Default	3600
Units	seconds
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	Link address for the DHCPv6 relay messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay link-address <i>string</i>
Tree	link-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	DHCP6 server(s) to which the DHCP6 requests are forwarded
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay server <i>string</i>

Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis	Source IPv6 address for the DHCPv6 relay messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay source-address <i>string</i>
Tree	source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

snooping

Synopsis	Enter the snooping context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 snooping
Tree	snooping
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 snooping
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 snooping admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

user-db *reference*

Synopsis	Local user database used for authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-ident *keyword*

Synopsis	DHCP6 user identification for this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 user-ident <i>keyword</i>
Tree	user-ident
Default	mac
Options	mac, mac-interface-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-bridged-mode *boolean*

Synopsis	Enable IPv6 IPoE bridged mode
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 ipoe-bridged-mode <i>boolean</i>
Tree	ipoe-bridged-mode
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 neighbor-discovery
Tree	neighbor-discovery

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dad-snooping *boolean*

Synopsis Populate table via duplicate address detection packets
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 neighbor-discovery dad-snooping](#) *boolean*
Tree [dad-snooping](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-limit *number*

Synopsis Maximum number of neighbor entries learned per SLAAC host
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 neighbor-discovery neighbor-limit](#) *number*
Tree [neighbor-limit](#)
Range 1 to 8
Default 1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos-route-lookup *keyword*

Synopsis QoS route lookup
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 qos-route-lookup](#) *keyword*
Tree [qos-route-lookup](#)
Options destination
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

router-advertisements

Synopsis	Enter the router-advertisements context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements
Tree	router-advertisements
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of router advertisements
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast *keyword*

Synopsis	Protocol with forced multicast
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements force-mcast <i>keyword</i>
Tree	force-mcast
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-advertisement-interval *number*

Synopsis	Maximum advertisement interval
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements max-advertisement-interval <i>number</i>
Tree	max-advertisement-interval
Range	900 to 1800

Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-advertisement-interval *number*

Synopsis	Minimum advertisement interval
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements min-advertisement-interval <i>number</i>
Tree	min-advertisement-interval
Range	900 to 1350
Default	900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

current-hop-limit *number*

Synopsis	Hop limit to be advertised
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options current-hop-limit <i>number</i>
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enter the dns context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options dns
Tree	dns
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis	Include the RDNSS server option 25
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options dns include-rdnss <i>boolean</i>
Tree	include-rdnss
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime (*number* | *keyword*)

Synopsis	Maximum time for the RDNSS address to remain valid
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options dns rdnss-lifetime (<i>number</i> <i>keyword</i>)
Tree	rdnss-lifetime
Range	900 to 3600
Default	3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-configuration *boolean*

Synopsis	Managed address configuration flag
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options managed-configuration <i>boolean</i>
Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu (*number* | *keyword*)

Synopsis	Advertised MTU value
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options mtu (<i>number</i> <i>keyword</i>)
Tree	mtu
Range	1280 to 9212
Default	not-included
Units	bytes
Options	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other-stateful-configuration *boolean*

Synopsis	Other stateful configuration flag
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options other-stateful-configuration <i>boolean</i>
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reachable-time *number*

Synopsis	Neighbor discovery reachable time that is advertised for this group interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options reachable-time <i>number</i>
Tree	reachable-time

Range	0 to 3600000
Default	0
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retransmit-timer *number*

Synopsis	Neighbor discovery retransmit timer that is advertised for this group interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options retransmit-timer <i>number</i>
Tree	retransmit-timer
Range	0 to 1800000
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-lifetime (*number* | *keyword*)

Synopsis	Router lifetime
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options router-lifetime (<i>number</i> <i>keyword</i>)
Tree	router-lifetime
Range	2700 to 9000
Default	4500
Units	seconds
Options	no-default-router
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-options

Synopsis	Enter the prefix-options context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options

Tree	prefix-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

autonomous *boolean*

Synopsis	Value of the autonomous flag
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options autonomous <i>boolean</i>
Tree	autonomous
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options on-link <i>boolean</i>
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number* | *keyword*)

Synopsis	Time for a prefix to remain preferred
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options preferred-lifetime (<i>number</i> <i>keyword</i>)
Tree	preferred-lifetime
Range	0 to 4294967294
Default	3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis	Time for a prefix to remain valid
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options valid-lifetime (<i>number</i> <i>keyword</i>)
Tree	valid-lifetime
Range	0 to 4294967294
Default	86400
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicit

Synopsis	Enter the router-solicit context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit
Tree	router-solicit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of router-solicit based authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inactivity-timer (*number* | *keyword*)

Synopsis	Time before an inactive host is removed
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit inactivity-timer (<i>number</i> <i>keyword</i>)
Tree	inactivity-timer
Range	1 to 31536000
Default	300
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis	Minimum interval between two consecutive authentication attempts for the same host
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit min-auth-interval <i>number</i>
Tree	min-auth-interval
Range	1 to 360000
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user-database that is used for router solicit based authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

urpf-check

Synopsis	Enable the urpf-check context
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 urpf-check mode <i>keyword</i>
Tree	mode
Default	strict
Options	strict, loose, strict-no-ecmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enter the local-address-assignment context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment
Tree	local-address-assignment
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Local Address Assignment
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv4 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe *boolean*

Synopsis	Request local addresses for non-DHCP/managed IPoE hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv4 client-applications ipoe <i>boolean</i>
Tree	ipoe
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Request local addresses for PPP IPCP hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv4 client-applications ppp <i>boolean</i>
Tree	ppp
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pool *string*

Synopsis Default pools

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment ipv4](#) **default-pool** *string*

Tree [default-pool](#)

String Length 1 to 32

Max. Instances 2

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis Local DHCP server that contains pools for local address assignment

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment ipv4](#) **server** *reference*

Tree [server](#)

Reference **configure** [service vprn](#) *string* [dhcp-server dhcpv4](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis Enter the **ipv6** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment ipv6](#)

Tree [ipv6](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-slaac *boolean*

Synopsis	Request local addresses for IPoE SLAAC hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications ipoe-slaac <i>boolean</i>
Tree	ipoe-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-wan *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications ipoe-wan <i>boolean</i>
Tree	ipoe-wan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-slaac *boolean*

Synopsis	Request local addresses for PPP SLAAC hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications ppp-slaac <i>boolean</i>
Tree	ppp-slaac
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server reference

Synopsis Local DHCPv6 server that contains pools for local address assignment

Context **configure service vprn string subscriber-interface string group-interface string local-address-assignment ipv6 server reference**

Tree [server](#)

Reference **configure service vprn string dhcp-server dhcpv6 string**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string

Synopsis MAC address for the interface

Context **configure service vprn string subscriber-interface string group-interface string mac string**

Tree [mac](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq-auth-policy reference

Synopsis Diameter NASREQ application policy to use for authentication

Context **configure service vprn string subscriber-interface string group-interface string nasreq-auth-policy reference**

Tree [nasreq-auth-policy](#)

Reference **configure subscriber-mgmt diameter-nasreq-policy string**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-up-while-empty boolean

Synopsis Enable this group interface without any active SAPs

Context **configure service vprn string subscriber-interface string group-interface string oper-up-while-empty boolean**

Tree	oper-up-while-empty
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the pppoe context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of PPPoE
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis	PPPoE anti-spoof filtering
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe anti-spoof <i>keyword</i>
Tree	anti-spoof
Default	mac-sid
Options	mac-sid, mac-sid-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client

Synopsis	Enter the dhcp-client context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe dhcp-client
Tree	dhcp-client
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-id *keyword*

Synopsis	Type of information that DHCP option 61 contains
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe dhcp-client client-id <i>keyword</i>
Tree	client-id
Options	mac-pppoe-session-id
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	PPPoE policy
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe policy <i>reference</i>
Tree	policy
Reference	configure subscriber-mgmt ppp-policy <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis Python policy used to modify PPPoE packets

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe](#) [python-policy](#) *reference*

Tree [python-policy](#)

Reference **configure** [python](#) [python-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-session-limit *number*

Synopsis Maximum PPPoE sessions per SAP

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe](#) [sap-session-limit](#) *number*

Tree [sap-session-limit](#)

Range 1 to 131071

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis Maximum PPPoE sessions

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe](#) [session-limit](#) *number*

Tree [session-limit](#)

Range 1 to 333823

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *reference*

Synopsis	RADIUS authentication policy
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> radius-auth-policy <i>reference</i>
Tree	radius-auth-policy
Reference	configure subscriber-mgmt radius-authentication-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redundant-interface *reference*

Synopsis	Redundant interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> redundant-interface <i>reference</i>
Tree	redundant-interface
Reference	configure service vprn <i>string</i> redundant-interface <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis	Enter the sap list instance
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Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string*
Tree **sap**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sap-id] *string*

Synopsis SAP ID
Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string*
Tree **sap**
String Length 1 to 45
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy
Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **accounting-policy** *reference*
Tree **accounting-policy**
Reference **configure log accounting-policy** *number*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the SAP
Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **admin-state** *keyword*
Tree **admin-state**
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis	Type of anti-spoof filtering
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> anti-spoof <i>keyword</i>
Tree	anti-spoof
Options	source-ip-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *string*

Synopsis	Calling station ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> calling-station-id <i>string</i>
Tree	calling-station-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpu-protection

Synopsis	Enter the cpu-protection context
Context	configure service vprn string subscriber-interface string group-interface string sap string cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

eth-cfm-monitoring

Synopsis	Enable the eth-cfm-monitoring context
Context	configure service vprn string subscriber-interface string group-interface string sap string cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	configure service vprn string subscriber-interface string group-interface string sap string cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

policy-id *reference*

Synopsis	CPM protection policy
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection policy-id <i>reference</i>
Tree	policy-id
Reference	configure system security cpu-protection <i>policy number</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

default-host

Synopsis Enter the **default-host** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **default-host**

Tree **default-host**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ipv4 [**address**] *reference* **prefix-length** *number*

Synopsis Enter the **ipv4** list instance

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **default-host ipv4** *reference* **prefix-length** *number*

Tree **ipv4**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

[**address**] *reference*

Synopsis IPv4 default host address

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **default-host ipv4** *reference* **prefix-length** *number*

Tree **ipv4**

Reference **configure service vprn** *string* **subscriber-interface** *string* **ipv4** **address** *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

prefix-length *number*

Synopsis IPv4 address prefix length

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **default-host ipv4** *reference* **prefix-length** *number*

Tree	ipv4
Range	0 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

next-hop *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next-hop IP address used to forward traffic on the SAP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv4 <i>reference</i> prefix-length <i>number</i> next-hop <i>string</i>
Tree	next-hop
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ipv6 [[address](#)] *string* [prefix-length](#) *number*

Synopsis	Enter the ipv6 list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv6 <i>string</i> prefix-length <i>number</i>
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

[address] *string*

Synopsis	IPv6 default host address
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv6 <i>string</i> prefix-length <i>number</i>
Tree	ipv6
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

prefix-length *number*

Synopsis IPv6 prefix length
Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **default-host** **ipv6** *string* **prefix-length** *number*
Tree **ipv6**
Range 0 to 128
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

next-hop *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Next-hop IP address used to forward traffic on the SAP
Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **default-host** **ipv6** *string* **prefix-length** *number* **next-hop** *string*
Tree **next-hop**
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis Text description
Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **description** *string*
Tree **description**
String Length 1 to 160
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [dist-cpu-protection](#) *reference*

Tree [dist-cpu-protection](#)

Reference **configure** [system security dist-cpu-protection policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis Enter the **egress** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#)

Tree [egress](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis Enter the **agg-rate** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress agg-rate](#)

Tree [agg-rate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule *keyword*

Synopsis Adaptation rule to compute the operational PIR value when an aggregate shaper is used

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress agg-rate adaptation-rule](#) *keyword*

Tree [adaptation-rule](#)

Default	closest
Options	max, min, closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on all policers and queues associated with context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate number

Synopsis Enforced aggregate rate for all queues

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress agg-rate rate** *number*

Tree **rate**

Range 1 to 6400000000

Units kilobps

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis Enter the **filter** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress filter**

Tree **filter**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis IPv4 filter policy name

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress filter ip** *reference*

Tree **ip**

Reference **configure filter ip-filter** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis IPv6 filter policy name

Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i>
Tree	qinq-mark-top-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-egress

Synopsis	Enter the sap-egress context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos sap-egress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc <i>keyword</i>
Tree	fc
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i>
Tree	fc-in-profile
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure <i>service vprn string subscriber-interface string group-interface string sap string eth-cfm collect-lmm-stats boolean</i>
Tree	<i>collect-lmm-stats</i>
Description	<p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mep *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis	Enter the mep list instance
Context	configure <i>service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure <i>service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Reference	configure <i>eth-cfm domain string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>string</i> association <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
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Context	configure <i>service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais boolean</i>
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure <i>service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification</i>
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure <i>service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm boolean

Synopsis	Generate CCM messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm boolean
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm-ltm-priority number

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm-padding-size number

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i>

Tree	ccm-padding-size
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

csf

Synopsis	Enable the csf context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf multiplier <i>decimal-number</i>
Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-test

Synopsis	Enable the eth-test context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

test-pattern

Synopsis	Enter the test-pattern context
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Context	configure <i>service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</i>
Tree	<i>test-pattern</i>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure <i>service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean</i>
Tree	<i>crc-tlv</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure <i>service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword</i>
Tree	<i>pattern</i>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

grace

Synopsis	Enter the grace context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-ed

Synopsis	Enter the eth-ed context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window

Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i>
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i>
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace
Description	When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm squelch-ingress-levels <i>number</i>
Tree	squelch-ingress-levels
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fwd-wholesale

Synopsis	Enter the fwd-wholesale context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> fwd-wholesale
Tree	fwd-wholesale
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-service *reference*

Synopsis	PPPoE service name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> fwd-wholesale pppoe-service <i>reference</i>
Tree	pppoe-service
Reference	configure service epipe <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-admin-state *keyword*

Synopsis	Administrative state of the hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> host-admin-state <i>keyword</i>
Tree	host-admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis	Host lockout policy
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> host-lockout-policy <i>reference</i>
Tree	host-lockout-policy
Reference	configure subscriber-mgmt host-lockout-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-host-tracking

Synopsis	Enter the igmp-host-tracking context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking expiry-time <i>number</i>
Tree	expiry-time

Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking import-policy reference
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of multicast groups to be tracked per group
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-group-sources number
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of multicast groups to be tracked
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-groups number
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of multicast sources to be tracked
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable IGMP router alert check option
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-qinq-dot1p keyword

Synopsis	Ingress match QinQ Dot1p
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos match-qinq-dot1p keyword
Tree	match-qinq-dot1p
Options	top, bottom

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis Enter the **policer-control-policy** context
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) **policer-control-policy**
Tree [policer-control-policy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Policer control policy name
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) **policer-control-policy** **policy-name** *reference*
Tree [policy-name](#)
Reference **configure** [qos](#) **policer-control-policy** *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-ingress

Synopsis Enter the **sap-ingress** context
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) **sap-ingress**
Tree [sap-ingress](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Policy ID
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) **sap-ingress** **policy-name** *reference*

Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis	Queuing type
Context	configure service vprn <i>string subscriber-interface string group-interface string sap string ingress qos sap-ingress queuing-type keyword</i>
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service vprn <i>string subscriber-interface string group-interface string sap string ingress qos scheduler-policy</i>
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service vprn <i>string subscriber-interface string group-interface string sap string ingress qos scheduler-policy policy-name reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis	Enter the lag context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag
Tree	lag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag link-map-profile <i>number</i>
Tree	link-map-profile
Description	<p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p>
Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

per-link-hash

Synopsis	Enter the per-link-hash context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag per-link-hash class <i>number</i>
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag per-link-hash weight <i>number</i>
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group *reference*

Synopsis	Monitor operational group
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>string</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multi-service-site *reference*

Synopsis	Multi service site name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> multi-service-site <i>reference</i>
Tree	multi-service-site

Reference	configure service customer <i>string</i> multi-service-site <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-group *reference*

Synopsis	Operational group
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>string</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

static-host

Synopsis	Enter the static-host context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host
Tree	static-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 [*ip*] *string* **mac** *string*

Synopsis	Enter the ipv4 list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i>
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ip] *string*

Synopsis	IPv4 address used by the static host
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i>
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	MAC address used by the static host
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i>
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the static host
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> ancp-string <i>string</i>
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis Enter the **app-profile** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv4** *string* **mac** *string* **app-profile**

Tree **app-profile**

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile reference

Synopsis Application profile used by the static host

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv4** *string* **mac** *string* **app-profile profile** *reference*

Tree **profile**

Reference **configure application-assurance group** *number* **partition** *number* **policy app-profile** *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scope keyword

Synopsis Scope of the static host application profile

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv4** *string* **mac** *string* **app-profile scope** *keyword*

Tree **scope**

Default subscriber

Options subscriber, mac

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id string

Synopsis Intermediate destination ID

Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> int-dest-id <i>string</i>
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-route [**prefix**] *string*

Synopsis	Enter the managed-route list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i>
Tree	managed-route
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[prefix] *string*

Synopsis	Managed route prefix associated with IPv4 static host
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i>
Tree	managed-route
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpe-check

Synopsis	Enable the cpe-check context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check
Tree	cpe-check
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the target CPE device
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check destination-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	destination-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failed-action

Synopsis	Enter the failed-action context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action
Tree	failed-action
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the provisioned managed route
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action <i>metric number</i>
Tree	metric
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference number

Synopsis	Preference associated to the provisioned managed route
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action <i>preference number</i>
Tree	preference
Range	0 to 255
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag number

Synopsis	Route tag used if CPE check fails
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action <i>tag number</i>
Tree	tag
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

withdraw *boolean*

Synopsis	Withdraw the route when the CPE check fails
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action withdraw <i>boolean</i>
Tree	withdraw
Default	false
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval between ICMP pings to the target CPE IP address
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check interval <i>number</i>
Tree	interval
Range	1 to 255
Default	1
Units	seconds
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check log <i>boolean</i>
Tree	log
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Default	56
Units	bytes
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source IP address used in the ICMP messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check source-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time interval determining that a ping is missed
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	1
Units	seconds
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the provisioned managed route
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> metric <i>number</i>
Tree	metric

Description	This command configures a metric to associate with the provisioned managed route.
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated to the provisioned managed route
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> preference <i>number</i>
Tree	preference
Description	This command configures the preference associated with the provisioned managed route.
Range	0 to 255
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag *number*

Synopsis	Route tag used if CPE check fails
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> tag <i>number</i>
Tree	tag
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip-policy *reference*

Synopsis	RIP policy name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> rip-policy <i>reference</i>
Tree	rip-policy

Reference	configure subscriber-mgmt rip-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv

Synopsis	Enter the shcv context
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> shcv
Tree	shcv
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Sub-profile name
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the subscriber-id context
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Context	configure service vprn <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string subscriber-id</i>
Tree	<i>subscriber-id</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Subscriber identification
Context	configure service vprn <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string subscriber-id string string</i>
Tree	<i>string</i>
String Length	1 to 64
Notes	The following elements are part of a choice: string or use-sap-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	configure service vprn <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string subscriber-id use-sap-id</i>
Tree	<i>use-sap-id</i>
Notes	The following elements are part of a choice: string or use-sap-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 [*prefix*] *string mac string*

Synopsis	Enter the ipv6 list instance
Context	configure service vprn <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string</i>
Tree	<i>ipv6</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[prefix] string

Synopsis	IPv6 prefix
Context	configure service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string
Tree	ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string

Synopsis	MAC address
Context	configure service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string
Tree	ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the static host
Context	configure service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string string

Synopsis	ANCP string
Context	configure service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string ancp-string string

Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis	Enter the app-profile context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> app-profile
Tree	app-profile
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis	Application profile used by the static host
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> app-profile profile <i>reference</i>
Tree	profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	Scope of the static host application profile
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> app-profile scope <i>keyword</i>
Tree	scope
Default	subscriber
Options	subscriber, mac
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> int-dest-id <i>string</i>
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-linking *string*

Synopsis	IPv6 host associated with the IPv4 host through the learned MAC address
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> mac-linking <i>string</i>
Tree	mac-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-route [[ipv6-prefix](#)] *string*

Synopsis	Enter the managed-route list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i>
Tree	managed-route
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[ipv6-prefix](#)] *string*

Synopsis	Managed route prefix associated with IPv6 static host
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i>
Tree	managed-route
Notes	This element is part of a list key.
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpe-check

Synopsis Enable the **cpe-check** context

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **managed-route** *string* **cpe-check**

Tree **cpe-check**

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP address of the target CPE device

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **managed-route** *string* **cpe-check** **destination-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **destination-ip-address**

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop-count *number*

Synopsis Consecutive ping replies missed before CPE deemed down

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **managed-route** *string* **cpe-check** **drop-count** *number*

Tree **drop-count**

Range 1 to 255

Default 3

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failed-action

Synopsis	Enter the failed-action context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action
Tree	failed-action
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric number

Synopsis	Metric associated with the provisioned managed route
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action metric <i>number</i>
Tree	metric
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference number

Synopsis	Preference associated to the provisioned managed route
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action preference <i>number</i>
Tree	preference
Range	0 to 255
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag number

Synopsis	Route tag used if CPE check fails
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Context	configure service vprn <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check failed-action tag number</i>
Tree	tag
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

withdraw *boolean*

Synopsis	Withdraw the route when the CPE check fails
Context	configure service vprn <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check failed-action withdraw boolean</i>
Tree	withdraw
Default	false
Notes	The following elements are part of a choice: (metric , preference , and tag) or withdraw .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval between ICMP pings to the target CPE IP address
Context	configure service vprn <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check interval number</i>
Tree	interval
Range	1 to 255
Default	1
Units	seconds
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check log <i>boolean</i>
Tree	log
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Default	56
Units	bytes
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address used in the ICMP messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time interval determining that a ping is missed
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check timeout <i>number</i>

Tree	timeout
Range	1 to 10
Default	1
Units	seconds
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric number

Synopsis	Metric associated with the provisioned managed route
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> metric <i>number</i>
Tree	metric
Description	This command configures a metric to associate with the provisioned managed route.
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference number

Synopsis	Preference associated to the provisioned managed route
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> preference <i>number</i>
Tree	preference
Description	This command configures the preference associated with the provisioned managed route.
Range	0 to 255
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag number

Synopsis	Route tag used if CPE check fails
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> tag <i>number</i>
Tree	tag
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retail-svc-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Retail service ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> retail-svc-id <i>number</i>
Tree	retail-svc-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv

Synopsis	Enter the shcv context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> shcv
Tree	shcv
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> sla-profile <i>reference</i>
Tree	sla-profile

Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Sub-profile name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the subscriber-id context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Subscriber identification
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> subscriber-id <i>string</i> <i>string</i>
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: string or use-sap-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> subscriber-id use-sap-id
Tree	use-sap-id
Notes	The following elements are part of a choice: string or use-sap-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-learning

Synopsis	Enter the mac-learning context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host mac-learning
Tree	mac-learning
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data-triggered *boolean*

Synopsis	Enable learning of MAC addresses from data packets
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host mac-learning data-triggered <i>boolean</i>
Tree	data-triggered
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-mac *boolean*

Synopsis	Enforce single MAC address and subscriber for the SAP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host mac-learning single-mac <i>boolean</i>
Tree	single-mac
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-sla-mgmt

Synopsis Enter the **sub-sla-mgmt** context

Context **configure service vprn string subscriber-interface string group-interface string sap string sub-sla-mgmt**

Tree **sub-sla-mgmt**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of SAP subscriber management

Context **configure service vprn string subscriber-interface string group-interface string sap string sub-sla-mgmt admin-state keyword**

Tree **admin-state**

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis Enter the **defaults** context

Context **configure service vprn string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults**

Tree **defaults**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis Default application profile name for this SAP

Context **configure service vprn string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults app-profile reference**

Tree **app-profile**

Reference	configure application-assurance group number partition number policy app-profile string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id

Synopsis	Enter the int-dest-id context
Context	configure service vprn string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults int-dest-id
Tree	int-dest-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Use the configured string
Context	configure service vprn string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults int-dest-id string string
Tree	string
String Length	1 to 32
Notes	The following elements are part of a choice: string or top-q-tag .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

top-q-tag

Synopsis	Use the top Q-tag of this SAP
Context	configure service vprn string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults int-dest-id top-q-tag
Tree	top-q-tag
Notes	The following elements are part of a choice: string or top-q-tag .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Default SLA profile for hosts on this SAP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Default subscriber profile used for subscribers on this SAP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the subscriber-id context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis	Use auto-generated subscriber identification string
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults subscriber-id auto-id
Tree	auto-id
Notes	The following elements are part of a choice: auto-id , sap-id , or string .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis Use SAP ID as default subscriber identification string

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string*
[sub-sla-mgmt](#) [defaults](#) [subscriber-id](#) [sap-id](#)

Tree [sap-id](#)

Notes The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis Default subscriber identification string for the SAP

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string*
[sub-sla-mgmt](#) [defaults](#) [subscriber-id](#) [string](#) *string*

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-sub-parameters

Synopsis Enter the **single-sub-parameters** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string*
[sub-sla-mgmt](#) [single-sub-parameters](#)

Tree [single-sub-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

non-sub-traffic

Synopsis Enable the **non-sub-traffic** context

Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic
Tree	non-sub-traffic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name for all non-subscriber traffic
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile applicable for all non-subscriber traffic
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber ID profile applied for all non-subscriber traffic
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Subscriber ID applied for all non-subscriber traffic

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [single-sub-parameters](#) [non-sub-traffic](#) [subscriber-id](#) *string*

Tree [subscriber-id](#)

String Length 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profiled-traffic-only *boolean*

Synopsis Include all traffic in subscriber profile

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [single-sub-parameters](#) [profiled-traffic-only](#) *boolean*

Tree [profiled-traffic-only](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis Subscriber identification policy used on this SAP

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [sub-ident-policy](#) *reference*

Tree [sub-ident-policy](#)

Reference **configure** [subscriber-mgmt](#) [sub-ident-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit (*keyword* | *number*)

Synopsis	Maximum number of subscribers on this SAP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt subscriber-limit (<i>keyword</i> <i>number</i>)
Tree	subscriber-limit
Range	1 to 131071
Default	1
Options	no-limit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-parameters

Synopsis	Enter the sap-parameters context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters
Tree	sap-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis	Anti-spoof type of the SAP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters anti-spoof <i>keyword</i>
Tree	anti-spoof
Default	ip-mac
Options	ip-mac, nh-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters description <i>string</i>

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-sla-mgmt

Synopsis	Enter the sub-sla-mgmt context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt
Tree	sub-sla-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the defaults context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Default application profile name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt defaults app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Default SLA profile
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt defaults sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Default subscriber profile
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt defaults sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the subscriber-id context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt defaults subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis	Subscriber ID that is autogenerated
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt defaults subscriber-id auto-id
Tree	auto-id
Notes	The following elements are part of a choice: auto-id or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	String to be used as default subscriber ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt defaults subscriber-id <i>string</i> <i>string</i>
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: auto-id or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis	Subscriber identification policy
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt sub-ident-policy <i>reference</i>
Tree	sub-ident-policy
Reference	configure subscriber-mgmt sub-ident-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy *reference*

Synopsis	Subscriber host connectivity verification policy for IPv4 and IPv6
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> shcv-policy <i>reference</i>
Tree	shcv-policy
Reference	configure subscriber-mgmt shcv-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv4 *reference*

Synopsis	Subscriber host connectivity verification policy for IPv4
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> shcv-policy-ipv4 <i>reference</i>

Tree	shcv-policy-ipv4
Reference	configure subscriber-mgmt shcv-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv6 *reference*

Synopsis	Subscriber host connectivity verification policy for IPv6
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> shcv-policy-ipv6 <i>reference</i>
Tree	shcv-policy-ipv6
Reference	configure subscriber-mgmt shcv-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

srrp [[srrp-id](#)] *number*

Synopsis	Enter the srrp list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i>
Tree	srrp
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[srrp-id] *number*

Synopsis	SRRP instance ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i>
Tree	srrp
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of SRRP
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dest-ip *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IPv4 prefix
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> bfd-liveness dest-ip <i>string</i>
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> bfd-liveness interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> bfd-liveness service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gw-mac *string*

Synopsis	Gateway MAC address
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> gw-mac <i>string</i>
Tree	gw-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keep-alive-interval *number*

Synopsis	Interval between SRRP advertisements
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> keep-alive-interval <i>number</i>
Tree	keep-alive-interval
Range	1 to 100
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

message-path *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to use as the SRRP message path
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> message-path <i>reference</i>
Tree	message-path
Reference	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group

Synopsis	Enter the monitor-oper-group context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group
Tree	monitor-oper-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-name *reference*

Synopsis	Operational group name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group group-name <i>reference</i>
Tree	group-name
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority-step *number*

Synopsis	Step value to change priority of SRRP instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group priority-step <i>number</i>
Tree	priority-step
Range	1 to 10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

one-garp-per-sap *boolean*

Synopsis	Send one gratuitous ARP to each SAP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> one-garp-per-sap <i>boolean</i>
Tree	one-garp-per-sap
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy reference

Synopsis VRRP priority control policy associated with the SRRP

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **policy reference**

Tree **policy**

Reference **configure vrrp policy** *number*

Max. Instances 2

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preempt boolean

Synopsis Allow the SRRP instance to override an existing master

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **preempt boolean**

Tree **preempt**

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority number

Synopsis Priority for this interface at this level

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **priority number**

Tree **priority**

Range 1 to 254

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-fib-population-packets *keyword*

Synopsis	Mode used to send FIB population packets (such as ARP) on switchover
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> send-fib-population-packets <i>keyword</i>
Tree	send-fib-population-packets
Default	all
Options	all, outer-tag-only
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suppress-aa-sub *boolean*

Synopsis	Enable application assurance suppression for ESM subscribers
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> suppress-aa-sub <i>boolean</i>
Tree	suppress-aa-sub
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> tos-marking-state <i>keyword</i>
Tree	tos-marking-state
Default	trusted
Options	trusted, untrusted
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Group interface type
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> type <i>keyword</i>
Tree	type
Default	plain
Options	plain, lns, wlan-gw, gtp, bonding
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the wlan-gw context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WLAN Gateway
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-address [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the gateway-address list instance
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	gateway-address
Max. Instances	10
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Gateway endpoint address of the WLAN Gateway tunnel
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	gateway-address
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

purpose

Synopsis	Enter the purpose context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) purpose
Tree	purpose
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect *boolean*

Synopsis	Use tunnel IP address for crosse-connect traffic
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) purpose xconnect <i>boolean</i>
Tree	xconnect
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-router *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Routing instance the WLAN-GW endpoint resides in
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-router <i>string</i>
Tree	gateway-router
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

group-encryption

Synopsis	Enter the group-encryption context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw group-encryption
Tree	group-encryption
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-keygroup-inbound *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw group-encryption encryption-keygroup-inbound <i>reference</i>
Tree	encryption-keygroup-inbound
Reference	configure group-encryption encryption-keygroup <i>number</i>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-keygroup-outbound *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw group-encryption encryption-keygroup-outbound <i>reference</i>

Tree	encryption-keygroup-outbound
Reference	configure group-encryption encryption-keygroup <i>number</i>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-ap

Synopsis	Enter the l2-ap context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap
Tree	l2-ap
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-point [[sap-id](#)] *string*

Synopsis	Enter the access-point list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i>
Tree	access-point
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sap-id] *string*

Synopsis	SAP ID for the Layer 2 access point
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i>
Tree	access-point
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the L2 access points
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service encapsulation type of this access point
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> encap-type <i>keyword</i>
Tree	encap-type
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

epipe-sap-template *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Parameters template for the internal connections with the ISA cards
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> epipe-sap-template <i>reference</i>
Tree	epipe-sap-template
Reference	configure service template epipe-sap-template <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-sub-id-fmt *keyword*

Synopsis	Format of the auto-generated subscriber ID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap auto-sub-id-fmt <i>keyword</i>
Tree	auto-sub-id-fmt
Default	include-ap-tags
Options	include-ap-tags, sap-only
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default encapsulation type for Layer 2 access points
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap default-encap-type <i>keyword</i>
Tree	default-encap-type
Default	null
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the lanext context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw lanext
Tree	lanext
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-bd *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of bridge domains

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)
[lanext max-bd](#) *number*

Tree [max-bd](#)

Range 1 to 131071

Default 131071

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-ap-mac

Synopsis Enable the **learn-ap-mac** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)
[learn-ap-mac](#)

Tree [learn-ap-mac](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

delay-auth *boolean*

Synopsis Delay authentication until ARP/ND is answered or timed out, after which AP MAC can be included

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)
[learn-ap-mac delay-auth](#) *boolean*

Tree [delay-auth](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility

Synopsis	Enter the mobility context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility
Tree	mobility
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Minimum time between two mobility events for a single UE
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility hold-time <i>number</i>
Tree	hold-time
Range	0 to 255
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

inter-tunnel-type *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable mobility between terminating tunnel types
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility inter-tunnel-type <i>boolean</i>
Tree	inter-tunnel-type
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

inter-vlan *boolean*

Synopsis	Enable mobility within different VLANs within the same range of VLAN Q-tags
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility inter-vlan <i>boolean</i>
Tree	inter-vlan
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

trigger

Synopsis	Enter the trigger context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility trigger
Tree	trigger
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

control *boolean*

Synopsis	Use control traffic (DHCP, DHCPv6, and ICMPv6-RS messages) as mobility trigger
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility trigger control <i>boolean</i>
Tree	control
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

data *boolean*

Synopsis	Use data traffic as mobility trigger
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility trigger data <i>boolean</i>
Tree	data
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

iapp *boolean*

Synopsis	Use Inter Access Point Protocol (IAPP) messages as mobility trigger
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility trigger iapp <i>boolean</i>
Tree	iapp
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

oper-down-on-group-degrade *boolean*

Synopsis	Bring interface operationally down when its ISA WLAN Gateway becomes degraded
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw oper-down-on-group-degrade <i>boolean</i>
Tree	oper-down-on-group-degrade
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-mss-adjust *number*

Synopsis	Value for the TCP Maximum Segment Size (MSS) option if not present, or if value is higher
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tcp-mss-adjust <i>number</i>
Tree	tcp-mss-adjust
Range	160 to 10240
Units	bytes
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-egress-qos

Synopsis	Enter the tunnel-egress-qos context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos

Tree	tunnel-egress-qos
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of egress QoS for WLAN-GW tunnels
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

agg-rate-limit (*number* | *keyword*)

Synopsis	Aggregate rate limit of each shaper associated with this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos agg-rate-limit (<i>number</i> <i>keyword</i>)
Tree	agg-rate-limit
Range	1 to 100000000
Default	max
Options	max
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Granularity of the egress shaping for WLAN Gateway
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos granularity <i>keyword</i>
Tree	granularity
Default	per-tunnel
Options	per-tunnel, per-retailer
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time (*number* | *keyword*)

Synopsis	Minimum time that the egress QoS resources associated with a tunnel (such as a shaper) are held
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos hold-time (<i>number</i> <i>keyword</i>)
Tree	hold-time
Range	1 to 86400
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-client-only *boolean*

Synopsis	Tunnel traffic to shape when multiple UEs use this tunnel
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos multi-client-only <i>boolean</i>
Tree	multi-client-only
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Identifier of the egress QoS policy associated with each tunnel of this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos qos <i>reference</i>
Tree	qos
Reference	configure qos sap-egress <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Identifier of the egress scheduler policy associated with each tunnel of this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos scheduler-policy <i>reference</i>
Tree	scheduler-policy
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-encaps

Synopsis	Enter the tunnel-encaps context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-encaps
Tree	tunnel-encaps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-l2tp-cookie (*keyword* | *hex-string*)

Synopsis	System that learns the cookie from L2TP tunnels terminating on this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-encaps learn-l2tp-cookie (<i>keyword</i> <i>hex-string</i>)
Tree	learn-l2tp-cookie
String Length	6
Default	never
Options	never, always
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-range [[range](#)] *string*

Synopsis	Enter the vlan-range list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i>
Tree	vlan-range
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[range] *string*

Synopsis	IEEE 802.1q VLAN tag range
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i>
Tree	vlan-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication

Synopsis	Enter the authentication context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication
Tree	authentication

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis Minimum time to hold a UE down after an authentication failure
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **authentication** **hold-time** *number*
Tree [hold-time](#)
Range 0 to 3600
Default 5
Units seconds
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis Enable the **local** context
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **authentication** **local**
Tree [local](#)
Introduced 22.2.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

coa-policy *reference*

Synopsis RADIUS ISA policy applied to CoA or disconnect messages
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **authentication** **local** **coa-policy** *reference*
Tree [coa-policy](#)
Reference **configure** [aaa radius](#) [isa-policy](#) *string*
Introduced 22.2.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-ue-state *keyword*

Synopsis	UE state accepted for immediate authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication local default-ue-state <i>keyword</i>
Tree	default-ue-state
Options	portal, dsm
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

on-control-plane *boolean*

Synopsis	Trigger authentication on first control plane packet instead of first data packet
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication on-control-plane <i>boolean</i>
Tree	on-control-plane
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	RADIUS policy for authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication policy <i>reference</i>
Tree	policy
Reference	configure aaa radius isa-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-mismatch-timeout *number*

Synopsis	Timeout value for the RADIUS proxy cache if a packet is received with a non-matching VLAN
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication vlan-mismatch-timeout <i>number</i>

Tree	vlan-mismatch-timeout
Range	5 to 60
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

data-triggered-ue-creation

Synopsis	Enter the data-triggered-ue-creation context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation
Tree	data-triggered-ue-creation
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of data-triggered UE creation
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp *boolean*

Synopsis	Authenticate ARP packets received from an unknown UE
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation arp <i>boolean</i>
Tree	arp
Default	false
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

create-proxy-cache-entry

Synopsis	Enter the create-proxy-cache-entry context
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry
Tree	create-proxy-cache-entry
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry mac-format <i>string</i>
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enable the proxy-server context
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	RADIUS Proxy server name
Context	configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry proxy-server name <i>string</i>
Tree	name
String Length	1 to 32

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance of the RADIUS proxy server
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry proxy-server router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp4

Synopsis	Enter the dhcp4 context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4
Tree	dhcp4
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv4
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns string

Synopsis	DNS servers signaled in DHCP
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dhcp4 dns string
Tree	dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware-ip-address (*ipv4-unicast-address | keyword*)

Synopsis	L2-Aware NAT inside IP address
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dhcp4 l2-aware-ip-address (ipv4-unicast-address keyword)
Tree	l2-aware-ip-address
Options	from-pool
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis	Enter the lease-time context
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dhcp4 lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active number

Synopsis	IP address lease time for the UE after successful (portal) authentication
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dhcp4 lease-time active number
Tree	active

Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	IP address lease time that is provided before and during (portal) authentication to the UE
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 lease-time <i>initial number</i>
Tree	initial
Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nbns string

Synopsis	NetBIOS servers signaled in DHCP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 nbns <i>string</i>
Tree	nbns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6

Tree	dhcp6
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the protocol
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime

Synopsis	Enter the preferred-lifetime context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 preferred-lifetime
Tree	preferred-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis	Preferred signaled lifetime after full authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 preferred-lifetime active <i>number</i>
Tree	active
Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	Preferred signaled lifetime when the UE is not fully authenticated
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw <i>string</i> vlan-range <i>string</i> dhcp6 preferred-lifetime initial number
Tree	initial
Range	300 to 3600
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime

Synopsis	Enter the valid-lifetime context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw <i>string</i> vlan-range <i>string</i> dhcp6 valid-lifetime
Tree	valid-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active number

Synopsis	Signaled valid lifetime after full authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw <i>string</i> vlan-range <i>string</i> dhcp6 valid-lifetime active number
Tree	active
Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	Valid signaled lifetime when the UE is not fully authenticated
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Context	configure service vprn <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dhcp6 valid-lifetime initial number</i>
Tree	initial
Range	300 to 3600
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dsm

Synopsis	Enter the dsm context
Context	configure service vprn <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dsm</i>
Tree	dsm
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA Radius Policy for accounting
Context	configure service vprn <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dsm accounting-policy reference</i>
Tree	accounting-policy
Reference	configure aaa radius isa-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-update

Synopsis	Enable the accounting-update context
Context	configure service vprn <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dsm accounting-update</i>

Tree	accounting-update
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Time interval between consecutive Interim accounting update messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm accounting-update interval <i>number</i>
Tree	interval
Range	5 to 259200
Units	minutes
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DSM
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

application-assurance

Synopsis	Enter the application-assurance context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm application-assurance
Tree	application-assurance
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-statistics *boolean*

Synopsis	Collect AA statistics
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dsm application-assurance accounting-statistics boolean
Tree	accounting-statistics
Default	false
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis	AA application profile used for portal authentication
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dsm application-assurance profile reference
Tree	profile
Reference	configure application-assurance group number partition number policy app-profile string
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-parameter *string*

Synopsis	AA URL parameter included for HTTP portal redirect
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dsm application-assurance url-parameter string
Tree	url-parameter
String Length	1 to 247
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dsm egress
Tree	egress

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*

Synopsis Policer for egress traffic
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) [egress](#) [policer](#) *reference*
Tree [policer](#)
Reference **configure** [subscriber-mgmt isa-policer](#) *string*
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis Enter the **ingress** context
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) [ingress](#)
Tree [ingress](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-filter *reference*

Synopsis Filter for ingress traffic
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) [ingress](#) [ip-filter](#) *reference*
Tree [ip-filter](#)
Reference **configure** [subscriber-mgmt isa-filter](#) *string*
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*

Synopsis Policer for ingress traffic

Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm ingress policer <i>reference</i>
Tree	policer
Reference	configure subscriber-mgmt isa-policer <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

soft-quota-exhausted-filter *reference*

Synopsis	Filter applied when soft volume quota is reached
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm ingress soft-quota-exhausted-filter <i>reference</i>
Tree	soft-quota-exhausted-filter
Description	This command applies a filter when a soft volume quota is reached. The filter replaces the currently applied filter (which can be preconfigured using the ip-filter command in the configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm ingress ip-filter context or be set using a RADIUS CoA message) for the UE upon quota exhaustion. If the quota is extended using a RADIUS CoA message, the filter is automatically reverted. Configuration changes apply only to new DSM UEs and not to existing UEs.
Reference	configure subscriber-mgmt isa-filter <i>string</i>
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

one-time-redirect

Synopsis	Enter the one-time-redirect context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm one-time-redirect
Tree	one-time-redirect
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*

Synopsis	Destination port of packets considered for HTTP redirect
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm one-time-redirect port <i>number</i>

Tree	port
Range	1 to 65535
Default	80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url string

Synopsis	URL for redirected HTTP protocol packets that can be overridden by AAA
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dsm one-time-redirect url string
Tree	url
String Length	1 to 255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

volume-quota-direction keyword

Synopsis	Volume quota direction for WLAN GW
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dsm volume-quota-direction keyword
Tree	volume-quota-direction
Description	This command specifies the direction that volume quotas are applied. Configuration changes apply only to new DSM UEs and not to existing UEs.
Default	both
Options	both, ingress, egress
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

extension [[extension-range](#)] string

Synopsis	Add a list entry for extension
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string extension string
Tree	extension
Introduced	21.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[extension-range] *string*

Synopsis VLAN tag range used for matching

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **extension** *string*

Tree [extension](#)

Description This command configures the additional VLAN range that is used for matching. Any traffic within the extension range is considered part of the same VLAN range for purposes of intra-SSID mobility.

Notes This element is part of a list key.

Introduced 21.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect-policy *reference*

Synopsis Default HTTP redirect policy for portal authentication

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **http-redirect-policy** *reference*

Tree [http-redirect-policy](#)

Reference **configure** [subscriber-mgmt](#) [http-redirect-policy](#) *string*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

idle-timeout-action *keyword*

Synopsis Action to perform when the idle timeout expires

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **idle-timeout-action** *keyword*

Tree [idle-timeout-action](#)

Default remove

Options remove, shcv

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2-service

Synopsis	Enable the I2-service context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> I2-service
Tree	I2-service
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Layer 2 service for VLAN range
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> I2-service admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> I2-service description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

service *reference*

Synopsis	Layer 2 service associated with the range
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> I2-service service <i>reference</i>
Tree	service
Reference	configure service vpls <i>string</i>

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy for DSM and ISA portal authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> nat-policy <i>reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

retail-service *string*

Synopsis	Default retail service for new UEs in this range
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> retail-service <i>string</i>
Tree	retail-service
String Length	1 to 64
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac

Synopsis	Enter the slaac context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac
Tree	slaac
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the protocol
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime

Synopsis	Enter the preferred-lifetime context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac preferred-lifetime
Tree	preferred-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active number

Synopsis	Preferred signaled lifetime after full authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac preferred-lifetime active <i>number</i>
Tree	active
Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	Preferred signaled lifetime when the UE is not fully authenticated
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac preferred-lifetime initial <i>number</i>
Tree	initial
Range	300 to 3600

Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime

Synopsis	Enter the valid-lifetime context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac valid-lifetime
Tree	valid-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active number

Synopsis	Signaled valid lifetime after full authentication
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac valid-lifetime active <i>number</i>
Tree	active
Range	300 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	Valid signaled lifetime when the UE is not fully authenticated
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac valid-lifetime initial <i>number</i>
Tree	initial
Range	300 to 3600
Default	300
Units	seconds
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vrgw

Synopsis Enter the **vrgw** context

Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw**
vlan-range *string* **vrgw**

Tree **vrgw**

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of vRGW

Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw**
vlan-range *string* **vrgw** **admin-state** *keyword*

Tree **admin-state**

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

brg

Synopsis Enter the **brg** context

Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw**
vlan-range *string* **vrgw** **brg**

Tree **brg**

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authenticated-brg-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Only allow hosts from BRGs pre-authenticated using the radius-proxy
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw <i>string</i> vlan-range <i>string</i> vrgw brg authenticated-brg-only <i>boolean</i>
Tree	authenticated-brg-only
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-brg-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default BRG profile to use if the AAA server does not specify one
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw <i>string</i> vlan-range <i>string</i> vrgw brg default-brg-profile <i>reference</i>
Tree	default-brg-profile
Reference	configure subscriber-mgmt vrgw brg-profile <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext

Synopsis	Enter the lanext context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw <i>string</i> vlan-range <i>string</i> vrgw lanext
Tree	lanext
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

access



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the access context
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext access
Tree	access
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-mac *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of allowed MAC entries on access side
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext access max-mac <i>number</i>
Tree	max-mac
Range	1 to 256
Default	20
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-access *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow multiple access points
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext access multi-access <i>boolean</i>
Tree	multi-access
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress home traffic
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext access policer <i>reference</i>
Tree	policer
Reference	configure subscriber-mgmt isa-policer <i>string</i>
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of HLE
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

assistive-address-resolution *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA assists in address resolution
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext assistive-address-resolution <i>boolean</i>
Tree	assistive-address-resolution
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bd-mac-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Prefix from which BD MACs for MAC translation are derived
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext bd-mac-prefix <i>string</i>
Tree	bd-mac-prefix
String Length	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-translation *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hide MAC address of home host by translating it to BD MAC
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext mac-translation <i>boolean</i>
Tree	mac-translation
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

network



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the network context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext network
Tree	network

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Administrative state of the HLE network
Context **configure** *service vprn string subscriber-interface string group-interface string wlan-gw
vlan-range string vrgw lanext network admin-state keyword*
Tree *admin-state*
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-mac *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of allowed MAC entries on network side
Context **configure** *service vprn string subscriber-interface string group-interface string wlan-gw
vlan-range string vrgw lanext network max-mac number*
Tree *max-mac*
Range 1 to 64
Default 20
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress data center traffic
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext network policer <i>reference</i>
Tree	policer
Reference	configure subscriber-mgmt isa-policer <i>string</i>
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect

Synopsis	Enter the xconnect context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect
Tree	xconnect
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting

Synopsis	Enter the accounting context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect accounting
Tree	accounting
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility-updates *boolean*

Synopsis	Accounting updates triggered by mobility
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect accounting mobility-updates <i>boolean</i>
Tree	mobility-updates

Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS accounting policy for cross-connected UEs
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string xconnect accounting policy reference
Tree	policy
Reference	configure aaa radius isa-policy string
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

update-interval number

Synopsis	Time between consecutive Interim accounting update messages
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string xconnect accounting update-interval number
Tree	update-interval
Range	5 to 259200
Units	minutes
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the cross-connect
Context	configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string xconnect admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Identifier of the WLAN Gateway ISA group to terminate UEs for this group interface
Context	configure service vprn <i>string subscriber-interface string group-interface string wlan-gw wlan-gw-group reference</i>
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis	Enable the wpp context
Context	configure service vprn <i>string subscriber-interface string group-interface string wpp</i>
Tree	wpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WPP
Context	configure service vprn <i>string subscriber-interface string group-interface string wpp admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial

Synopsis	Enter the initial context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial
Tree	initial
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Initial application profile name
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Initial SLA profile
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Initial subscriber profile
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time *number*

Synopsis Lease time

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#)
[lease-time](#) *number*

Tree [lease-time](#)

Range 10 to 315446399

Default 600

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal

Synopsis Enter the **portal** context

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#)
[portal](#)

Tree [portal](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis Web portal server name

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#)
[portal](#) [name](#) *string*

Tree [name](#)

String Length 1 to 32

Notes The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal-group *reference*

Synopsis	WPP portal group for this interface
Context	configure service vprn string subscriber-interface string group-interface string wpp portal portal-group reference
Tree	portal-group
Reference	configure aaa wpp portal-group string
Notes	The following elements are part of a choice: portal-group or (name and router-instance).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	The virtual router instance of the WPP portal for this interface
Context	configure service vprn string subscriber-interface string group-interface string wpp portal router-instance string
Tree	router-instance
Notes	The following elements are part of a choice: portal-group or (name and router-instance).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

restore-to-initial-on-disconnect *boolean*

Synopsis	Restore initial profiles after a host has disconnected
Context	configure service vprn string subscriber-interface string group-interface string wpp restore-to-initial-on-disconnect boolean
Tree	restore-to-initial-on-disconnect
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

triggered-hosts *boolean*

Synopsis	Enable/disable triggered hosts
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp triggered-hosts <i>boolean</i>
Tree	triggered-hosts
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	User database
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis	Enter the hold-time context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis	Enter the down context
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Context	configure service vprn string subscriber-interface string hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only boolean

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service vprn string subscriber-interface string hold-time ipv4 down init-only boolean
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds number

Synopsis	Down hold time for the IP interface
Context	configure service vprn string subscriber-interface string hold-time ipv4 down seconds number
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the up context
Context	configure service vprn string subscriber-interface string hold-time ipv4 up
Tree	up

Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure <i>service vprn string subscriber-interface string hold-time ipv4 up seconds number</i>
Tree	<i>seconds</i>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>service vprn string subscriber-interface string hold-time ipv6</i>
Tree	<i>ipv6</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis	Enter the down context
Context	configure <i>service vprn string subscriber-interface string hold-time ipv6 down</i>
Tree	<i>down</i>
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 down init-only boolean
Tree	init-only
Description	This command applies the delay only when when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 down seconds number
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the up context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-linking

Synopsis	Enter the ipoe-linking context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipoe-linking
Tree	ipoe-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gratuitous-router-advertisement *boolean*

Synopsis	Send unsolicited router advertisement after DHCP setup
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipoe-linking gratuitous-router-advertisement <i>boolean</i>
Tree	gratuitous-router-advertisement
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session

Synopsis	Enter the ipoe-session context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipoe-session
Tree	ipoe-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	Maximum number of sessions on this group interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipoe-session session-limit <i>number</i>
Tree	session-limit
Range	1 to 500000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address [[ipv4-address](#)] *string*

Synopsis	Enter the address list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv4-address] *string*

Synopsis	IP address associated with the subscriber subnet
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 address <i>string</i>
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gateway string

Synopsis	Gateway IP address within the subnet for SRRP routing
Context	configure service vprn string subscriber-interface string ipv4 address string gateway string
Tree	gateway
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

holdup-time number

Synopsis	Wait time before accepting new state attribute
Context	configure service vprn string subscriber-interface string ipv4 address string holdup-time number
Tree	holdup-time
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

populate-host-routes boolean

Synopsis	Populate subscriber host routes in local FIB
Context	configure service vprn string subscriber-interface string ipv4 address string populate-host-routes boolean
Tree	populate-host-routes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length number

Synopsis	IPv4 address prefix length
Context	configure service vprn string subscriber-interface string ipv4 address string prefix-length number
Tree	prefix-length
Range	0 to 32

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 address <i>string</i> track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-unmatching-subnets *boolean*

Synopsis	Allow subscriber hosts without a matching subnet
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 allow-unmatching-subnets <i>boolean</i>
Tree	allow-unmatching-subnets
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-host

Synopsis	Enter the arp-host context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 arp-host
Tree	arp-host
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of ARP hosts
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 arp-host admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis	Maximum number of ARP hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 arp-host host-limit <i>number</i>
Tree	host-limit
Range	1 to 524287
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the bfd context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 bfd
Tree	bfd
Description	Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 bfd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive *number*

Synopsis	BFD receive interval over this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 bfd receive <i>number</i>
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transmit-interval *number*

Synopsis BFD transmit interval over this interface

Context **configure service vprn** *string* **subscriber-interface** *string* **ipv4 bfd transmit-interval** *number*

Tree **transmit-interval**

Description This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Local termination point for the BFD session

Context **configure service vprn** *string* **subscriber-interface** *string* **ipv4 bfd type** *keyword*

Tree **type**

Description This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.
The options to specify where the BFD session runs are:

- **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**.
- **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.
- **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.

Default auto

Options cpm-np, auto, fp

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

default-dns *string*

Synopsis	Default DNS server addresses
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 default-dns <i>string</i>
Tree	default-dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp

Synopsis	Enter the dhcp context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis	Enable IPoE clients to use the DHCP relay or proxy server
Context	configure service vprn string subscriber-interface string ipv4 dhcp client-applications dhcp boolean
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis	Enable PPPoE clients to use DHCP relay or proxy server
Context	configure service vprn string subscriber-interface string ipv4 dhcp client-applications ppp boolean
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure service vprn string subscriber-interface string ipv4 dhcp description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address string

Synopsis	GI address for the DHCP relay
Context	configure service vprn string subscriber-interface string ipv4 dhcp gi-address string
Tree	gi-address

Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service vprn string subscriber-interface string ipv4 dhcp lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases
Context	configure service vprn string subscriber-interface string ipv4 dhcp lease-populate max-leases <i>number</i>
Tree	max-leases
Range	0 to 511999
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

offer-selection

Synopsis	Enter the offer-selection context
Context	configure service vprn string subscriber-interface string ipv4 dhcp offer-selection
Tree	offer-selection
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis	Enter the client-mac context
Context	configure service vprn string subscriber-interface string ipv4 dhcp offer-selection client-mac
Tree	client-mac
Notes	The following elements are part of a choice: client-mac or server .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	configure service vprn string subscriber-interface string ipv4 dhcp offer-selection client-mac discover-delay number
Tree	discover-delay
Description	This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis	Designated client MAC addresses for Offer selection
Context	configure service vprn string subscriber-interface string ipv4 dhcp offer-selection client-mac mac-address keyword
Tree	mac-address
Description	This command specifies the client MAC addresses for which the Discover delay applies.
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp offer-selection discover-delay <i>number</i>
Tree	discover-delay
Description	This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [**ipv4-address**] *string*

Synopsis	Enter the server list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i>
Tree	server
Max. Instances	8
Notes	The following elements are part of a choice: client-mac or server .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv4-address] *string*

Synopsis	IP address of the DHCP server
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i>
Tree	server
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i> discover-delay <i>number</i>
Tree	discover-delay
Description	This command configures the time to delay DHCP Discover messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-82

Synopsis	Enter the option-82 context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-specific-option

Synopsis	Enter the vendor-specific-option context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i>
Tree	client-mac-address

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option sap-id <i>boolean</i>
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i>
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option string <i>string</i>
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option system-id <i>boolean</i>
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the proxy-server context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server emulated-server <i>string</i>
Tree	emulated-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis	Enter the lease-time context
Context	configure service vprn string subscriber-interface string ipv4 dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	configure service vprn string subscriber-interface string ipv4 dhcp proxy-server lease-time radius-override boolean
Tree	radius-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	DHCP lease time
Context	configure service vprn string subscriber-interface string ipv4 dhcp proxy-server lease-time value number
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	configure service vprn string subscriber-interface string ipv4 dhcp python-policy reference
Tree	python-policy

Reference **configure** [python python-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay-proxy

Synopsis Enable the **relay-proxy** context
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp relay-proxy](#)
Tree [relay-proxy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-update-src-ip *boolean*

Synopsis Update the source IP address of a DHCP RELEASE message
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp relay-proxy release-update-src-ip](#) *boolean*
Tree [release-update-src-ip](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

siaddr-override *string*

Synopsis DHCP server IP address for address hiding function
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp relay-proxy siaddr-override](#) *string*
Tree [siaddr-override](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-include-gi-address *boolean*

Synopsis Include the GI address in DHCP relay messages
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp release-include-gi-address](#) *boolean*

Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server string

Synopsis	DHCP server IP addresses
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp server <i>string</i>
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip-addr keyword

Synopsis	Type of source address to use for DHCP relay
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp src-ip-addr <i>keyword</i>
Tree	src-ip-addr
Default	auto
Options	auto, gi-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

virtual-subnet boolean

Synopsis	Enable a virtual subnet for DHCPv4 hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp virtual-subnet <i>boolean</i>
Tree	virtual-subnet
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

export-host-routes *boolean*

Synopsis	Allow export of subscriber management host routes
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 export-host-routes <i>boolean</i>
Tree	export-host-routes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unnumbered

Synopsis	Enter the unnumbered context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 unnumbered
Tree	unnumbered
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address for the subscriber interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 unnumbered ip-address <i>string</i>
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or ip-int-name .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis	Interface name from which an IPv4 address is borrowed
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 unnumbered ip-int-name <i>string</i>
Tree	ip-int-name
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or ip-int-name .

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis Enable the **ipv6** context
Context **configure service vprn string subscriber-interface string ipv6**
Tree [ipv6](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address [[ipv6-address](#)] *string*

Synopsis Enter the **address** list instance
Context **configure service vprn string subscriber-interface string ipv6 address string**
Tree [address](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[ipv6-address](#)] *string*

Synopsis IPv6 address for the subscriber interface
Context **configure service vprn string subscriber-interface string ipv6 address string**
Tree [address](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Host type for subscriber interface prefixes

Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 address <i>string</i> host-type <i>keyword</i>
Tree	host-type
Default	pd
Options	pd, wan, pd-wan
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 address <i>string</i> prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-multiple-wan-addresses *boolean*

Synopsis	Allow multiple WAN addresses
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 allow-multiple-wan-addresses <i>boolean</i>
Tree	allow-multiple-wan-addresses
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-unmatching-prefixes *boolean*

Synopsis	Allow subscriber hosts without a matching prefix
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 allow-unmatching-prefixes <i>boolean</i>
Tree	allow-unmatching-prefixes
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis Enter the **bfd** context
Context **configure service vprn string subscriber-interface string ipv6 bfd**
Tree **bfd**
Description Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of BFD sessions
Context **configure service vprn string subscriber-interface string ipv6 bfd admin-state keyword**
Tree **admin-state**
Default disable
Options enable, disable
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

echo-receive number

Synopsis Minimum echo interval over this interface
Context **configure service vprn string subscriber-interface string ipv6 bfd echo-receive number**
Tree **echo-receive**
Range 100 to 100000
Units milliseconds
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multiplier number

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure service vprn string subscriber-interface string ipv6 bfd multiplier number
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive number

Synopsis	BFD receive interval over this interface
Context	configure service vprn string subscriber-interface string ipv6 bfd receive number
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transmit-interval number

Synopsis	BFD transmit interval over this interface
Context	configure service vprn string subscriber-interface string ipv6 bfd transmit-interval number
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000

Default	100
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Local termination point for the BFD session
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 bfd type <i>keyword</i>
Tree	type
Description	<p>This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.</p> <p>The options to specify where the BFD session runs are:</p> <ul style="list-style-type: none">• auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np.• cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.• fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Default	auto
Options	cpm-np, auto, fp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

default-dns *string*

Synopsis	Default DNS server addresses
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 default-dns <i>string</i>
Tree	default-dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-length (*number* | *keyword*)

Synopsis	IPv6 delegated prefix length
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 delegated-prefix-length (<i>number</i> <i>keyword</i>)
Tree	delegated-prefix-length
Range	48 to 64
Default	64
Options	variable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

override-slaac *boolean*

Synopsis	Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 override-slaac <i>boolean</i>
Tree	override-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-managed-route

Synopsis	Enable the pd-managed-route context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 pd-managed-route
Tree	pd-managed-route
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-hop *keyword*

Synopsis Next hop type

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6 dhcp6 pd-managed-route](#) [next-hop](#) *keyword*

Tree [next-hop](#)

Default ipv6

Options ipv4, ipv6

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis Enter the **proxy-server** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6 dhcp6 proxy-server](#)

Tree [proxy-server](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the DHCPv6 proxy server

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6 dhcp6 proxy-server](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis Enter the **client-applications** context

Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server client-applications dhcp <i>boolean</i>
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis	Allow the PPP application to use DHCP relay functionality
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server client-applications ppp <i>boolean</i>
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number* | *keyword*)

Synopsis	Time for prefix to remain preferred on this interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server preferred-lifetime (<i>number</i> <i>keyword</i>)
Tree	preferred-lifetime
Range	300 to 4294967294
Default	3600
Units	seconds
Options	infinite

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-timer *number*

Synopsis Rebind timer (T2) for this interface
Context **configure** **service vprn** *string* **subscriber-interface** *string* **ipv6 dhcp6 proxy-server rebind-timer** *number*
Tree **rebind-timer**
Range 0 to 1209600
Default 2880
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-timer *number*

Synopsis Renew timer (T1)
Context **configure** **service vprn** *string* **subscriber-interface** *string* **ipv6 dhcp6 proxy-server renew-timer** *number*
Tree **renew-timer**
Range 0 to 604800
Default 1800
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis Enter the **server-id** context
Context **configure** **service vprn** *string* **subscriber-interface** *string* **ipv6 dhcp6 proxy-server server-id**
Tree **server-id**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-ascii *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-en-ascii <i>string</i>
Tree	duid-en-ascii
String Length	1 to 58
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-hex *string*

Synopsis	DUID system ID in hexadecimal format
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-en-hex <i>string</i>
Tree	duid-en-hex
String Length	1 to 118
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-ll

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-ll
Tree	duid-ll
Notes	The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis	Time for prefix to remain valid on this interface
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server valid-lifetime (<i>number</i> <i>keyword</i>)
Tree	valid-lifetime
Range	300 to 4294967294
Default	86400
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay

Synopsis	Enter the relay context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay
Tree	relay
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

advertise-selection

Synopsis Enter the **advertise-selection** context
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [advertise-selection](#)
Tree [advertise-selection](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis Enter the **client-mac** context
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [advertise-selection](#) [client-mac](#)
Tree [client-mac](#)
Notes The following elements are part of a choice: **client-mac** or **server**.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis Designated client MAC addresses for Advertise selection
Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [advertise-selection](#) [client-mac](#) [mac-address](#) *keyword*
Tree [mac-address](#)
Options odd, even
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis Enter the **preference-option** context

Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac preference-option value <i>number</i>
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac solicit-delay <i>number</i>
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the preference-option context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection preference-option
Tree	preference-option

Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection preference-option value <i>number</i>
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [**ipv6-address**] *string*

Synopsis	Enter the server list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i>
Tree	server
Max. Instances	8
Notes	The following elements are part of a choice: client-mac or server .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-address] *string*

Synopsis	IP address of the DHCPv6 server
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i>
Tree	server
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the preference-option context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> preference-option value <i>number</i>
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> solicit-delay <i>number</i>
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection solicit-delay <i>number</i>
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the server instance or the client-mac context.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay client-applications dhcp <i>boolean</i>
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Allow the PPP application to use DHCP relay functionality
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay client-applications ppp <i>boolean</i>

Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay <i>description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-split

Synopsis	Enter the lease-split context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay <i>lease-split</i>
Tree	lease-split
Description	<p>Commands in this context configure DHCPv6 lease split.</p> <p>DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:</p> <ul style="list-style-type: none"> • the renew time T1 committed by the server (long renew time) • half of the preferred lifetime committed by the server when T1 committed by the server equals zero
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 lease split
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay <i>lease-split admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	DHCPv6 lease split valid lifetime (short lease time)
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay lease-split valid-lifetime <i>number</i>
Tree	valid-lifetime
Range	300 to 315446399
Default	3600
Units	seconds
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	Link address for the DHCPv6 relay messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay link-address <i>string</i>
Tree	link-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	DHCP6 server(s) to which the DHCP6 requests are forwarded
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay server <i>string</i>
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis	Source IPv6 address for the DHCPv6 relay messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay source-address <i>string</i>
Tree	source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-bridged-mode *boolean*

Synopsis	Enable IPv6 IPoE bridged mode
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 ipoe-bridged-mode <i>boolean</i>
Tree	ipoe-bridged-mode
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-local-address

Synopsis	Enter the link-local-address context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 link-local-address
Tree	link-local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	IPv6 link local address
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 link-local-address <i>address</i> <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix [ipv6-prefix] *string*

Synopsis	Enter the prefix list instance
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i>
Tree	prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-prefix] *string*

Synopsis	IPv6 address for a router interface
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

holdup-time *number*

Synopsis	Time to wait before route accepts new state attribute
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> holdup-time <i>number</i>
Tree	holdup-time
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Host type for subscriber interface prefixes
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> host-type <i>keyword</i>
Tree	host-type
Default	pd
Options	pd, wan, pd-wan
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-advertisements

Synopsis	Enter the router-advertisements context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements
Tree	router-advertisements
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of router advertisements
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast *keyword*

Synopsis	Protocol with forced multicast
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements force-mcast <i>keyword</i>
Tree	force-mcast
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-advertisement-interval *number*

Synopsis	Maximum advertisement interval
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements max-advertisement-interval <i>number</i>
Tree	max-advertisement-interval
Range	900 to 1800
Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-advertisement-interval *number*

Synopsis	Minimum advertisement interval
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements min-advertisement-interval <i>number</i>
Tree	min-advertisement-interval
Range	900 to 1350
Default	900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

current-hop-limit *number*

Synopsis	Hop limit to be advertised
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options current-hop-limit <i>number</i>
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enter the dns context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options dns
Tree	dns
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis	Include the RDNSS server option 25
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options dns include-rdnss <i>boolean</i>
Tree	include-rdnss
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime (*number* | *keyword*)

Synopsis Maximum time for the RDNSS address to remain valid

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#)
[options dns rdnss-lifetime](#) (*number* | *keyword*)

Tree [rdnss-lifetime](#)

Range 900 to 3600

Default 3600

Units seconds

Options infinite

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-configuration *boolean*

Synopsis Managed address configuration flag

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#)
[options managed-configuration](#) *boolean*

Tree [managed-configuration](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu (*number* | *keyword*)

Synopsis Advertised MTU value

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#)
[options mtu](#) (*number* | *keyword*)

Tree [mtu](#)

Range 1280 to 9212

Default not-included

Units bytes

Options not-included

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other-stateful-configuration *boolean*

Synopsis Other stateful configuration flag

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#) [options other-stateful-configuration](#) *boolean*

Tree [other-stateful-configuration](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reachable-time *number*

Synopsis Neighbor discovery reachable time that is advertised for this group interface

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#) [options reachable-time](#) *number*

Tree [reachable-time](#)

Range 0 to 3600000

Default 0

Units milliseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retransmit-timer *number*

Synopsis Neighbor discovery retransmit timer that is advertised for this group interface

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv6](#) [router-advertisements](#) [options retransmit-timer](#) *number*

Tree [retransmit-timer](#)

Range 0 to 1800000

Default 0

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-lifetime (*number* | *keyword*)

Synopsis	Router lifetime
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options router-lifetime (<i>number</i> <i>keyword</i>)
Tree	router-lifetime
Range	2700 to 9000
Default	4500
Units	seconds
Options	no-default-router
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-options

Synopsis	Enter the prefix-options context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements prefix-options
Tree	prefix-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

autonomous *boolean*

Synopsis	Value of the autonomous flag
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements prefix-options autonomous <i>boolean</i>
Tree	autonomous
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements prefix-options on-link <i>boolean</i>
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number* | *keyword*)

Synopsis	Time for a prefix to remain preferred
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements prefix-options preferred-lifetime (<i>number</i> <i>keyword</i>)
Tree	preferred-lifetime
Range	0 to 4294967294
Default	3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis	Time for a prefix to remain valid
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements prefix-options valid-lifetime (<i>number</i> <i>keyword</i>)
Tree	valid-lifetime
Range	0 to 4294967294
Default	86400
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicit

Synopsis	Enter the router-solicit context
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-solicit
Tree	router-solicit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inactivity-timer (*number* | *keyword*)

Synopsis	Time before an inactive host is removed
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-solicit inactivity-timer (<i>number</i> <i>keyword</i>)
Tree	inactivity-timer
Range	1 to 31536000
Default	300
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enter the local-address-assignment context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment
Tree	local-address-assignment
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Local Address Assignment
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context

Context **configure service vprn** *string* **subscriber-interface** *string* **local-address-assignment ipv4**

Tree **ipv4**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis Enter the **client-applications** context

Context **configure service vprn** *string* **subscriber-interface** *string* **local-address-assignment ipv4**
client-applications

Tree **client-applications**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis Request local addresses for PPP IPCP hosts

Context **configure service vprn** *string* **subscriber-interface** *string* **local-address-assignment ipv4**
client-applications ppp *boolean*

Tree **ppp**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pool *string*

Synopsis Default pools

Context **configure service vprn** *string* **subscriber-interface** *string* **local-address-assignment ipv4**
default-pool *string*

Tree **default-pool**

String Length 1 to 32

Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server reference

Synopsis	Local DHCP server that contains pools for local address assignment
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv4 server reference
Tree	server
Reference	configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the client-applications context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-slaac boolean

Synopsis	Request local addresses for IPoE SLAAC hosts
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Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6 client-applications ipoe-slaac <i>boolean</i>
Tree	ipoe-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-wan *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6 client-applications ipoe-wan <i>boolean</i>
Tree	ipoe-wan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-slaac *boolean*

Synopsis	Request local addresses for PPP SLAAC hosts
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6 client-applications ppp-slaac <i>boolean</i>
Tree	ppp-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis	Local DHCPv6 server that contains pools for local address assignment
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6 server <i>reference</i>
Tree	server
Reference	configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the pppoe context
Context	configure service vprn string subscriber-interface string pppoe
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure service vprn string subscriber-interface string pppoe description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	Maximum PPPoE sessions
Context	configure service vprn string subscriber-interface string pppoe session-limit number
Tree	session-limit
Range	1 to 333823
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-retail-subnets *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Export subnets to the forwarding service
Context	configure service vprn string subscriber-interface string private-retail-subnets boolean
Tree	private-retail-subnets

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-mode *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mode of operation for hosts with /128 WAN IPv6 address
Context	configure service vprn string subscriber-interface string wan-mode keyword
Tree	wan-mode
Default	mode64
Options	mode64, mode128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enable the wlan-gw context
Context	configure service vprn string subscriber-interface string wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-manager

Synopsis	Enter the pool-manager context
Context	configure service vprn string subscriber-interface string wlan-gw pool-manager
Tree	pool-manager
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6-client

Synopsis	Enter the dhcp6-client context
Context	configure service vprn string subscriber-interface string wlan-gw pool-manager dhcp6-client
Tree	dhcp6-client
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv4-nat

Synopsis	Enter the dhcpv4-nat context
Context	configure service vprn string subscriber-interface string wlan-gw pool-manager dhcp6-client dhcpv4-nat
Tree	dhcpv4-nat
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	configure service vprn string subscriber-interface string wlan-gw pool-manager dhcp6-client dhcpv4-nat admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	IPv6 address in the link address field of relay header
Context	configure service vprn string subscriber-interface string wlan-gw pool-manager dhcp6-client dhcpv4-nat link-address string
Tree	link-address
Default	::
Introduced	16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis Pool name to be sent in the DHCPv6 messages

Context **configure service vprn** *string* **subscriber-interface** *string* **wlan-gw pool-manager dhcp6-client dhcpv4-nat pool-name** *string*

Tree [pool-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ia-na

Synopsis Enter the **ia-na** context

Context **configure service vprn** *string* **subscriber-interface** *string* **wlan-gw pool-manager dhcp6-client ia-na**

Tree [ia-na](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the DHCPv6 client entity

Context **configure service vprn** *string* **subscriber-interface** *string* **wlan-gw pool-manager dhcp6-client ia-na admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis IPv6 address in the link address field of relay header

Context **configure service vprn** *string* **subscriber-interface** *string* **wlan-gw pool-manager dhcp6-client ia-na link-address** *string*

Tree	link-address
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na pool-name <i>string</i>
Tree	pool-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lease-query

Synopsis	Enable the lease-query context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client lease-query
Tree	lease-query
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-retries *number*

Synopsis	Maximum number of retries before the lease query assumes that no existing subnets were allocated
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client lease-query max-retries <i>number</i>
Tree	max-retries
Range	0 to 10
Default	2
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

servers *string*

Synopsis	DHCPv6 servers that are used for requesting addresses
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client servers <i>string</i>
Tree	servers
Max. Instances	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac

Synopsis	Enter the slaac context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client slaac
Tree	slaac
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client slaac admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	IPv6 address in the link address field of relay header
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client slaac link-address <i>string</i>
Tree	link-address

Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client slaac pool-name <i>string</i>
Tree	pool-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-ip (*keyword* | *ipv6-address*)

Synopsis	Source IP address that is used by the DHCPv6 client
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client source-ip (<i>keyword</i> <i>ipv6-address</i>)
Tree	source-ip
Default	use-interface-ip
Options	use-interface-ip
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enter the watermarks context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager watermarks
Tree	watermarks
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	New prefix that is used when the ISA level reaches high watermark
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager watermarks high <i>number</i>
Tree	high
Range	51 to 99
Default	95
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Prefix that is released if the usage level without this prefix is below the low watermark
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager watermarks low <i>number</i>
Tree	low
Range	50 to 98
Default	90
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group reference

Synopsis	Identifier of the WLAN Gateway ISA group on which the prefixes are installed
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager wlan-gw-group <i>reference</i>
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the redundancy context
Context	configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw <i>redundancy</i>
Tree	redundancy

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of WLAN-GW redundancy
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [wlan-gw redundancy](#) **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Route to export to peer
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [wlan-gw redundancy](#) **export** *string*
Tree [export](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Peer route to monitor
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [wlan-gw redundancy](#) **monitor** *string*
Tree [monitor](#)
Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-mgmt

Synopsis Enter the **subscriber-mgmt** context

Context **configure service vprn string subscriber-mgmt**

Tree [subscriber-mgmt](#)

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-id *number*

Synopsis Shunt ID for a pair of resilient nodes

Context **configure service vprn string subscriber-mgmt multi-chassis-shunt-id *number***

Tree [multi-chassis-shunt-id](#)

Description This command configures the shunt ID that is used to shunt downstream traffic from a standby node to an active node. Because this ID identifies the traffic service on the standby node, the same ID must be configured per service on each node.

This configuration is required for BNG CUPS inter-UPF resiliency shunting, but not for non-BNG CUPS shunting. However, when configured, it is also used for shunting non-BNG CUPS sessions in the same service.

Range 1 to 8191

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up-resiliency

Synopsis Enter the **up-resiliency** context

Context **configure service vprn string subscriber-mgmt up-resiliency**

Tree [up-resiliency](#)

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group [[oper-group](#)] *reference*

Synopsis Enter the **monitor-oper-group** list instance

Context	configure service vprn string subscriber-mgmt up-resiliency monitor-oper-group reference
Tree	monitor-oper-group
Description	Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby). Note: The following is only applicable for the configure service vpls capture-sap context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups.
Max. Instances	4
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[oper-group] *reference*

Synopsis	Operational group name
Context	configure service vprn string subscriber-mgmt up-resiliency monitor-oper-group reference
Tree	monitor-oper-group
Reference	configure service oper-group string
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

health-drop *number*

Synopsis	Number subtracted from the health value per failure
Context	configure service vprn string subscriber-mgmt up-resiliency monitor-oper-group reference health-drop number
Tree	health-drop
Description	This command defines how the failure of an operational group member affects the health value. The base health value is 255; the value decreases with the defined number per member failure to a minimum of 0.
Range	1 to 255

Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-propagate

Synopsis	Enter the ttl-propagate context
Context	configure service vprn string ttl-propagate
Tree	ttl-propagate
Introduced	16.0.R1
Platforms	All

local keyword

Synopsis	Local TTL propagation control for the VPRN
Context	configure service vprn string ttl-propagate local keyword
Tree	local
Description	This command specifies the local TTL propagation control for the VPRN and overrides the global configuration of the TTL propagation for locally generated packets that are forwarded over MPLS LSPs in a given VPRN service context.
Default	use-base
Options	none, all, vc-only, use-base
Introduced	16.0.R1
Platforms	All

transit keyword

Synopsis	Transit TTL propagation control for the VPRN
Context	configure service vprn string ttl-propagate transit keyword
Tree	transit
Description	This command overrides the global configuration of the TTL propagation for in transit packets that are forwarded over MPLS LSPs in a given VPRN service context.
Default	use-base
Options	none, all, vc-only, use-base
Introduced	16.0.R1
Platforms	All

twamp-light

Synopsis	Enter the twamp-light context
Context	configure service vprn string twamp-light
Tree	twamp-light
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reflector

Synopsis	Enable the reflector context
Context	configure service vprn string twamp-light reflector
Tree	reflector
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of TWAMP Light functionality
Context	configure service vprn string twamp-light reflector admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	configure service vprn string twamp-light reflector allow-ipv6-udp-checksum-zero boolean
Tree	allow-ipv6-udp-checksum-zero

Description	When configured to true , this command allows the processing of IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior. When configured to false , IPv6 packets that arrive with a UDP checksum of zero are discarded.
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure service vpn string twamp-light reflector description string
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure service vpn string twamp-light reflector prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Max. Instances	50
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source prefix for the TWAMP-Light reflector
Context	configure service vpn string twamp-light reflector prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis	Text description
Context	configure service vprn string twamp-light reflector prefix (ipv4-prefix ipv6-prefix) description string
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type keyword

Synopsis	Processing behavior type for the reflector
Context	configure service vprn string twamp-light reflector type keyword
Tree	type
Description	<p>This command configures the processing behavior of the TWAMP Light reflector. When the value is twamp-light the reflector does not check the received PDU as a traditional base TWAMP Light packet without TLV processing. When the value is stamp, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet.</p> <p>In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to stamp. When the reflector is operating in stamp mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.</p>
Default	twamp-light
Options	stamp, twamp-light
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

udp-port number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs
Context	configure service vprn string twamp-light reflector udp-port number

Tree	udp-port
Range	862 64364 to 64373
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

video-interface [[interface-name](#)] *string*

Synopsis	Enter the video-interface list instance
Context	configure service vprn <i>string</i> video-interface <i>string</i>
Tree	video-interface
Max. Instances	9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[interface-name] *string*

Synopsis	Video interface name
Context	configure service vprn <i>string</i> video-interface <i>string</i>
Tree	video-interface
String Length	1 to 29
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

accounting-policy *reference*

Synopsis	Accounting Policy
Context	configure service vprn <i>string</i> video-interface <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

address [[ip-address](#)] *string*

Synopsis Add a list entry for **address**

Context **configure** [service](#) [vprn](#) *string* [video-interface](#) *string* [address](#) *string*

Tree [address](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[ip-address] *string*

Synopsis IPv4 address for the video interface within the service

Context **configure** [service](#) [vprn](#) *string* [video-interface](#) *string* [address](#) *string*

Tree [address](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

adi



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis Enter the **adi** context

Context **configure** [service](#) [vprn](#) *string* [video-interface](#) *string* [adi](#)

Tree [adi](#)

Introduced 16.0.R1

Deprecated 22.10.R3

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

scte30



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enter the scte30 context
Context	configure service vprn string video-interface string adi scte30
Tree	scte30
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ad-server [**address**] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Add a list entry for ad-server
Context	configure service vprn string video-interface string adi scte30 ad-server string
Tree	ad-server
Max. Instances	4
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**address**] *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Ad server address
Context	configure service vprn string video-interface string adi scte30 ad-server string
Tree	ad-server
Notes	This element is part of a list key.
Introduced	16.0.R1

Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-address



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enable the local-address context
Context	configure service vprn string video-interface string adi scte30 local-address
Tree	local-address
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

control string



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Control
Context	configure service vprn string video-interface string adi scte30 local-address control string
Tree	control
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

data string



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Data
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Context	configure service vprn <i>string</i> video-interface <i>string</i> adi scte30 local-address data <i>string</i>
Tree	data
Notes	This element is mandatory.
Introduced	16.0.R1
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the video interface
Context	configure service vprn <i>string</i> video-interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

channel [**mcast-address**] *string* **source** *string*

Synopsis	Enter the channel list instance
Context	configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i>
Tree	channel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[mcast-address] *string*

Synopsis	Multicast channel address
Context	configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i>
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source string

Synopsis Unicast source address

Context **configure** **service vprn** *string* **video-interface** *string* **channel** *string* **source** *string*

Tree **channel**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

channel-name string

Synopsis Channel name

Context **configure** **service vprn** *string* **video-interface** *string* **channel** *string* **source** *string* **channel-name** *string*

Tree **channel-name**

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description string

Synopsis Text description

Context **configure** **service vprn** *string* **video-interface** *string* **channel** *string* **source** *string* **description** *string*

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

scte35-action *keyword*

Synopsis	Enable downstream forwarding of SCTE 35 cue avails
Context	configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> scte35-action <i>keyword</i>
Tree	scte35-action
Default	forward
Options	forward, drop
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

zone-channel [**zone-mcast-address**] *string* **zone-source** *string*

Synopsis	Enter the zone-channel list instance
Context	configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i>
Tree	zone-channel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**zone-mcast-address**] *string*

Synopsis	Multicast zone channel address
Context	configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i>
Tree	zone-channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

zone-source *string*

Synopsis	Unicast source address
Context	configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i>

Tree	zone-channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

adi-channel-name *string*

Synopsis	Zone channel name
Context	configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i> adi-channel-name <i>string</i>
Tree	adi-channel-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cpu-protection *reference*

Synopsis	CPU protection policy
Context	configure service vprn <i>string</i> video-interface <i>string</i> cpu-protection <i>reference</i>
Tree	cpu-protection
Reference	configure system security cpu-protection <i>policy</i> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure service vprn <i>string</i> video-interface <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

multicast-service *number*

Synopsis	Associated multicast service ID
Context	configure service vprn <i>string</i> video-interface <i>string</i> multicast-service <i>number</i>
Tree	multicast-service
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

output-format *keyword*

Synopsis	Output format
Context	configure service vprn <i>string</i> video-interface <i>string</i> output-format <i>keyword</i>
Tree	output-format
Default	rtp-udp
Options	udp, rtp-udp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-client



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	Enable the rt-client context
Context	configure service vprn <i>string</i> video-interface <i>string</i> rt-client
Tree	rt-client
Introduced	16.0.R2
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

src-address *string*



WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	IP address for the RET client on the video interface
Context	configure service vprn <i>string</i> video-interface <i>string</i> rt-client src-address <i>string</i>
Tree	src-address
Notes	This element is mandatory.
Introduced	16.0.R2
Deprecated	22.10.R3
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-sap

Synopsis	Enable the video-sap context
Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap
Tree	video-sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

egress

Synopsis	Enter the egress context
Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap egress filter
Tree	filter

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip *reference*

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap egress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

policy-name *reference*

Synopsis	SAP egress QoS policy ID
Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap egress qos policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ingress

Synopsis	Enter the ingress context
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Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

policy-name *reference*

Synopsis	SAP ingress QoS policy ID
Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap ingress qos policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group-id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Video group ID
Context	configure service vprn <i>string</i> video-interface <i>string</i> video-sap video-group-id <i>reference</i>
Tree	video-group-id
Reference	configure isa video-group <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vprn-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VPRN type
Context	configure service vprn <i>string</i> vprn-type <i>keyword</i>
Tree	vprn-type
Default	regular
Options	regular, hub, spoke, subscriber-split-horizon
Introduced	16.0.R1

Platforms All

vxlan

Synopsis Enter the **vxlan** context
Context **configure service vprn string vxlan**
Tree **vxlan**
Introduced 16.0.R1
Platforms All

tunnel-termination [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **tunnel-termination** list instance
Context **configure service vprn string vxlan tunnel-termination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree **tunnel-termination**
Introduced 16.0.R1
Platforms All

[**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Non-system IP address that terminates the VXLAN
Context **configure service vprn string vxlan tunnel-termination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree **tunnel-termination**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

fpe-id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis FPE id for this entry

Context	configure service vprn string vxlan tunnel-termination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fpe-id reference
Tree	fpe-id
Reference	configure fwd-path-ext fpe number
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

weighted-ecmp keyword

Synopsis	Weighted load-balancing capability for ECMP routes
Context	configure service vprn string weighted-ecmp keyword
Tree	weighted-ecmp
Default	false
Options	false, true, strict
Introduced	16.0.R1
Platforms	All

wlan-gw

Synopsis	Enable the wlan-gw context
Context	configure service vprn string wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

distributed-subscriber-mgmt

Synopsis	Enter the distributed-subscriber-mgmt context
Context	configure service vprn string wlan-gw distributed-subscriber-mgmt
Tree	distributed-subscriber-mgmt
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-tcp-mss-adjust *number*

Synopsis	TCP-MSS adjustment value in upstream direction for DSM
Context	configure service vprn <i>string</i> wlan-gw distributed-subscriber-mgmt ipv6-tcp-mss-adjust <i>number</i>
Tree	ipv6-tcp-mss-adjust
Range	160 to 10240
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility-triggered-accounting

Synopsis	Enter the mobility-triggered-accounting context
Context	configure service vprn <i>string</i> wlan-gw mobility-triggered-accounting
Tree	mobility-triggered-accounting
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of mobility triggered accounting
Context	configure service vprn <i>string</i> wlan-gw mobility-triggered-accounting admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-down *number*

Synopsis	Hold additional mobility-triggered update until this timer expires
Context	configure service vprn <i>string</i> wlan-gw mobility-triggered-accounting hold-down <i>number</i>
Tree	hold-down
Range	60 to 86400
Units	seconds

Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-counters *boolean*

Synopsis Include counters in interim updates
Context **configure service vprn** *string wlan-gw mobility-triggered-accounting include-counters boolean*
Tree [include-counters](#)
Default false
Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect

Synopsis Enter the **xconnect** context
Context **configure service vprn** *string wlan-gw xconnect*
Tree [xconnect](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the WLAN-GW cross-connect
Context **configure service vprn** *string wlan-gw xconnect admin-state keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-source-ip *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address and prefix for the tunnel source
Context	configure service vprn <i>string</i> wlan-gw xconnect tunnel-source-ip <i>string</i>
Tree	tunnel-source-ip
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN-GW Group
Context	configure service vprn <i>string</i> wlan-gw xconnect wlan-gw-group <i>reference</i>
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis	Enable the wpp context
Context	configure service vprn <i>string</i> wpp
Tree	wpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WPP
Context	configure service vprn <i>string</i> wpp admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal [[name](#)] *string*

Synopsis	Enter the portal list instance
Context	configure service vprn <i>string</i> wpp portal <i>string</i>
Tree	portal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Web portal name
Context	configure service vprn <i>string</i> wpp portal <i>string</i>
Tree	portal
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack-auth-retry-count *number*

Synopsis	Number of retransmissions of an ACK_OUT message
Context	configure service vprn <i>string</i> wpp portal <i>string</i> ack-auth-retry-count <i>number</i>
Tree	ack-auth-retry-count
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WPP portal address
Context	configure service vprn <i>string</i> wpp portal <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the WPP portal server
Context	configure service vprn <i>string</i> wpp portal <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ntf-logout-retry-count *number*

Synopsis	Number of retransmissions of an NTF_LOGOUT message
Context	configure service vprn <i>string</i> wpp portal <i>string</i> ntf-logout-retry-count <i>number</i>
Tree	ntf-logout-retry-count
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-format *keyword*

Synopsis	Format of the port in the ACK_INO message
----------	---

Context	configure service vprn <i>string wpp portal string port-format keyword</i>
Tree	port-format
Default	standard
Options	standard, vendor-specific
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-interval *number*

Synopsis	Time between two consecutive retransmissions
Context	configure service vprn <i>string wpp portal string retry-interval number</i>
Tree	retry-interval
Range	10 to 2000
Default	2000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Message authentication between portal and BRAS by applying the secret used by WPPv2
Context	configure service vprn <i>string wpp portal string secret string</i>
Tree	secret
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *number*

Synopsis	Protocol version to be expected by the WPP portal
Context	configure service vprn <i>string wpp portal string version number</i>
Tree	version
Range	1 2
Default	1

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

3.44 sfm commands

```
configure
- sfm number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- sfm-type keyword
```

3.44.1 sfm command descriptions

sfm [**sfm-slot**] *number*

Synopsis	Enter the sfm list instance
Context	configure sfm number
Tree	sfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

[sfm-slot] *number*

Synopsis	Unique value to identify this SFM slot within a chassis in the system
Context	configure sfm number
Tree	sfm
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of SFM
Context	configure sfm number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

sfm-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Provision the SFM type
Context	configure <i>sfm number sfm-type keyword</i>
Tree	sfm-type
Options	sfm-x20, sfm-x20-b, m-sfm5-7, m-sfm5-12, m-sfm5-12e, sfm-x20s-b, sfm-ixr-6, sfm-ixr-10, sfm-s, m-sfm6-12e, sfm2-x20s, sfm-2s, m-sfm6-7/12, sfm-2se, sfm2-s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

3.45 subscriber-mgmt commands

```

configure
- subscriber-mgmt
- accu-stats-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress keyword id number
- ingress keyword id number
- ancp
- ancp-policy string
- apply-groups reference
- apply-groups-exclude reference
- egress
- rate-adjustment number
- rate-modify
- agg-rate
- scheduler string
- rate-monitor
- alarm boolean
- rate number
- rate-reduction number
- ingress
- rate-adjustment number
- rate-modify
- scheduler string
- rate-monitor
- alarm boolean
- rate number
- rate-reduction number
- port-down
- suspend-shcv
- alarm boolean
- hold-time number
- ancp-static-map
- multi-service-site-entry string customer-name reference customer-site-
name reference
- ancp-policy reference
- apply-groups reference
- apply-groups-exclude reference
- sap-entry string sap-id string
- ancp-policy reference
- apply-groups reference
- apply-groups-exclude reference
- apply-groups reference
- apply-groups-exclude reference
- authentication-origin
- overrides
- priority number
- apply-groups reference
- apply-groups-exclude reference
- source keyword
- auto-sub-id
- apply-groups reference
- apply-groups-exclude reference
- implicit-generation boolean
- ipoe-key keyword
- ppp-key keyword

```


configure subscriber-mgmt bgp-peering-policy

- **bgp-peering-policy** *string*
 - **advertise-inactive** *boolean*
 - **aggregator-id-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **as-override** *boolean*
 - **asn-4-byte** *boolean*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **bfd-liveness** *boolean*
 - **client-reflect** *boolean*
 - **cluster** *string*
 - **connect-retry** *number*
 - **damping** *boolean*
 - **description** *string*
 - **export** *reference*
 - **fast-external-failover** *boolean*
 - **hold-time** *number*
 - **import** *reference*
 - **keepalive** *number*
 - **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **local-as**
 - **as-number** *number*
 - **private** *boolean*
 - **local-preference** *number*
 - **loop-detect** *keyword*
 - **med-out** (*number* | *keyword*)
 - **min-route-advertisement** *number*
 - **multihop** *number*
 - **next-hop-self** *boolean*
 - **passive** *boolean*
 - **peer-as** *number*
 - **preference** *number*
 - **prefix-limit** *number*
 - **remove-private**
 - **limited** *boolean*
 - **send-communities**
 - **extended** *boolean*
 - **standard** *boolean*
 - **ttl-security** *number*
 - **type** *keyword*
- **category-map** *string*
 - **activity-threshold** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **category** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **credit-type-override** *keyword*
 - **default-credit**
 - **time** *number*
 - **volume**
 - **unit** *keyword*
 - **value** *number*
 - **description** *string*
 - **egress**
 - **policer** *number*
 - **queue** *number*
 - **exhausted-credit-service-level**
 - **egress**
 - **ip-filter**
 - **entry** *number*
 - **action**
 - **drop**

configure subscriber-mgmt category-map category exhausted-credit-service-level egress ip-filter entry action forward

```

- forward
- http-redirect
  - allow-override boolean
  - url string
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
  - dscp keyword
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - fragment keyword
- icmp
  - code number
  - type number
- ip-option
  - mask number
  - type number
- multiple-option boolean
- option-present boolean
- protocol (number | keyword)
- src-ip string
- src-port
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- tcp-flags
  - ack boolean
  - syn boolean
- ipv6-filter
  - entry number
    - action
      - drop
      - forward
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - icmp
        - code number
        - type number
      - next-header (number | keyword)
      - src-ip string
      - src-port
        - eq number
        - gt number
        - lt number
        - range
  
```

configure subscriber-mgmt category-map category exhausted-credit-service-level egress ipv6-filter entry match src-port range end

```

        - end number
        - start number
    - tcp-flags
      - ack boolean
      - syn boolean
- ingress
  - ip-filter
    - entry number
    - action
      - drop
      - forward
      - http-redirect
        - allow-override boolean
        - url string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip string
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - fragment keyword
      - icmp
        - code number
        - type number
      - ip-option
        - mask number
        - type number
      - multiple-option boolean
      - option-present boolean
      - protocol (number | keyword)
      - src-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - tcp-flags
        - ack boolean
        - syn boolean
  - ipv6-filter
    - entry number
    - action
      - drop
      - forward
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip string
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number

```

configure subscriber-mgmt category-map category exhausted-credit-service-level ingress ipv6-filter entry match dst-port range start

```

    - start number
  - icmp
    - code number
    - type number
  - next-header (number | keyword)
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - tcp-flags
    - ack boolean
    - syn boolean
  - pir (number | keyword)
- ingress
  - policer number
  - queue number
  - out-of-credit-action-override keyword
  - rating-group number
- credit-exhaust-threshold number
- credit-type keyword
- description string
- gx-session-level-usage boolean
- credit-control-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-category-map reference
  - description string
  - error-handling-action keyword
  - out-of-credit-action keyword
  - server
    - diameter reference
    - radius
- diameter-gx-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
- gx
  - avp-subscription-id
    - origin keyword
    - type keyword
  - ccrt-replay
    - interval number
    - max-lifetime number
  - credit-mcs-interval number
  - destination-realm-learning boolean
  - features
    - extended-bandwidth boolean
  - include-avp
    - an-gw-address boolean
    - apn-ambr boolean
    - called-station-id boolean
    - calling-station-id
      - type keyword
    - ip-can-type boolean
    - logical-access-id boolean
  - nas-port
    - bit-spec string
  - nas-port-id
    - prefix-string string
    - suffix
    - circuit-id

```

configure subscriber-mgmt diameter-gx-policy gx include-avp nas-port-id suffix not-included

```

    - not-included
    - remote-id
    - user-string string
- nas-port-type
  - type number
- pdn-connection-id boolean
- physical-access-id boolean
- rai boolean
- rat-type boolean
- sgsn-mcc-mnc boolean
- supported-features boolean
- user-equipment-info
  - type keyword
- user-location-info boolean
- mac-format string
- report-ip-address-event boolean
- three-gpp-qos-mapping
  - apn-ambr-dl
    - aggregate-rate
    - arbiter string
    - hs-sla-agg-rate
    - ignore-override
    - policer number
    - queue number
    - scheduler string
  - apn-ambr-ul
    - arbiter string
    - ignore-override
    - policer number
    - queue number
    - scheduler string
- node
  - destination-realm string
  - origin-host reference
- on-failure
  - failover boolean
  - handling keyword
- peer-policy reference
- tx-timer number
- diameter-gy-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - gy
    - avp-subscription-id
      - origin keyword
      - type keyword
    - ccrt-replay
      - interval number
      - max-lifetime number
    - destination-realm-learning boolean
    - extended-failure-handling
      - admin-state keyword
      - interim-credit
        - max-attempts (number | keyword)
        - reporting boolean
        - validity-time (number | keyword)
        - volume
          - credits number
          - units keyword
      - new-session-id boolean
    - include-avp
      - aaa-user-name boolean
      - address-avp boolean

```

configure subscriber-mgmt diameter-gy-policy gy include-avp called-station-id

```

- called-station-id
  - id string
- charging-rule-base-name
  - category-map
  - not-included
  - user-string string
- ggsn-address
  - type keyword
- pdp-context-type boolean
- ps-information boolean
- service-context-id
  - id string
- three-gpp-charging-characteristics boolean
- three-gpp-charging-id keyword
- three-gpp-ggsn-ipv4-address boolean
- three-gpp-ggsn-ipv6-address boolean
- three-gpp-gprs-negotiated-qos-profile boolean
- three-gpp-imsi keyword
- three-gpp-nsapi boolean
- three-gpp-rat-type
  - type number
- three-gpp-selection-mode boolean
- three-gpp-session-stop-indicator boolean
- three-gpp-user-location-info boolean
- user-equipment-info-type
  - type keyword
- mac-format string
- out-of-credit-reporting keyword
- vendor-support keyword
- node
  - destination-realm string
  - origin-host reference
- on-failure
  - failover boolean
  - handling keyword
- peer-policy reference
- tx-timer number
- diameter-nasreq-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - nasreq
    - include-avp
      - called-station-id boolean
      - calling-station-id
        - type keyword
      - circuit-id boolean
      - imei boolean
      - nas-port
        - bit-spec string
      - nas-port-id
        - prefix-string string
        - suffix
          - circuit-id
          - not-included
          - remote-id
          - user-string string
      - nas-port-type
        - type (keyword | number)
      - rat-type boolean
      - remote-id boolean
      - user-location-info boolean
    - mac-format string
    - password string

```

configure subscriber-mgmt diameter-nasreq-policy nasreq user-name

- **user-name**
 - **domain-name** *string*
 - **format** *keyword*
 - **operation** *keyword*
- **node**
 - **destination-realm** *string*
 - **origin-host** *reference*
- **on-failure**
 - **failover** *boolean*
 - **handling** *keyword*
- **peer-policy** *reference*
- **tx-timer** *number*
- **explicit-subscriber-map**
 - **entry** *string*
 - **alias** *string*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sla-profile** *reference*
 - **sub-profile** *reference*
- **group-interface-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **group-interface-template** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **ip-mtu** *number*
 - **ipv4**
 - **icmp**
 - **mask-reply** *boolean*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **ttl-expired**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **neighbor-discovery**
 - **proxy-arp-policy** *reference*
 - **remote-proxy-arp** *boolean*
 - **urpf-check**
 - **mode** *keyword*
 - **ipv6**
 - **urpf-check**
 - **mode** *keyword*
 - **gtp**
 - **apn-policy** *string*
 - **apn** *string*
 - **ambr-qos-mapping**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **downlink**
 - **aggregate-rate**

configure subscriber-mgmt gtp apn-policy apn ambr-qos-mapping downlink arbiter

```

    - arbiter string
    - policer number
    - queue number
    - scheduler string
  - uplink
    - arbiter string
    - policer number
    - queue number
    - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - defaults
    - group-interface
      - name string
      - svc-name string
    - diameter-nasreq-policy reference
    - radius-auth-policy reference
    - skip-gtp-ipv4-allocation boolean
    - user-db reference
  - apply-groups reference
  - apply-groups-exclude reference
  - apply-groups reference
  - apply-groups-exclude reference
  - max-held-uplink-sessions number
  - peer-profile string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - interface-type keyword
    - ip-ttl number
    - keep-alive
      - admin-state keyword
      - interval number
      - retry-count number
      - timeout number
    - message-retransmit
      - retry-count number
      - timeout number
    - python-policy reference
  - sll
    - change-reporting-action (number | keyword)
    - end-marker-count number
    - ipv4-mtu number
    - qos
      - ambr
        - down-link number
        - up-link number
      - arp number
      - down-link
        - gbr number
        - mbr number
      - qci number
      - up-link
        - gbr number
        - mbr number
  - uplink
    - charging-characteristics
      - home
        - bit0 boolean
        - bit1 boolean
        - bit10 boolean
        - bit11 boolean
        - bit12 boolean
        - bit13 boolean

```


configure subscriber-mgmt gtp peer-profile uplink charging-characteristics home bit14

```

    - bit14 boolean
    - bit15 boolean
    - bit2 boolean
    - bit3 boolean
    - bit4 boolean
    - bit5 boolean
    - bit6 boolean
    - bit7 boolean
    - bit8 boolean
    - bit9 boolean
  - roaming
    - bit0 boolean
    - bit1 boolean
    - bit10 boolean
    - bit11 boolean
    - bit12 boolean
    - bit13 boolean
    - bit14 boolean
    - bit15 boolean
    - bit2 boolean
    - bit3 boolean
    - bit4 boolean
    - bit5 boolean
    - bit6 boolean
    - bit7 boolean
    - bit8 boolean
    - bit9 boolean
  - ggsn
    - qos
      - ambr
        - down-link number
        - up-link number
      - arp number
      - down-link
        - gbr number
        - mbr number
      - up-link
        - gbr number
        - mbr number
  - pgw
    - qos
      - ambr
        - down-link number
        - up-link number
      - arp number
      - down-link
        - gbr number
        - mbr number
      - qci number
      - up-link
        - gbr number
        - mbr number
    - protocol-configuration-options keyword
    - rat-type (number | keyword)
    - report-wlan-location boolean
    - session-hold-time (number | keyword)
  - serving-network
    - mcc string
    - mnc string
- host-lockout-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - host-key keyword

```

configure subscriber-mgmt host-lockout-policy lockout-reset-time

```

- lockout-reset-time number
- lockout-time
  - max number
  - min number
- max-lockout-hosts number
- host-tracking-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - egress-rate-modify
    - agg-rate
    - scheduler string
- http-redirect-policy string
  - aa-url-parameter string
  - application-assurance reference
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - dst-port number
  - forward-entry dst-ip (ipv4-prefix | ipv6-prefix) protocol keyword dst-port number
  - ignore-app-profile boolean
  - portal-hold-time number
  - url string
- igmp-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - egress-rate-modify
    - agg-rate
    - scheduler string
  - fast-leave boolean
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - multicast-reporter
    - admin-state keyword
    - destination reference
    - optional-fields
      - host-mac boolean
      - pppoe-session-id boolean
      - sap-id boolean
      - svc-id boolean
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - redirection-policy reference
  - replication keyword
  - router-alert-check boolean
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
  - use-multicast-destination-mac boolean
  - version keyword
- ipoe-session-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - circuit-id-from-auth boolean
  - description string
  - session-key
    - cid boolean

```

configure subscriber-mgmt ipoe-session-policy session-key mac

```

    - mac boolean
    - rid boolean
    - sap boolean
  - session-timeout (number | keyword)
- isa-filter string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ipv4
    - default-action keyword
    - entry number
      - action
        - drop
        - forward
        - http-redirect
          - url string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
      - match
        - dst-ip string
        - dst-port
          - equals number
        - protocol keyword
    - ipv6
      - default-action keyword
      - entry number
        - action
          - drop
          - forward
          - http-redirect
            - url string
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
        - match
          - dst-ip string
          - dst-port
            - equals number
          - protocol keyword
      - type keyword
  - isa-policer string
  - action keyword
  - adaptation-rule
    - cir keyword
    - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cbs number
  - description string
  - mbs number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - type keyword
- isa-service-chaining
  - apply-groups reference
  - apply-groups-exclude reference
  - evpn string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bgp
    - route-distinguisher

```

configure subscriber-mgmt isa-service-chaining evpn bgp route-distinguisher rd

```

- rd (keyword | vpn-route-distinguisher)
- route-target
  - export string
  - import string
- description string
- export
  - advertise-pools
    - admin-state keyword
    - pool router-instance string name string
  - gateway-address-range
    - end string
    - start string
  - vxlan
    - vni number
- import-mode keyword
- prefix-route-resolution keyword
- mac-prefix string
- vas-filter string
- apply-groups reference
- apply-groups-exclude reference
- description string
- entry number
  - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - fail-action keyword
    - forward
      - esi string
      - sf-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - svc reference
    - insert-nsh
      - meta-data
        - insert-subscriber-id
        - opaque-data string
      - svc-path
        - path-id number
        - svc-index number
    - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - match
    - foreign-ip (ipv4-unicast-prefix | ipv4-unicast-address)
    - foreign-port number
    - protocol keyword
- local-user-db string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- ipoe
  - host string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - authentication
    - auth-domain-name string
    - gx-policy string
    - nasreq-auth-policy string
    - radius-auth-policy string
  - gtp-interface
    - name string
    - service-id number
  - host-identification

```

configure subscriber-mgmt local-user-db ipoe host host-identification circuit-id

```

- circuit-id
  - ascii-string string
  - hex-string string
- derived-id string
- encap-tag-range
  - from string
  - to string
- encap-tag-separate-range
  - inner
    - end number
    - start number
  - outer
    - end number
    - start number
- ip-prefix (ipv4-prefix-with-host-bits | ipv6-prefix-with-host-bits)
- mac string
- option60
  - ascii-string string
  - hex-string string
- remote-id
  - ascii-string string
  - hex-string string
- sap-id string
- service-id number
- string string
- system-id string
- identification
  - ancp-string string
  - app-profile-string string
  - category-map-name string
  - int-dest-id string
  - option-number number
  - sla-profile-string string
  - spi-sharing-group-id number
  - sub-profile-string string
  - subscriber-id string
- ipv4
  - address
    - gi-address keyword
    - ip-address string
    - pool
      - delimiter string
      - primary string
      - secondary string
    - use-pool-from-client
      - delimiter string
  - gi-address string
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
  - server string
- ipv6
  - address string
  - address-pool string
  - delegated-prefix string
  - delegated-prefix-length number
  - delegated-prefix-pool string
  - link-address string

```

configure subscriber-mgmt local-user-db ipoe host ipv6 option

- **option** (number | keyword)
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **hex-string** string
 - **ipv6-address** string
 - **router-advertisement-policy** string
 - **server** string
 - **slaac-prefix** string
 - **slaac-prefix-pool** string
 - **timers**
 - **preferred-lifetime** (number | keyword)
 - **rebind** number
 - **renew** number
 - **valid-lifetime** (number | keyword)
- **match-radius-proxy-cache**
 - **fail-action** keyword
 - **mac-format** string
 - **match**
 - **circuit-id** boolean
 - **ipv4-option** number
 - **ipv6-option** number
 - **mac** boolean
 - **remote-id** boolean
 - **server**
 - **name** string
 - **service** number
- **mld-import** string
- **msap-defaults**
 - **group-interface**
 - **name** string
 - **prefix** keyword
 - **suffix** keyword
 - **policy** string
 - **service** number
- **radius-accounting-policy**
 - **duplicate** string
 - **name** string
- **retail-service-id** number
- **rip-policy** string
- **to-client-options**
 - **ipv4-option** (number | keyword)
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **ascii-string** string
 - **duration** number
 - **empty**
 - **hex-string** string
 - **ipv4-address** string
 - **netbios-node-type** keyword
 - **ipv6-option** (number | keyword)
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **ascii-string** string
 - **domain-string** string
 - **empty**
 - **hex-string** string
 - **ipv6-address** string
- **to-server-options**
 - **ipv6-option** (number | keyword)
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **ascii-string** string
 - **domain-string** string
 - **empty**

configure subscriber-mgmt local-user-db ipoe host to-server-options ipv6-option hex-string

```

    - hex-string string
    - ipv6-address string
- wpp
  - initial
    - app-profile string
    - sla-profile string
    - sub-profile string
  - portal
    - name string
    - portal-group string
    - router-instance (keyword | number)
    - restore-to-initial-on-disconnect keyword
- mask type keyword
- apply-groups reference
- apply-groups-exclude reference
- prefix
  - length number
  - string string
- suffix
  - length number
  - string string
- match-list keyword
- ppp
  - host string
    - access-loop-encapsulation
      - apply-groups reference
      - apply-groups-exclude reference
      - encap-offset
        - type keyword
      - rate-down number
    - access-loop-information
      - circuit-id
        - ascii-string string
        - use-sap-id
      - remote-id
        - ascii-string string
        - use-mac-address
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication
      - gx-policy string
      - nasreq-auth-policy string
      - padi-auth-policy string
      - pre-auth-policy string
      - radius-auth-policy string
      - user-db string
    - host-identification
      - circuit-id
        - ascii-string string
        - hex-string string
      - derived-id string
      - encap-tag-range
        - from string
        - to string
      - encap-tag-separate-range
        - inner
          - end number
          - start number
        - outer
          - end number
          - start number
      - mac string
      - remote-id

```

configure subscriber-mgmt local-user-db ppp host host-identification remote-id ascii-string

```

    - ascii-string string
    - hex-string string
  - sap-id string
  - service-name string
  - user-name
    - format keyword
    - name string
- identification
  - ancp-string string
  - app-profile-string string
  - category-map-name string
  - int-dest-id string
  - option-number number
  - sla-profile-string string
  - spi-sharing-group-id number
  - sub-profile-string string
  - subscriber-id string
- ipv4
  - address
    - gi-address keyword
    - ip-address string
    - pool
      - delimiter string
      - primary string
      - secondary string
    - prefix-length number
    - use-pool-from-client
      - delimiter string
  - ignore-df-bit boolean
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
- ipv6
  - address string
  - address-pool string
  - delegated-prefix string
  - delegated-prefix-length number
  - delegated-prefix-pool string
  - force-ipv6cp boolean
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - hex-string string
    - ipv6-address string
  - router-advertisement-policy string
  - slaac-prefix string
  - slaac-prefix-pool string
  - timers
    - preferred-lifetime (number | keyword)
    - rebind number
    - renew number
    - valid-lifetime (number | keyword)
- l2tp
  - group
    - name string
    - service-id number
- lns-interface
  - name string

```


configure subscriber-mgmt local-user-db ppp host lns-interface service-id

```

- service-id number
- mld-import string
- msap-defaults
- group-interface
  - name string
  - prefix keyword
  - suffix keyword
- policy string
- service number
- pado-delay number
- password
  - chap string
  - ignore
  - pap string
- ppp-policy-parameters
  - max-sessions-per-mac number
- radius-accounting-policy
  - duplicate string
  - name string
- retail-service-id number
- rip-policy string
- steering-profile string
- to-client-options
  - ipv6-option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - domain-string string
    - empty
    - hex-string string
    - ipv6-address string
- mask type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - prefix
    - length number
    - string string
  - suffix
    - length number
    - string string
  - match-list keyword
- mld-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - egress-rate-modify
    - agg-rate
    - scheduler string
  - fast-leave boolean
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - redirection-policy reference
  - replication keyword
  - router-alert-check boolean
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string

```

configure subscriber-mgmt mld-policy static group starg

```
    - starg
  - use-multicast-destination-mac boolean
  - version keyword
- msap-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - cpu-protection
    - ip-src-monitoring
    - mac-monitoring
    - policy-id reference
  - description string
  - dist-cpu-protection string
  - ies-vprn-only-sap-parameters
    - anti-spoof keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - egress
    - qos
      - policy-name reference
  - ingress
    - qos
      - policy-name reference
      - queuing-type keyword
  - igmp-host-tracking
    - expiry-time number
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
  - lag-link-map-profile number
  - sticky-msaps boolean
  - sticky-msaps-idle-timeout number
  - sub-sla-mgmt
    - defaults
      - app-profile reference
      - int-dest-id
        - string string
        - top-q-tag
      - sla-profile reference
      - sub-profile reference
      - subscriber-id
        - auto-id
        - sap-id
        - string string
    - single-sub-parameters
      - non-sub-traffic-profiles
        - app-profile reference
        - sla-profile reference
        - sub-profile reference
        - subscriber-id string
      - profiled-traffic-only boolean
    - sub-ident-policy reference
    - subscriber-limit (keyword | number)
  - vpls-only-sap-parameters
    - apply-groups reference
    - apply-groups-exclude reference
  - arp-host
    - host-limit number
    - min-auth-interval number
  - arp-reply-agent keyword
  - dhcp
    - lease-populate number
    - option-82
      - action keyword
```

configure subscriber-mgmt msap-policy vpls-only-sap-parameters dhcp option-82 circuit-id

```

    - circuit-id keyword
    - remote-id
      - mac
      - string string
    - vendor-specific-option
      - client-mac-address boolean
      - sap-id boolean
      - service-id boolean
      - string string
      - system-id boolean
    - proxy-server
      - admin-state keyword
      - emulated-server string
      - lease-time
        - radius-override boolean
        - value number
    - egress
      - qos
        - policy-name reference
    - igmp-snooping
      - fast-leave boolean
      - import-policy reference
      - maximum-number-groups (keyword | number)
    - mcac
      - bandwidth
        - mandatory (number | keyword)
        - total (number | keyword)
      - interface-policy reference
      - mc-constraints
        - level number
          - apply-groups reference
          - apply-groups-exclude reference
          - bandwidth number
        - number-down number
          - apply-groups reference
          - apply-groups-exclude reference
          - level number
        - use-lag-port-weight boolean
      - policy reference
    - mvr
      - from-vpls reference
      - query-interval number
      - query-last-member-interval number
      - query-response-interval number
      - robust-count number
      - send-queries boolean
      - version keyword
    - ingress
      - qos
        - policy-name reference
        - queuing-type keyword
    - mac-da-hashing boolean
    - split-horizon-group string
  - pfcp
    - association string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - association-release-timeout (keyword | number)
      - association-setup-retry number
      - bfd-expedited-path-down boolean
      - description string
      - heartbeat
        - interval number

```

configure subscriber-mgmt pfcf association heartbeat retries

```

    - retries number
    - timeout number
  - interface
    - name string
    - router-instance string
  - nat
    - nat-group reference
    - wlan-gw-group reference
  - node-id
    - fqdn string
    - use-ip-address
  - path-restoration-time number
  - peer
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - python-policy reference
  - tx
    - retries number
    - timeout number
    - ttl number
  - up-resiliency
- pim-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
- ppp-policy string
  - allow-same-circuit-id-for-dhcp boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - cookies boolean
  - default-pap-password string
  - default-user-name string
  - description string
  - force-ppp-mtu-gt-1492 boolean
  - ipcp-subnet-negotiation boolean
  - keepalive
    - hold-up-multiplier number
    - interval number
  - lcp-ignore-identifier boolean
  - lcp-ignore-magic-numbers boolean
  - max-sessions-per-cid
    - allow-sessions-without-cid boolean
    - limit number
  - max-sessions-per-mac number
- mlppp
  - accept-mrru boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - endpoint
    - ip (ipv4-address | keyword)
    - mac (mac-address | keyword)
    - short-sequence-numbers boolean
  - ncp-renegotiation keyword
  - pado-ac-name string
  - pado-delay number
  - ppp-authentication keyword
  - ppp-chap-challenge-length
    - max number
    - min number
  - ppp-initial-delay boolean
  - ppp-mtu number
  - ppp-options
    - custom-option protocol keyword option-number number
    - address string
    - apply-groups reference

```

configure subscriber-mgmt ppp-policy ppp-options custom-option apply-groups-exclude

```

    - apply-groups-exclude reference
    - ascii-string string
    - empty
    - hex-string string
- re-establish-session boolean
- reject-unconfigured-ncp boolean
- reply-on-padt boolean
- session-timeout number
- sid-allocation keyword
- unique-sid keyword
- pppoe-client-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- keepalive
  - hold-up-multiplier number
  - interval number
- mru number
- mtu number
- python-policy reference
- restart-backoff
  - initial-time number
  - max-time number
- stack
  - ipv4 boolean
  - ipv6-slaac boolean
- radius-accounting-policy string
- acct-tunnel-connection-fmt string
- apply-groups reference
- apply-groups-exclude reference
- custom-record
  - apply-groups reference
  - apply-groups-exclude reference
  - queue number
    - apply-groups reference
    - apply-groups-exclude reference
  - e-counters
    - in-profile-octets-discarded-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-packets-discarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - out-profile-octets-discarded-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-packets-discarded-count boolean
    - out-profile-packets-forwarded-count boolean
  - i-counters
    - all-octets-offered-count boolean
    - all-packets-offered-count boolean
    - high-octets-discarded-count boolean
    - high-octets-offered-count boolean
    - high-packets-discarded-count boolean
    - high-packets-offered-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - low-octets-discarded-count boolean
    - low-octets-offered-count boolean
    - low-packets-discarded-count boolean
    - low-packets-offered-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-packets-forwarded-count boolean
    - uncoloured-octets-offered-count boolean
    - uncoloured-packets-offered-count boolean
- ref-queue
  - all

```

configure subscriber-mgmt radius-accounting-policy custom-record ref-queue e-counters

```

- e-counters
  - in-profile-octets-discarded-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-packets-discarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - out-profile-octets-discarded-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-packets-discarded-count boolean
  - out-profile-packets-forwarded-count boolean
- i-counters
  - all-octets-offered-count boolean
  - all-packets-offered-count boolean
  - high-octets-discarded-count boolean
  - high-octets-offered-count boolean
  - high-packets-discarded-count boolean
  - high-packets-offered-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - low-octets-discarded-count boolean
  - low-octets-offered-count boolean
  - low-packets-discarded-count boolean
  - low-packets-offered-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-packets-forwarded-count boolean
  - uncoloured-octets-offered-count boolean
  - uncoloured-packets-offered-count boolean
- id reference
- significant-change number
- delay-start-time number
- description string
- host-accounting
  - admin-state keyword
  - interim-update boolean
- include-radius-attribute
  - access-loop-options boolean
  - acct-authentic boolean
  - acct-delay-time boolean
  - acct-triggered-reason boolean
  - all-authorized-session-addresses boolean
  - apn boolean
  - bearer-fteid boolean
  - bonding-active-connections boolean
  - bonding-id boolean
  - brg-num-active-sessions boolean
  - called-station-id boolean
  - calling-station-id
    - type keyword
  - circuit-id boolean
  - delegated-ipv6-prefix boolean
  - detailed-acct-attributes boolean
  - dhcp-vendor-class-id boolean
  - error-code boolean
  - firewall-info boolean
  - framed-interface-id boolean
  - framed-ip-address boolean
  - framed-ip-netmask boolean
  - framed-ipv6-prefix boolean
  - framed-ipv6-route boolean
  - framed-route boolean
  - imei boolean
  - imsi boolean
  - ipv6-address boolean
  - lanext-bridge-id boolean
  - lanext-device-type boolean

```

configure subscriber-mgmt radius-accounting-policy include-radius-attribute lanext-route-distinguisher

- **lanext-route-distinguisher** *boolean*
- **lanext-route-target** *boolean*
- **lanext-vni** *boolean*
- **mac-address** *boolean*
- **msisdn** *boolean*
- **nas-identifier** *boolean*
- **nas-port**
 - **bit-spec** *string*
- **nas-port-id**
 - **prefix-string** *string*
 - **suffix** *keyword*
- **nas-port-type**
 - **type** (*keyword | number*)
- **nat-port-range** *boolean*
- **remote-id** *boolean*
- **sla-profile** *boolean*
- **spi-sharing-id** *boolean*
- **std-acct-attributes** *boolean*
- **steering-profile** *boolean*
- **sub-profile** *boolean*
- **subscriber-id** *boolean*
- **tunnel-client-attrs** *boolean*
- **tunnel-server-attrs** *boolean*
- **uli** *boolean*
- **user-name** *boolean*
- **v6-aggregate-stats** *boolean*
- **wifi-num-attached-ues** *boolean*
- **wifi-rssi** *boolean*
- **wifi-ssid-vlan** *boolean*
- **xconnect-tunnel-home-address** *boolean*
- **mcs-interval**
 - **interval** (*keyword | number*)
- **queue-instance-accounting**
 - **admin-state** *keyword*
 - **interim-update** *boolean*
- **radius-server-policy** *reference*
- **session-accounting**
 - **admin-state** *keyword*
 - **host-update** *boolean*
 - **interim-update** *boolean*
- **session-id-format** *keyword*
- **triggered-updates**
 - **gtp-mobility** *boolean*
- **update-interval**
 - **interval** *number*
 - **jitter** (*keyword | number*)
- **radius-authentication-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **fallback**
 - **action**
 - **accept**
 - **user-db** *string*
 - **force-probing** *boolean*
- **include-radius-attribute**
 - **access-loop-options** *boolean*
 - **acct-session-id**
 - **type** *keyword*
 - **apn** *boolean*
 - **called-station-id** *boolean*
 - **calling-station-id**
 - **type** *keyword*
 - **circuit-id** *boolean*

configure subscriber-mgmt radius-authentication-policy include-radius-attribute dhcp-options

```

- dhcp-options boolean
- dhcp-vendor-class-id boolean
- dhcp6-options boolean
- gprs-negotiated-qos-profile boolean
- imei boolean
- imsi boolean
- mac-address boolean
- msisdn boolean
- nas-identifier boolean
- nas-port
  - bit-spec string
- nas-port-id
  - prefix-string string
  - suffix keyword
- nas-port-type
  - type (keyword | number)
- pppoe-service-name boolean
- rat-type boolean
- remote-id boolean
- sap-session-index boolean
- tunnel-server-attrs boolean
- uli boolean
- wifi-num-attached-ues boolean
- wifi-ssid-vlan boolean
- xconnect-tunnel-home-address boolean
- password string
- ppp-user-name
  - domain-name string
  - domain-operation keyword
- pppoe-access-method keyword
- radius-server-policy reference
- re-authentication boolean
- send-acct-stop-on-fail
  - on-accept-failure boolean
  - on-reject boolean
  - on-request-failure boolean
- user-name
  - domain-name string
  - domain-operation keyword
  - format keyword
  - gtp-format keyword
  - mac-format string
- rip-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - authentication-type keyword
  - description string
- router-advertisement-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - force-mcast keyword
  - max-advertisement-interval number
  - min-advertisement-interval number
  - options
    - current-hop-limit number
    - dns
      - include-rdnss boolean
      - rdnss-lifetime (number | keyword)
    - managed-configuration boolean
    - mtu (number | keyword)
    - other-stateful-configuration boolean
    - reachable-time number
    - retransmit-timer number

```


configure subscriber-mgmt router-advertisement-policy options router-lifetime

- **router-lifetime** *(number | keyword)*
- **prefix-options**
 - **stateful**
 - **auto-lifetimes** *boolean*
 - **on-link** *boolean*
 - **preferred-lifetime** *(number | keyword)*
 - **valid-lifetime** *(number | keyword)*
 - **stateless**
 - **on-link** *boolean*
 - **preferred-lifetime** *(number | keyword)*
 - **valid-lifetime** *(number | keyword)*
- **sap-template** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **cpu-protection**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
- **description** *string*
- **dist-cpu-protection** *reference*
- **hold-time** *(number | keyword)*
- **shcv-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **layer-3**
 - **source-ip-origin** *keyword*
 - **unnumbered-source-ip** *string*
- **periodic**
 - **action** *keyword*
 - **admin-state** *keyword*
 - **interval** *number*
 - **retry-count** *number*
 - **timeout** *number*
- **trigger**
 - **host-limit-exceeded**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **retry-count** *number*
 - **timeout** *number*
 - **inactivity**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **retry-count** *number*
 - **timeout** *number*
 - **ip-conflict**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **retry-count** *number*
 - **timeout** *number*
 - **mac-learning**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **retry-count** *number*
 - **timeout** *number*
 - **mobility**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **retry-count** *number*

configure subscriber-mgmt shcv-policy trigger mobility timeout

- **timeout** *number*
- **vpls**
 - **source-ip** *string*
 - **source-mac** *string*
- **sla-profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **control**
 - **cups** *boolean*
 - **local** *boolean*
 - **credit-control-policy** *reference*
 - **def-instance-sharing** *keyword*
 - **description** *string*
 - **egress**
 - **bonding-selection**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate-thresholds**
 - **high** *number*
 - **low** *number*
 - **weight**
 - **change** *number*
 - **initial** *number*
 - **ip-filter** *reference*
 - **ipv6-filter** *reference*
 - **qos**
 - **hs-agg-rate** *number*
 - **qos-marking-from-sap** *boolean*
 - **sap-egress**
 - **overrides**
 - **hs-queue-stat-mode** *keyword*
 - **hs-wrr-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hs-class-weight** *number*
 - **rate** (*number* | *keyword*)
 - **policer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **packet-byte-offset** *number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **stat-mode** *keyword*
 - **queue** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **avg-frame-overhead** *decimal-number*
 - **cbs** (*number* | *keyword*)
 - **high-prio-only** (*number* | *keyword*)
 - **hs-class-weight** *number*
 - **hs-wred-queue**
 - **policy** *reference*
 - **hs-wrr-weight** *number*
 - **mbs** (*number* | *keyword*)
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **stat-mode** *keyword*
 - **policy-name** *reference*
 - **port-parent-location** *keyword*
 - **scheduler-policy**

configure subscriber-mgmt sla-profile egress qos scheduler-policy overrides

```

    - overrides
      - scheduler reference
      - apply-groups reference
      - apply-groups-exclude reference
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - policy-name reference
    - use-ingress-l2tp-dscp boolean
  - report-rate
    - agg-rate
    - policer number
    - pppoe-actual-rate
    - rfc5515-actual-rate
    - scheduler string
- host-limits
  - ipv4
    - arp number
    - dhcp number
    - overall number
    - ppp number
  - ipv6
    - overall number
    - pd-ipoe-dhcp number
    - pd-overall number
    - pd-ppp-dhcp number
    - wan-ipoe-dhcp number
    - wan-ipoe-slaac number
    - wan-overall number
    - wan-ppp-dhcp number
    - wan-ppp-slaac number
  - lac-overall number
  - overall number
  - remove-oldest boolean
- idle-timeout
  - apply-groups reference
  - apply-groups-exclude reference
  - category reference
    - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - timeout number
  - category-map-name reference
- ingress
  - ip-filter reference
  - ipv6-filter reference
  - qos
    - sap-ingress
      - overrides
        - policer reference
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - mbs (number | keyword)
        - packet-byte-offset number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
        - stat-mode keyword
      - queue reference
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - high-prio-only (number | keyword)

```

configure subscriber-mgmt sla-profile ingress qos sap-ingress overrides queue mbs

```

    - mbs (number | keyword)
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
      - stat-mode keyword
    - policy-name reference
    - queuing-type keyword
  - report-rate
    - agg-rate
    - policer number
    - pppoe-actual-rate
    - rfc5515-actual-rate
    - scheduler string
  - one-time-http-redirection
    - ip-filter reference
  - pfc-p-mappings
    - session-qer
      - downlink
        - aggregate-rate
        - arbiter string
        - policer number
        - queue number
        - scheduler string
      - uplink
        - arbiter string
        - policer number
        - queue number
        - scheduler string
    - session-limits
      - ipoe number
      - l2tp
        - lts number
        - lts number
        - overall number
      - overall number
      - pppoe
        - lac number
        - local number
        - overall number
  - steering-profile string
    - access
      - router-instance string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - network
      - next-hop string
      - router-instance string
  - sub-ident-policy string
    - app-profile-map
      - entry string
        - app-profile reference
        - apply-groups reference
        - apply-groups-exclude reference
      - use-direct-map-as-default boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - primary
      - admin-state keyword
      - script-url string
    - secondary
      - admin-state keyword
      - script-url string

```

configure subscriber-mgmt sub-ident-policy sla-profile-map

```

- sla-profile-map
  - entry string
    - apply-groups reference
    - apply-groups-exclude reference
    - sla-profile reference
  - use-direct-map-as-default boolean
- strings-from-option number
- sub-profile-map
  - entry string
    - apply-groups reference
    - apply-groups-exclude reference
    - sub-profile reference
  - use-direct-map-as-default boolean
- tertiary
  - admin-state keyword
  - script-url string
- sub-mcac-policy string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth
    - mandatory (number | keyword)
    - total (number | keyword)
  - description string
- sub-profile string
  - accounting-policy reference
  - accu-stats-policy reference
  - ancp
    - ancp-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - control
    - cups boolean
    - local boolean
  - description string
- egress
  - lag-per-link-hash
    - apply-groups reference
    - apply-groups-exclude reference
    - class number
    - weight number
  - qos
    - agg-rate
      - adaptation-rule keyword
      - burst-limit (number | keyword)
      - min-resv-bw number
      - queue-frame-based-accounting boolean
      - rate number
    - encap-offset
      - type keyword
    - hs-agg-rate number
    - hs-low-burst-max-class number
    - hs-min-resv-bw number
    - policer-control-policy
      - overrides
        - root
          - apply-groups reference
          - apply-groups-exclude reference
          - max-rate (number | keyword)
          - priority-mbs-thresholds
            - min-thresh-separation (number | keyword)

```

configure subscriber-mgmt sub-profile egress qos policer-control-policy overrides root priority-mbs-thresholds priority

```

    - priority number
      - apply-groups reference
      - apply-groups-exclude reference
      - mbs-contribution (number | keyword)
  - policy-name reference
- scheduler-policy
- overrides
  - scheduler reference
  - apply-groups reference
  - apply-groups-exclude reference
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- firewall-policy reference
- host-limits
  - ipv4
    - arp number
    - dhcp number
    - overall number
    - ppp number
  - ipv6
    - overall number
    - pd-ipoe-dhcp number
    - pd-overall number
    - pd-ppp-dhcp number
    - wan-ipoe-dhcp number
    - wan-ipoe-slaac number
    - wan-overall number
    - wan-ppp-dhcp number
    - wan-ppp-slaac number
  - lac-overall number
  - overall number
- host-tracking-policy reference
- hs-sla-mode keyword
- igmp-policy reference
- ingress
  - qos
    - policer-control-policy
      - overrides
        - root
          - apply-groups reference
          - apply-groups-exclude reference
          - max-rate (number | keyword)
          - priority-mbs-thresholds
            - min-thresh-separation (number | keyword)
            - priority number
              - apply-groups reference
              - apply-groups-exclude reference
              - mbs-contribution (number | keyword)
          - policy-name reference
        - policy-name reference
      - scheduler-policy
      - overrides
        - scheduler reference
        - apply-groups reference
        - apply-groups-exclude reference
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
        - policy-name reference
    - policy-name reference
- mld-policy reference
- nat
  - access-mode keyword
  - allow-bypass boolean

```

configure subscriber-mgmt sub-profile nat policy

- **policy** *reference*
- **prefix-list** *reference*
- **pim-policy** *reference*
- **preference** *number*
- **radius-accounting**
 - **policy** *reference*
 - **session-optimized-stop** *boolean*
- **secondary-shaper-hashing** *boolean*
- **session-limits**
 - **ipoe** *number*
 - **l2tp**
 - **lns** *number*
 - **lts** *number*
 - **overall** *number*
 - **overall** *number*
- **pppoe**
 - **lac** *number*
 - **local** *number*
 - **overall** *number*
- **sla-profile-map**
 - **entry** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sla-profile** *reference*
 - **use-direct-map-as-default** *boolean*
- **sub-mcac-policy** *reference*
- **upnp-policy** *reference*
- **volume-stats-type** *keyword*
- **vport-hashing** *boolean*
- **subscriber-interface-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **svlan-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **system-behavior**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **legacy-dns-nbns** *boolean*
- **up-resiliency**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fate-sharing-group-template** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **gratuitous-arp** *keyword*
 - **redundant-interface**
 - **name** *string*
 - **service** *string*
 - **uplink-forwarding-while-standby** *boolean*
- **vrgw**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **brg-profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **connectivity-verification**
 - **admin-state** *keyword*
 - **count** *number*
 - **retry-time** *number*
 - **timeout** *number*

configure subscriber-mgmt vrgw brg-profile description

```

- description string
- hold-time number
- home-pool
  - lease-time number
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
  - standby-ip-lifetime number
  - subnet
    - end string
    - prefix string
    - start string
  - initial-hold-time number
- radius-authentication
  - password string
  - server-policy reference
- radius-proxy-server string name string
- sla-profile-string string
- sub-profile-string string
- uplink-initial-wait number
- lanext
  - apply-groups reference
  - apply-groups-exclude reference
  - router-target-as-number number
- wlan-gw
  - apply-groups reference
  - apply-groups-exclude reference
  - queries
    - apply-groups reference
    - apply-groups-exclude reference
  - tunnel string
    - access-point-mac-address-learning-status keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - calculate-counts boolean
    - encapsulation
      - gre boolean
      - l2 boolean
      - l2tp boolean
      - vxlan boolean
    - l2
      - inner-vlan number
      - outer-vlan number
      - sap string
    - l3
      - address-type keyword
      - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - router-instance string
  - ues
    - maximum number
    - minimum number
    - state
      - cross-connect boolean
      - dsm boolean
      - esm boolean
      - l2 boolean
      - migrant boolean

```


configure subscriber-mgmt wlan-gw queries ue

```
- ue string
- address
  - dhcp6-na string
  - ipv4 string
  - slaac string
  - type keyword
- apply-groups reference
- apply-groups-exclude reference
- bridge-domain number
- connection-state
  - already-signed-in boolean
  - authorized-only boolean
  - cross-connect boolean
  - data-triggered boolean
  - delete-pending boolean
  - dhcp-triggered boolean
  - dsm boolean
  - esm boolean
  - gtp-authorized boolean
  - ip-assigned boolean
  - ip-assigned-authorized boolean
  - l2 boolean
  - portal boolean
- mac-address string
- soft-quota-exhausted boolean
- tunnel
  - encapsulation keyword
  - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - router-instance string
- vlan number
- wlan-gw-group
  - id number
  - member number
- virtual-chassis-identifier string
```

3.45.1 subscriber-mgmt command descriptions

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure subscriber-mgmt
Tree	subscriber-mgmt
Description	Commands in this context configure subscriber management attributes, policies, and profiles.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accu-stats-policy [\[name\]](#) *string*

Synopsis	Enter the accu-stats-policy list instance
Context	configure subscriber-mgmt accu-stats-policy <i>string</i>
Tree	accu-stats-policy
Description	<p>Commands in this context configure a storage policy for cumulative statistics for subscribers.</p> <p>The policy defines the direction for the policer or the queue to be stored.</p> <p>The policy stores subscriber statistics even if the subscriber session has ended. The subscriber statistics can be viewed even if the subscriber is offline.</p> <p>When the subscriber session ends, the statistics are added to the past statistics stored in memory so that all previous session statistics are accumulated. The accumulated statistics are not persistent; they are only stored in memory and reset to zero when the chassis reboots.</p>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[\[name\]](#) *string*

Synopsis	Policy name
Context	configure subscriber-mgmt accu-stats-policy <i>string</i>
Tree	accu-stats-policy
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt accu-stats-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress [[type](#)] *keyword id number*

Synopsis	Add a list entry for egress
Context	configure subscriber-mgmt accu-stats-policy <i>string</i> egress <i>keyword id number</i>
Tree	egress
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[type](#)] *keyword*

Synopsis	Type
Context	configure subscriber-mgmt accu-stats-policy <i>string</i> egress <i>keyword id number</i>
Tree	egress
Options	queue, policer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

id number

Synopsis	Queue or policer ID
Context	configure subscriber-mgmt accu-stats-policy <i>string egress</i> <i>keyword id number</i>
Tree	<i>egress</i>
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress [*type*] *keyword id number*

Synopsis	Add a list entry for ingress
Context	configure subscriber-mgmt accu-stats-policy <i>string ingress</i> <i>keyword id number</i>
Tree	<i>ingress</i>
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*type*] *keyword*

Synopsis	Type
Context	configure subscriber-mgmt accu-stats-policy <i>string ingress</i> <i>keyword id number</i>
Tree	<i>ingress</i>
Options	queue, policer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

id number

Synopsis	Queue or policer ID
Context	configure subscriber-mgmt accu-stats-policy <i>string ingress</i> <i>keyword id number</i>
Tree	<i>ingress</i>
Range	1 to 63

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp

Synopsis	Enter the ancp context
Context	configure subscriber-mgmt ancp
Tree	ancp
Description	Commands in this context configure Access Node Control Protocol (ANCP) settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-policy [[name](#)] *string*

Synopsis	Enter the ancp-policy list instance
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i>
Tree	ancp-policy
Description	<p>Commands in this context configure the specified ANCP policy, which can be associated with either an ANCP string (static) or a subscriber-profile (dynamic), and define the behavior of hosts belonging to these profiles.</p> <p>ANCP policies control rates and subscribers based on port-up/port-down messages from the access node. When configured, the node stops SHCV to a host that is part of a port that is down (by port-down message). When a port-up message is received for the port that was down, the node initiates the SHCV process immediately to verify connectivity.</p> <p>When ANCP is used with ESM, all hosts of a subscriber are updated with the ANCP string last associated with the subscriber.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Policy name
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i>
Tree	ancp-policy
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-adjustment *number*

Synopsis	Rate adjustment for the scheduler
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-adjustment <i>number</i>
Tree	rate-adjustment
Description	This command configures the rate adjustment for the scheduler. This setting is used when the rate returned by the DSLAM is calculated with a different encapsulation than the SR node. The node adjusts the rate by the percentage specified as: $\text{DSLAM_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$
Range	1 to 200
Default	100
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-modify

Synopsis	Enter the rate-modify context
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-modify
Tree	rate-modify
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Maximum total rate for all subscriber egress queues
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-modify agg-rate
Tree	agg-rate
Description	This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.
Notes	The following elements are part of a choice: agg-rate or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Scheduler to be applied for rate modification
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-modify scheduler <i>string</i>
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: agg-rate or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-monitor

Synopsis	Enter the rate-monitor context
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-monitor
Tree	rate-monitor
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

alarm *boolean*

Synopsis	Generate SNMP notification when monitor event is raised
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-monitor alarm <i>boolean</i>
Tree	alarm
Description	When configured to true , the system generates an alarm (trap) to the management system including the rate, the ANCP policy name, and the ANCP string when the monitored rate is below the configured rate.

When configured to **false**, no alarm is generated.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate number

Synopsis	Rate below which the system generates an event
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-monitor <i>rate number</i>
Tree	rate
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-reduction number

Synopsis	Constant rate reduction to specified DSLAM rate
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-reduction <i>number</i>
Tree	rate-reduction
Description	This command configures a constant rate reduction to the rate specified by the DSLAM. This setting is used if the node must adjust the rate to a value that is offset (for example by a fixed multicast dedicated bandwidth) compared to the total available on the DSLAM. The rate is calculated as: $\text{DSLAM_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-adjustment *number*

Synopsis Rate adjustment for the scheduler

Context **configure** [subscriber-mgmt](#) [ancp](#) [ancp-policy](#) *string* [ingress](#) [rate-adjustment](#) *number*

Tree [rate-adjustment](#)

Description This command configures the rate adjustment for the scheduler. This setting is used when the rate returned by the DSLAM is calculated with a different encapsulation than the SR node. The node adjusts the rate by the percentage specified as:
$$\text{DSLAM_RATE} * (\text{adjustment rate})/100 \text{ — (rate reduction)}$$

Range 1 to 200

Default 100

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-modify

Synopsis Enter the **rate-modify** context

Context **configure** [subscriber-mgmt](#) [ancp](#) [ancp-policy](#) *string* [ingress](#) [rate-modify](#)

Tree [rate-modify](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis Scheduler to be applied for rate modification

Context **configure** [subscriber-mgmt](#) [ancp](#) [ancp-policy](#) *string* [ingress](#) [rate-modify](#) [scheduler](#) *string*

Tree [scheduler](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-monitor

Synopsis	Enter the rate-monitor context
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> ingress rate-monitor
Tree	rate-monitor
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

alarm *boolean*

Synopsis	Generate SNMP notification when monitor event is raised
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> ingress rate-monitor alarm <i>boolean</i>
Tree	alarm
Description	When configured to true , the system generates an alarm (trap) to the management system including the rate, the ANCP policy name, and the ANCP string when the monitored rate is below the configured rate. When configured to false , no alarm is generated.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate *number*

Synopsis	Rate below which the system generates an event
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> ingress rate-monitor rate <i>number</i>
Tree	rate
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-reduction *number*

Synopsis	Constant rate reduction to specified DSLAM rate
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> ingress rate-reduction <i>number</i>
Tree	rate-reduction

Description	This command configures a constant rate reduction to the rate specified by the DSLAM. This setting is used if the node must adjust the rate to a value that is offset (for example by a fixed multicast dedicated bandwidth) compared to the total available on the DSLAM. The rate is calculated as: $\text{DSLAM_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-down

Synopsis	Enter the port-down context
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> port-down
Tree	port-down
Description	Commands in this context configure the actions taken on port-down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suspend-shcv

Synopsis	Enable the suspend-shcv context
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> port-down suspend-shcv
Tree	suspend-shcv
Description	Commands in this context specify the configuration to suspend SHCV for the hosts defined with the ANCP policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

alarm *boolean*

Synopsis	Send an alarm before suspending SHCV
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> port-down suspend-shcv alarm <i>boolean</i>
Tree	alarm
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Time that SHCV is suspended
Context	configure subscriber-mgmt ancp ancp-policy <i>string</i> port-down suspend-shcv hold-time <i>number</i>
Tree	hold-time
Description	This command configures the time that the node suspends SHCV. When unconfigured, SHCV is suspended until a port-up message is received.
Range	1 to 7200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-static-map

Synopsis	Enter the ancp-static-map context
Context	configure subscriber-mgmt ancp ancp-static-map
Tree	ancp-static-map
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multi-service-site-entry [[ancp-string](#)] *string* [customer-name](#) *reference* [customer-site-name](#) *reference*

Synopsis	Enter the multi-service-site-entry list instance
Context	configure subscriber-mgmt ancp ancp-static-map multi-service-site-entry <i>string</i> customer-name <i>reference</i> customer-site-name <i>reference</i>
Tree	multi-service-site-entry
Description	Commands in this context configure the ANCP key mapping (usually the circuit ID of the DSLAM port) to a customer, site, and scheduler name when Multi-Service site (MSS) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ancp-string**] *string*

Synopsis	ANCP string
Context	configure subscriber-mgmt ancp ancp-static-map multi-service-site-entry <i>string</i> customer-name <i>reference</i> customer-site-name <i>reference</i>
Tree	multi-service-site-entry
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

customer-name *reference*

Synopsis	Customer ID
Context	configure subscriber-mgmt ancp ancp-static-map multi-service-site-entry <i>string</i> customer-name <i>reference</i> customer-site-name <i>reference</i>
Tree	multi-service-site-entry
Reference	configure service customer <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

customer-site-name *reference*

Synopsis	Service customer multi-service site name
Context	configure subscriber-mgmt ancp ancp-static-map multi-service-site-entry <i>string</i> customer-name <i>reference</i> customer-site-name <i>reference</i>
Tree	multi-service-site-entry
Reference	configure service customer <i>string</i> multi-service-site <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-policy *reference*

Synopsis	ANCP policy name
Context	configure subscriber-mgmt ancp ancp-static-map multi-service-site-entry <i>string</i> customer-name <i>reference</i> customer-site-name <i>reference</i> ancp-policy <i>reference</i>
Tree	ancp-policy
Reference	configure subscriber-mgmt ancp ancp-policy <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-entry [[ancp-string](#)] *string* [sap-id](#) *string*

Synopsis	Enter the sap-entry list instance
Context	configure subscriber-mgmt ancp ancp-static-map sap-entry <i>string</i> sap-id <i>string</i>
Tree	sap-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ancp-string] *string*

Synopsis	ANCP key name
Context	configure subscriber-mgmt ancp ancp-static-map sap-entry <i>string</i> sap-id <i>string</i>
Tree	sap-entry
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *string*

Synopsis	SAP ID
Context	configure subscriber-mgmt ancp ancp-static-map sap-entry <i>string</i> sap-id <i>string</i>
Tree	sap-entry
String Length	1 to 45
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-policy *reference*

Synopsis ANCP policy name
Context **configure** [subscriber-mgmt ancp ancp-static-map sap-entry string sap-id string ancp-policy reference](#)
Tree [ancp-policy](#)
Reference **configure** [subscriber-mgmt ancp ancp-policy string](#)
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-origin

Synopsis Enter the **authentication-origin** context
Context **configure** [subscriber-mgmt authentication-origin](#)
Tree [authentication-origin](#)
Introduced 21.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis Enter the **overrides** context
Context **configure** [subscriber-mgmt authentication-origin overrides](#)
Tree [overrides](#)
Introduced 21.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority [*id*] *number*

Synopsis Enter the **priority** list instance
Context **configure** [subscriber-mgmt authentication-origin overrides priority number](#)
Tree [priority](#)

Description	Commands in this context arrange the relative order of authentication priorities.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	Authentication origin priority override
Context	configure subscriber-mgmt authentication-origin overrides priority <i>number</i>
Tree	priority
Description	This command configures the insert position of the authentication origin priority override.
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source *keyword*

Synopsis	Source of authentication priority
Context	configure subscriber-mgmt authentication-origin overrides priority <i>number</i> source <i>keyword</i>
Tree	source
Description	This command specifies the prioritization of authentication sources.
Options	python, diameter-gx, ludb, radius, diameter-nasreq, gtp, dhcp, local-address-assignment, pfc, config
Notes	This element is mandatory.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-sub-id

Synopsis	Enter the auto-sub-id context
Context	configure subscriber-mgmt auto-sub-id
Tree	auto-sub-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

implicit-generation *boolean*

Synopsis	Generate implicitly the subscriber identifier if none is provided
Context	configure subscriber-mgmt auto-sub-id implicit-generation <i>boolean</i>
Tree	implicit-generation
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-key *keyword*

Synopsis	Auto-generated subscriber identifier key1 for IPoE hosts
Context	configure subscriber-mgmt auto-sub-id ipoe-key <i>keyword</i>
Tree	ipoe-key
Options	mac, sap-id, circuit-id, remote-id, dual-stack-remote-id, service-name
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-key *keyword*

Synopsis	Auto-generated subscriber identifier key1 for PPP hosts
Context	configure subscriber-mgmt auto-sub-id ppp-key <i>keyword</i>
Tree	ppp-key
Options	mac, sap-id, circuit-id, remote-id, session-id
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bgp-peering-policy [*name*] *string*

Synopsis	Enter the bgp-peering-policy list instance
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i>
Tree	bgp-peering-policy
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	BGP peer policy name
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i>
Tree	bgp-peering-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

advertise-inactive *boolean*

Synopsis	Advertise inactive BGP routes to other BGP peers
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

aggregator-id-zero *boolean*

Synopsis	Set router ID in aggregator path attribute to zero when BGP aggregates routes
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> aggregator-id-zero <i>boolean</i>
Tree	aggregator-id-zero
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

as-override *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> as-override <i>boolean</i>
Tree	as-override
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

asn-4-byte *boolean*

Synopsis	Enable the use of 4-byte ASNs
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> asn-4-byte <i>boolean</i>
Tree	asn-4-byte
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-key *string*

Synopsis	BGP authentication key for all peers
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 370
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-keychain *reference*

Synopsis	Keychain name used for the TCP session
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables the use of Bi-directional Forwarding Detection (BFD) to control the state of an ESM dynamic BGP peer that is set up with the BGP peering policy. The parameters used for the BFD session are configured in the BFD context of the group interface or retail subscriber interface.</p> <p>When configured to false, this command disables the use of BFD for new ESM dynamic BGP peers that are set up with the BGP peering policy.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-reflect *boolean*

Synopsis	Enable client reflection of routes to all client peers
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> client-reflect <i>boolean</i>
Tree	client-reflect
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cluster *string*

Synopsis	Cluster ID for route reflector server
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> cluster <i>string</i>
Tree	cluster
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535

Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

damping *boolean*

Synopsis	Use BGP route damping for learned routes defined within the route policy
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> damping <i>boolean</i>
Tree	damping
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

export *reference*

Synopsis	Export route policies used to control routes advertised to BGP neighbors
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> export <i>reference</i>
Tree	export
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fast-external-failover *boolean*

Synopsis	Enable/disable BGP fast external failover.
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> fast-external-failover <i>boolean</i>
Tree	fast-external-failover
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	BGP hold time before closing connection
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> hold-time <i>number</i>
Tree	hold-time
Range	0 3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import *reference*

Synopsis	Import route policies used to control routes advertised to BGP neighbors
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> import <i>reference</i>
Tree	import
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keepalive *number*

Synopsis	BGP keepalive timer
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> keepalive <i>number</i>
Tree	keepalive
Range	0 to 21845

Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Local IP address used by group or neighbor when communicating with BGP peers
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-as

Synopsis	Enter the local-as context
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> local-as
Tree	local-as
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

as-number *number*

Synopsis	AS number to be advertised to peer
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private *boolean*

Synopsis	Hide local AS number in paths learned from peering
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> local-as private <i>boolean</i>
Tree	private
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-preference *number*

Synopsis Local preference attribute for incoming routes if not specified
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [local-preference](#) *number*
Tree [local-preference](#)
Range 0 to 4294967295
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

loop-detect *keyword*

Synopsis Strategy for loop detection in the AS path
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [loop-detect](#) *keyword*
Tree [loop-detect](#)
Options drop-peer, ignore-loop, off, discard-route
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

med-out (*number* | *keyword*)

Synopsis Multi-Exit Discriminator (MED) advertising
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [med-out](#) (*number* | *keyword*)
Tree [med-out](#)
Max. Range 0 to 4294967295
Options igp-cost
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-route-advertisement *number*

Synopsis Minimum interval between successive updates of prefix toward peer
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [min-route-advertisement](#) *number*

Tree	min-route-advertisement
Range	1 to 255
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multihop *number*

Synopsis	TTL value entered in IP header of packets sent to peer
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> multihop <i>number</i>
Tree	multihop
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-hop-self *boolean*

Synopsis	Advertise routes to peer using next hop path attribute set to itself
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> next-hop-self <i>boolean</i>
Tree	next-hop-self
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

passive *boolean*

Synopsis	Wait passively for BGP peer to connect
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> passive <i>boolean</i>
Tree	passive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer-as *number*

Synopsis	AS number for remote peer
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> peer-as <i>number</i>

Tree	peer-as
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Route preference for routes learned from all configured peers
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-limit *number*

Synopsis	Maximum number of routes that can be learned from peer
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> prefix-limit <i>number</i>
Tree	prefix-limit
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remove-private

Synopsis	Enable the remove-private context
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

limited *boolean*

Synopsis	Remove private AS numbers up to first public ASN encountered
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> remove-private limited <i>boolean</i>

Tree	limited
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-communities

Synopsis	Enter the send-communities context
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> send-communities
Tree	send-communities
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

extended *boolean*

Synopsis	Send the community attribute to the peer for external communities
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> send-communities extended <i>boolean</i>
Tree	extended
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

standard *boolean*

Synopsis	Send the community attribute to the peer for non-external communities
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> send-communities standard <i>boolean</i>
Tree	standard
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-security *number*

Synopsis	Minimum TTL value for incoming BGP packet
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> ttl-security <i>number</i>
Tree	ttl-security

Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Peer type
Context	configure subscriber-mgmt bgp-peering-policy <i>string</i> type <i>keyword</i>
Tree	type
Options	no-type, internal, external
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

category-map [[category-map-name](#)] *string*

Synopsis	Enter the category-map list instance
Context	configure subscriber-mgmt category-map <i>string</i>
Tree	category-map
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[category-map-name](#)] *string*

Synopsis	Category map name
Context	configure subscriber-mgmt category-map <i>string</i>
Tree	category-map
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

activity-threshold *number*

Synopsis	Threshold that is applied to determine whether an activity is ongoing
Context	configure subscriber-mgmt category-map <i>string</i> activity-threshold <i>number</i>
Tree	activity-threshold
Range	1 to 100000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

category [**category-name**] *string*

Synopsis	Enter the category list instance
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i>
Tree	category
Max. Instances	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**category-name**] *string*

Synopsis	Category name
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i>
Tree	category
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-type-override *keyword*

Synopsis	Credit type override in category map
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> credit-type-override <i>keyword</i>
Tree	credit-type-override

Options	volume, time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-credit

Synopsis	Enter the default-credit context
Context	configure subscriber-mgmt category-map <i>string category string</i> default-credit
Tree	default-credit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Default time credit
Context	configure subscriber-mgmt category-map <i>string category string</i> default-credit time <i>number</i>
Tree	time
Range	1 to 4294967295
Units	seconds
Notes	The following elements are part of a choice: time or volume .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

volume

Synopsis	Enable the volume context
Context	configure subscriber-mgmt category-map <i>string category string</i> default-credit volume
Tree	volume
Notes	The following elements are part of a choice: time or volume .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unit *keyword*

Synopsis	Unit for the default volume credit
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> default-credit volume unit <i>keyword</i>
Tree	unit
Default	bytes
Options	bytes, kilobytes, megabytes, gigabytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Value for the default volume credit
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> default-credit volume value <i>number</i>
Tree	value
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> egress
Tree	egress

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis Egress policers for this category
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [egress](#) [policer](#) *number*
Tree [policer](#)
Range 1 to 63
Max. 63
Instances
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue *number*

Synopsis Egress queues for this category
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [egress](#) [queue](#) *number*
Tree [queue](#)
Range 1 to 8
Max. 8
Instances
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exhausted-credit-service-level

Synopsis Enter the **exhausted-credit-service-level** context
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#)
Tree [exhausted-credit-service-level](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-filter

Synopsis	Enter the ip-filter context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter
Tree	ip-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i>
Tree	entry
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*id*] *number*

Synopsis	IP filter entry ID
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis Enter the **action** context
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **action**
Tree [action](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis Packets matching the filter entry are dropped
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **action** **drop**
Tree [drop](#)
Notes The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis Packets matching the filter entry are forwarded
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **action** **forward**
Tree [forward](#)
Notes The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis Enable the **http-redirect** context

Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> action http-redirect
Tree	http-redirect
Notes	The following elements are part of a choice: drop , forward , or http-redirect .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-override *boolean*

Synopsis	Allow URL to be overridden by RADIUS/Diameter
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> action http-redirect allow-override <i>boolean</i>
Tree	allow-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

url *string*

Synopsis	URL that is used to redirect the packets
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> action http-redirect url <i>string</i>
Tree	url
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis Enter the **match** context

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **match**

Tree [match](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dscp keyword

Synopsis DSCP to match

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **match** **dscp** *keyword*

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis Enter the **dst-port** context

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **match** **dst-port**

Tree [dst-port](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq number

Synopsis Port equal

Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match dst-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Port greater than
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match dst-port gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Port less than
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match dst-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match dst-port range
Tree	range

Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the port range to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fragment keyword

Synopsis	Fragmentation to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the icmp context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

code number

Synopsis	ICMP code to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match icmp code <i>number</i>
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type number

Synopsis	ICMP type to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match icmp type <i>number</i>
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-option

Synopsis	Enter the ip-option context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match ip-option
Tree	ip-option
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask *number*

Synopsis Mask with which the first IP option of IP header is ANDed before comparing

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level egress ip-filter entry](#) *number* [match ip-option](#) **mask** *number*

Tree [mask](#)

Range 0 to 255

Default 0

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis First IP option value for the IP header

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level egress ip-filter entry](#) *number* [match ip-option](#) **type** *number*

Tree [type](#)

Range 0 to 255

Default 0

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multiple-option *boolean*

Synopsis Match the multiple option

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level egress ip-filter entry](#) *number* [match multiple-option](#) **boolean**

Tree [multiple-option](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-present *boolean*

Synopsis Match the present option

Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ip-filter entry <i>number match option-present boolean</i>
Tree	option-present
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol (*number | keyword*)

Synopsis	IPv4 protocol to match
Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ip-filter entry <i>number match protocol (number keyword)</i>
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip *string*

Synopsis	Source IP address and mask to match
Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ip-filter entry <i>number match src-ip string</i>
Tree	src-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the src-port context
Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ip-filter entry <i>number match src-port</i>
Tree	src-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Port equal
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Port greater than
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Port less than
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match src-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
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Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ip-filter entry <i>number match src-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range to match
Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ip-filter entry <i>number match src-port range</i> end <i>number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the port range to match
Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ip-filter entry <i>number match src-port range</i> start <i>number</i>
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tcp-flags

Synopsis	Enter the tcp-flags context
Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ip-filter entry <i>number match</i> tcp-flags
Tree	tcp-flags
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack *boolean*

Synopsis Check for ACK bit

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress ip-filter entry](#) *number* [match tcp-flags](#) **ack** *boolean*

Tree [ack](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

syn *boolean*

Synopsis Check for SYN bit

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress ip-filter entry](#) *number* [match tcp-flags](#) **syn** *boolean*

Tree [syn](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-filter

Synopsis Enter the **ipv6-filter** context

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress ipv6-filter](#)

Tree [ipv6-filter](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress ipv6-filter entry](#) *number*

Tree [entry](#)

Max.
Instances 10

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis IP filter entry ID
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) [entry](#) *number*
Tree [entry](#)
Range 1 to 65535
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis Enter the **action** context
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) [entry](#) *number* **action**
Tree [action](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis Packets matching the filter entry are dropped
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) [entry](#) *number* **action** **drop**
Tree [drop](#)
Notes The following elements are part of a choice: **drop** or **forward**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis Packets matching the filter entry are forwarded

Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number action forward</i>
Tree	forward
Notes	The following elements are part of a choice: drop or forward .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the match context
Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number match</i>
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dscp *keyword*

Synopsis	DSCP to match
Context	configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number match dscp keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis Enter the **dst-port** context
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) [entry](#) *number* [match](#) **dst-port**
Tree [dst-port](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq number

Synopsis Port equal
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) [entry](#) *number* [match](#) **dst-port** **eq** *number*
Tree [eq](#)
Range 0 to 65535
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt number

Synopsis Port greater than
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) [entry](#) *number* [match](#) **dst-port** **gt** *number*
Tree [gt](#)
Range 0 to 65534
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt number

Synopsis	Port less than
Context	configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ipv6-filter entry number match dst-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ipv6-filter entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range to match
Context	configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ipv6-filter entry number match dst-port range end number
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the port range to match
Context	configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ipv6-filter entry number match dst-port range start number

Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the icmp context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

code number

Synopsis	ICMP code to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match icmp code <i>number</i>
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type number

Synopsis	ICMP type to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match icmp type <i>number</i>
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip *string*

Synopsis	Source IP address and mask as the match condition
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match src-ip <i>string</i>
Tree	src-ip
Default	0::0 0::0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the src-port context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Port equal
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match src-port eq <i>number</i>
Tree	eq

Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt number

Synopsis	Port greater than
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt number

Synopsis	Port less than
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match src-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis Upper bound of the port range to match

Context **configure** [subscriber-mgmt category-map](#) *string category string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number match src-port range end number*

Tree [end](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis Lower bound of the port range to match

Context **configure** [subscriber-mgmt category-map](#) *string category string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number match src-port range start number*

Tree [start](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tcp-flags

Synopsis Enter the **tcp-flags** context

Context **configure** [subscriber-mgmt category-map](#) *string category string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number match tcp-flags*

Tree [tcp-flags](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack boolean

Synopsis Check for ACK bit

Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match tcp-flags ack <i>boolean</i>
Tree	ack
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

syn *boolean*

Synopsis	Check for SYN bit
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match tcp-flags syn <i>boolean</i>
Tree	syn
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-filter

Synopsis	Enter the ip-filter context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter
Tree	ip-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
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Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ip-filter entry number</i>
Tree	entry
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	IP filter entry ID
Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ip-filter entry number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the action context
Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ip-filter entry number action</i>
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis	Packets matching the filter entry are dropped
Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ip-filter entry number action drop</i>
Tree	drop
Notes	The following elements are part of a choice: drop , forward , or http-redirect .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis Packets matching the filter entry are forwarded

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ip-filter entry](#) *number* [action forward](#)

Tree [forward](#)

Notes The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis Enable the **http-redirect** context

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ip-filter entry](#) *number* [action http-redirect](#)

Tree [http-redirect](#)

Notes The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-override *boolean*

Synopsis Allow URL to be overridden by RADIUS/Diameter

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ip-filter entry](#) *number* [action http-redirect allow-override](#) *boolean*

Tree [allow-override](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

url *string*

Synopsis URL that is used to redirect the packets

Context	configure subscriber-mgmt category-map <i>string</i> <i>category</i> <i>string</i> <i>exhausted-credit-service-level ingress ip-filter entry</i> <i>number</i> <i>action</i> <i>http-redirect url</i> <i>string</i>
Tree	url
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt category-map <i>string</i> <i>category</i> <i>string</i> <i>exhausted-credit-service-level ingress ip-filter entry</i> <i>number</i> <i>description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the match context
Context	configure subscriber-mgmt category-map <i>string</i> <i>category</i> <i>string</i> <i>exhausted-credit-service-level ingress ip-filter entry</i> <i>number</i> <i>match</i>
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dscp *keyword*

Synopsis	DSCP to match
Context	configure subscriber-mgmt category-map <i>string</i> <i>category</i> <i>string</i> <i>exhausted-credit-service-level ingress ip-filter entry</i> <i>number</i> <i>match</i> <i>dscp</i> <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,

	cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-ip string

Synopsis	Destination IP address and mask to match
Context	configure subscriber-mgmt category-map string category string exhausted-credit-service-level ingress ip-filter entry number match dst-ip string
Tree	dst-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the dst-port context
Context	configure subscriber-mgmt category-map string category string exhausted-credit-service-level ingress ip-filter entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq number

Synopsis	Port equal
Context	configure subscriber-mgmt category-map string category string exhausted-credit-service-level ingress ip-filter entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt number

Synopsis	Port greater than
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Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ip-filter entry number match dst-port gt number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Port less than
Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ip-filter entry number match dst-port lt number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ip-filter entry number match dst-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range to match
Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ip-filter entry number match dst-port range end number</i>
Tree	end
Range	0 to 65535

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the port range to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fragment keyword

Synopsis	Fragmentation to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the icmp context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

code number

Synopsis	ICMP code to match
Context	configure subscriber-mgmt category-map string category string exhausted-credit-service-level ingress ip-filter entry number match icmp code number
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type number

Synopsis	ICMP type to match
Context	configure subscriber-mgmt category-map string category string exhausted-credit-service-level ingress ip-filter entry number match icmp type number
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-option

Synopsis	Enter the ip-option context
Context	configure subscriber-mgmt category-map string category string exhausted-credit-service-level ingress ip-filter entry number match ip-option
Tree	ip-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask number

Synopsis	Mask with which the first IP option of IP header is ANDed before comparing
Context	configure subscriber-mgmt category-map string category string exhausted-credit-service-level ingress ip-filter entry number match ip-option mask number
Tree	mask
Range	0 to 255
Default	0

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis First IP option value for the IP header
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [match](#) [ip-option](#) **type** *number*
Tree [type](#)
Range 0 to 255
Default 0
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multiple-option *boolean*

Synopsis Match the multiple option
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [match](#) [multiple-option](#) **boolean**
Tree [multiple-option](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-present *boolean*

Synopsis Match the present option
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [match](#) [option-present](#) **boolean**
Tree [option-present](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol (*number* | *keyword*)

Synopsis IPv4 protocol to match
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [match](#) [protocol](#) (*number* | *keyword*)

Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the src-port context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq number

Synopsis	Port equal
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt number

Synopsis	Port greater than
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis Port less than
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [match](#) [src-port](#) **lt** *number*
Tree [lt](#)
Range 1 to 65535
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis Enable the **range** context
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [match](#) [src-port](#) **range**
Tree [range](#)
Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis Upper bound of the port range to match
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [match](#) [src-port](#) [range](#) **end** *number*
Tree [end](#)
Range 0 to 65535
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the port range to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match src-port range start <i>number</i>
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tcp-flags

Synopsis	Enter the tcp-flags context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match tcp-flags
Tree	tcp-flags
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack *boolean*

Synopsis	Check for ACK bit
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match tcp-flags ack <i>boolean</i>
Tree	ack
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

syn *boolean*

Synopsis	Check for SYN bit
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match tcp-flags syn <i>boolean</i>
Tree	syn
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-filter

Synopsis	Enter the ipv6-filter context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter
Tree	ipv6-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i>
Tree	entry
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*id*] *number*

Synopsis	IP filter entry ID
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the action context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> action
Tree	action

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis Packets matching the filter entry are dropped
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ipv6-filter](#) [entry](#) *number* [action](#) [drop](#)
Tree [drop](#)
Notes The following elements are part of a choice: **drop** or **forward**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis Packets matching the filter entry are forwarded
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ipv6-filter](#) [entry](#) *number* [action](#) [forward](#)
Tree [forward](#)
Notes The following elements are part of a choice: **drop** or **forward**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ipv6-filter](#) [entry](#) *number* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis Enter the **match** context

Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match</i>
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dscp keyword

Synopsis	DSCP to match
Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match dscp keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-ip string

Synopsis	Destination IP address and mask to match
Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match dst-ip string</i>
Tree	dst-ip
Default	0::0 0::0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the dst-port context
Context	configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match dst-port</i>
Tree	dst-port
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq number

Synopsis Port equal

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ipv6-filter entry](#) *number match dst-port eq number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt number

Synopsis Port greater than

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ipv6-filter entry](#) *number match dst-port gt number*

Tree [gt](#)

Range 0 to 65534

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt number

Synopsis Port less than

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ipv6-filter entry](#) *number match dst-port lt number*

Tree [lt](#)

Range 1 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the port range to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the icmp context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match icmp

Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

code number

Synopsis	ICMP code to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number match icmp code number</i>
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type number

Synopsis	ICMP type to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number match icmp type number</i>
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number match next-header</i> (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the src-port context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq number

Synopsis	Port equal
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt number

Synopsis	Port greater than
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt number

Synopsis	Port less than
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match src-port lt <i>number</i>

Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match src-port range end <i>number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the port range to match
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match src-port range start <i>number</i>
Tree	start
Range	0 to 65535
Notes	This element is mandatory.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tcp-flags

Synopsis Enter the **tcp-flags** context
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ipv6-filter](#) [entry](#) *number* [match](#) [tcp-flags](#)
Tree [tcp-flags](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack *boolean*

Synopsis Check for ACK bit
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ipv6-filter](#) [entry](#) *number* [match](#) [tcp-flags](#) [ack](#) *boolean*
Tree [ack](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

syn *boolean*

Synopsis Check for SYN bit
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ipv6-filter](#) [entry](#) *number* [match](#) [tcp-flags](#) [syn](#) *boolean*
Tree [syn](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis PIR
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [pir](#) (*number* | *keyword*)
Tree [pir](#)
Range 1 to 100000000

Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer number

Synopsis	Ingress policers used in this category
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> ingress policer <i>number</i>
Tree	policer
Range	1 to 63
Max.	63
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue number

Synopsis	Ingress queues used in this category
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> ingress queue <i>number</i>
Tree	queue
Range	1 to 32
Max.	32
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-of-credit-action-override *keyword*

Synopsis	Out of credit action that is overridden in category map
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> out-of-credit-action-override <i>keyword</i>
Tree	out-of-credit-action-override
Options	continue, disconnect-host, block-category, change-service-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rating-group *number*

Synopsis	Rating group for this category
Context	configure subscriber-mgmt category-map <i>string</i> category <i>string</i> rating-group <i>number</i>
Tree	rating-group
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-exhaust-threshold *number*

Synopsis	Percentage for credit exhaust threshold
Context	configure subscriber-mgmt category-map <i>string</i> credit-exhaust-threshold <i>number</i>
Tree	credit-exhaust-threshold
Range	50 to 100
Default	100
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-type *keyword*

Synopsis	Credit type
Context	configure subscriber-mgmt category-map <i>string</i> credit-type <i>keyword</i>
Tree	credit-type
Default	volume

Options	volume, time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt category-map <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gx-session-level-usage *boolean*

Synopsis	Allow Gx session level Usage Monitoring
Context	configure subscriber-mgmt category-map <i>string</i> gx-session-level-usage <i>boolean</i>
Tree	gx-session-level-usage
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-control-policy [[name](#)] *string*

Synopsis	Enter the credit-control-policy list instance
Context	configure subscriber-mgmt credit-control-policy <i>string</i>
Tree	credit-control-policy
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Credit control policy name
Context	configure subscriber-mgmt credit-control-policy <i>string</i>

Tree	credit-control-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-category-map *reference*

Synopsis	Default category map for this policy
Context	configure subscriber-mgmt credit-control-policy <i>string</i> default-category-map <i>reference</i>
Tree	default-category-map
Reference	configure subscriber-mgmt category-map <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt credit-control-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

error-handling-action *keyword*

Synopsis	Action when an error occurs in the determination of Credit Control
Context	configure subscriber-mgmt credit-control-policy <i>string</i> error-handling-action <i>keyword</i>
Tree	error-handling-action
Default	continue
Options	continue, block
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-of-credit-action *keyword*

Synopsis	Action when out of credit is reached
Context	configure subscriber-mgmt credit-control-policy <i>string</i> out-of-credit-action <i>keyword</i>
Tree	out-of-credit-action
Default	continue
Options	continue, disconnect-host, block-category, change-service-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server

Synopsis	Enter the server context
Context	configure subscriber-mgmt credit-control-policy <i>string</i> server
Tree	server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter *reference*

Synopsis	Diameter policy name that defines the Diameter peers to be used
Context	configure subscriber-mgmt credit-control-policy <i>string</i> server diameter <i>reference</i>
Tree	diameter
Reference	configure subscriber-mgmt diameter-gy-policy <i>string</i>
Notes	The following elements are part of a choice: diameter or radius .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Use RADIUS authentication servers defined in the RADIUS authentication policy in group interface
Context	configure subscriber-mgmt credit-control-policy <i>string</i> server radius
Tree	radius
Notes	The following elements are part of a choice: diameter or radius .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter-gx-policy [*name*] *string*

Synopsis Enter the **diameter-gx-policy** list instance
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string*
Tree [diameter-gx-policy](#)
Max. Instances 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Diameter application policy name
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string*
Tree [diameter-gx-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gx

Synopsis Enter the **gx** context
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* **gx**

Tree [gx](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-subscription-id

Synopsis Enter the **avp-subscription-id** context
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [avp-subscription-id](#)
Tree [avp-subscription-id](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

origin keyword

Synopsis Format of the Subscription-Id-Data AVP
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [avp-subscription-id](#) *origin keyword*
Tree [origin](#)
Default subscriber-id
Options subscriber-id, circuit-id, imsi, msisdn, imei, dual-stack-remote-id, mac, username, nas-port-id
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis Format of the Subscription-Id-Type AVP
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [avp-subscription-id](#) *type keyword*
Tree [type](#)
Default private
Options e164, imsi, nai, private
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ccrt-replay

Synopsis	Enable the ccrt-replay context
Context	configure subscriber-mgmt diameter-gx-policy string gx ccrt-replay
Tree	ccrt-replay
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval number

Synopsis	Minimum interval between two consecutive CCR-t replay attempts in a session
Context	configure subscriber-mgmt diameter-gx-policy string gx ccrt-replay interval number
Tree	interval
Range	60 to 86400
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lifetime number

Synopsis	Maximum time that CCR-t messages are replayed
Context	configure subscriber-mgmt diameter-gx-policy string gx ccrt-replay max-lifetime number
Tree	max-lifetime
Description	This command specifies the maximum time that CCR-t messages for Diameter Gx sessions that belong to the Diameter application policy are replayed.
Range	1 to 24
Default	24
Units	hours
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-mcs-interval number

Synopsis	Volume syncing interval for usage monitoring
Context	configure subscriber-mgmt diameter-gx-policy string gx credit-mcs-interval number
Tree	credit-mcs-interval

Description	This command configures the MCS interval at which the accounting data of subscriber hosts is updated.
Range	5 to 60
Default	10
Units	minutes
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-realm-learning *boolean*

Synopsis	Learn the destination realm from the incoming messages
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx destination-realm-learning <i>boolean</i>
Tree	destination-realm-learning
Description	<p>When configured to true, destination realm learning is enabled on the application level.</p> <p>The destination realm is a mandatory configuration parameter used in outgoing Credit Control Request messages (CCR). The configured destination realm is always used in the initial request (CCR-I) message. The consecutive request message of a Gx session can use the destination realm learned from the replies.</p> <p>When configured to false, destination realm learning is disabled and the configured destination realm is used in outgoing request messages.</p>
Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

features

Synopsis	Enter the features context
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx features
Tree	features
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

extended-bandwidth *boolean*

Synopsis	Negotiate support for extended bandwidth AVPs
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Context	configure subscriber-mgmt diameter-gx-policy <i>string gx features extended-bandwidth boolean</i>
Tree	extended-bandwidth
Description	<p>When configured to true, negotiation occurs for the support of extended AVPs that are capable of supporting bandwidth values greater than $(2^{32} - 1)$ b/s. The extended AVPs allow bitrates in kb/s and are as follows:</p> <ul style="list-style-type: none">• Extended-GBR-DL (AVP code 2850)• Extended-GBR-UL (AVP code 2851)• Extended-Max-Requested-BW-DL (AVP code 554)• Extended-Max-Requested-BW-UL (AVP code 555)• Extended-APN-AMBR-DL (AVP code 2848)• Extended-APN-AMBR-UL (AVP code 2849) <p>When configured to false, the extended AVPs are not supported.</p>
Default	false
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-avp

Synopsis	Enter the include-avp context
Context	configure subscriber-mgmt diameter-gx-policy <i>string gx include-avp</i>
Tree	include-avp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

an-gw-address *boolean*

Synopsis	Include the IP address of this gateway
Context	configure subscriber-mgmt diameter-gx-policy <i>string gx include-avp an-gw-address boolean</i>
Tree	an-gw-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

apn-ambr *boolean*

Synopsis	Include the APN aggregate maximum bitrate
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp apn-ambr <i>boolean</i>
Tree	apn-ambr
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the called station ID
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp called-station-id <i>boolean</i>
Tree	called-station-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-station-id

Synopsis	Enable the calling-station-id context
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp calling-station-id
Tree	calling-station-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Format of the Calling-Station-ID AVP
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp calling-station-id <i>type</i> <i>keyword</i>
Tree	type
Default	sap-string
Options	sap-string, mac, sap-id, remote-id, llid
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-can-type *boolean*

Synopsis Include the IP CAN type

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [ip-can-type](#) *boolean*

Tree [ip-can-type](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

logical-access-id *boolean*

Synopsis Include the logical access id

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [logical-access-id](#) *boolean*

Tree [logical-access-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port

Synopsis Enable the **nas-port** context

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [nas-port](#)

Tree [nas-port](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis NAS-Port AVP format

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [nas-port](#) [bit-spec](#) *string*

Tree [bit-spec](#)

String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis	Enable the nas-port-id context
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id
Tree	nas-port-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis	Prefix string for NAS-Port-Id AVP
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id prefix-string <i>string</i>
Tree	prefix-string
String Length	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix

Synopsis	Enter the suffix context
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id suffix
Tree	suffix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Add Circuit ID as suffix
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id suffix circuit-id

Tree	circuit-id
Notes	The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

not-included

Synopsis	Do not add a suffix
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id suffix not-included
Tree	not-included
Notes	The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Add Remote ID as suffix
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id suffix remote-id
Tree	remote-id
Notes	The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-string *string*

Synopsis	Add a user configurable string as suffix
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id suffix user-string <i>string</i>
Tree	user-string
String Length	1 to 64
Notes	The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string .

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis Enable the **nas-port-type** context
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx include-avp nas-port-type](#)
Tree [nas-port-type](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type number

Synopsis NAS-Port-Type AVP value
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx include-avp nas-port-type type](#)
number
Tree [type](#)
Range 0 to 255
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pdn-connection-id boolean

Synopsis Include the PDN connection id
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx include-avp pdn-connection-id](#)
boolean
Tree [pdn-connection-id](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

physical-access-id boolean

Synopsis Include the physical access ID
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx include-avp physical-access-id](#)
boolean

Tree	physical-access-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rai *boolean*

Synopsis	Include the routing area identity
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp rai <i>boolean</i>
Tree	rai
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type *boolean*

Synopsis	Include the RAT type
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp rat-type <i>boolean</i>
Tree	rat-type
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sgsn-mcc-mnc *boolean*

Synopsis	Include the 3GPP-SGSN-MCC-MNC AVP
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp sgsn-mcc-mnc <i>boolean</i>
Tree	sgsn-mcc-mnc
Description	When configured to true , this command enables the inclusion of the 3GPP-SGSN-MCC-MNC AVP, which contains the MCC and MNC as configured under configure subscriber-mgmt gtp serving-network .
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

supported-features *boolean*

Synopsis	Include the supported features
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp supported-features <i>boolean</i>
Tree	supported-features
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-equipment-info

Synopsis	Enable the user-equipment-info context
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp user-equipment-info
Tree	user-equipment-info
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Information to include in User-Equipment-Info attribute in CCR messages
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp user-equipment-info <i>type keyword</i>
Tree	type
Default	mac
Options	imeisv, mac, eui64, modified-eui64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-location-info *boolean*

Synopsis	Include the 3GPP-User-Location-Information AVP
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp user-location-info <i>boolean</i>
Tree	user-location-info

Description	When configured to true , this command enables the inclusion of the 3GPP-User-Location-Information AVP as signaled in the incoming GTP setup message.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx mac-format <i>string</i>
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

report-ip-address-event *boolean*

Synopsis	Enable CCR-u upon IP address allocation events for dual stack subscribers
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx report-ip-address-event <i>boolean</i>
Tree	report-ip-address-event
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-qos-mapping

Synopsis	Enter the three-gpp-qos-mapping context
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping
Tree	three-gpp-qos-mapping
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn-ambr-dl

Synopsis	Enter the apn-ambr-dl context
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-dl
Tree	apn-ambr-dl
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

aggregate-rate

Synopsis	Map to an aggregate rate
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-dl aggregate-rate
Tree	aggregate-rate
Notes	The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter *string*

Synopsis	Arbiter name to be overridden
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-dl arbiter <i>string</i>
Tree	arbiter
String Length	1 to 32
Notes	The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hs-sla-agg-rate

Synopsis	Map to an HS SLA aggregate rate
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-dl hs-sla-agg-rate
Tree	hs-sla-agg-rate

Notes	The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ignore-override

Synopsis	no override on apn-ambr-dl
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-dl ignore-override
Tree	ignore-override
Notes	The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Policer ID to be overridden
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-dl policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue *number*

Synopsis	Queue ID to be overridden
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-dl queue <i>number</i>
Tree	queue
Range	1 to 8
Notes	The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler .

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis Name of the scheduler to be overridden
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [three-gpp-qos-mapping](#) [apn-ambr-dl](#) **scheduler** *string*
Tree [scheduler](#)
String Length 1 to 32
Notes The following elements are part of a choice: **aggregate-rate**, **arbiter**, **hs-sla-agg-rate**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn-ambr-ul

Synopsis Enter the **apn-ambr-ul** context
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [three-gpp-qos-mapping](#) [apn-ambr-ul](#)
Tree [apn-ambr-ul](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter *string*

Synopsis Arbiter name to be overridden
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [three-gpp-qos-mapping](#) [apn-ambr-ul](#) **arbiter** *string*
Tree [arbiter](#)
String Length 1 to 32
Notes The following elements are part of a choice: **arbiter**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ignore-override

Synopsis	no override on apn-ambr-ul
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-ul ignore-override
Tree	ignore-override
Notes	The following elements are part of a choice: arbiter , ignore-override , policer , queue , or scheduler .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Policer ID to be overridden
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-ul policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: arbiter , ignore-override , policer , queue , or scheduler .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue *number*

Synopsis	Queue ID to be overridden
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-ul queue <i>number</i>
Tree	queue
Range	1 to 32
Notes	The following elements are part of a choice: arbiter , ignore-override , policer , queue , or scheduler .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Name of the scheduler to be overridden
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-ul scheduler <i>string</i>
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: arbiter , ignore-override , policer , queue , or scheduler .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

node

Synopsis	Enter the node context
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> node
Tree	node
Notes	The following elements are part of a choice: node or peer-policy .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-realm *string*

Synopsis	Destination-Realm AVP used by the Diameter peer policy
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> node destination-realm <i>string</i>
Tree	destination-realm
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

origin-host *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Origin-host that identifies the diameter-node that is to be used for transmission
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Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> node origin-host <i>reference</i>
Tree	origin-host
Reference	configure aaa diameter node <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-failure

Synopsis	Enter the on-failure context
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> on-failure
Tree	on-failure
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover *boolean*

Synopsis	Session peer failover
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> on-failure failover <i>boolean</i>
Tree	failover
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handling *keyword*

Synopsis	Session peer failure handling
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> on-failure handling <i>keyword</i>
Tree	handling
Default	terminate
Options	terminate, continue, retry-and-terminate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer-policy *reference*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Policy for the Diameter peers
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> peer-policy <i>reference</i>
Tree	peer-policy
Reference	configure aaa diameter peer-policy <i>string</i>
Notes	The following elements are part of a choice: node or peer-policy .
Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-timer *number*

Synopsis	Maximum wait time for a pending session request
Context	configure subscriber-mgmt diameter-gx-policy <i>string</i> tx-timer <i>number</i>
Tree	tx-timer
Range	10 to 1000
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter-gy-policy [*name*] *string*

Synopsis	Enter the diameter-gy-policy list instance
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i>
Tree	diameter-gy-policy
Max. Instances	32
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Diameter application policy name
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string*
Tree [diameter-gy-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gy

Synopsis Enter the **gy** context
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#)
Tree [gy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-subscription-id

Synopsis Enter the **avp-subscription-id** context
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [avp-subscription-id](#)
Tree [avp-subscription-id](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

origin keyword

Synopsis Origin for the Subscription-Id-Data AVP

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [avp-subscription-id](#) **origin** *keyword*

Tree [origin](#)

Default subscriber-id

Options subscriber-id, circuit-id, imsi, msisdn, imei, dual-stack-remote-id, mac, username, nas-port-id

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis Origin for the Subscription-Id-Type AVP

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [avp-subscription-id](#) **type** *keyword*

Tree [type](#)

Default private

Options e164, imsi, nai, private

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ccrt-replay

Synopsis Enable the **ccrt-replay** context

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) **ccrt-replay**

Tree [ccrt-replay](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval number

Synopsis Interval at which CCR-t messages are replayed

Context	configure subscriber-mgmt diameter-gy-policy <i>string gy ccrt-replay interval number</i>
Tree	interval
Description	This command specifies the interval at which CCR-t messages for Diameter Gy sessions that belong to the Diameter application policy are replayed, until a valid CCA-t response is received or until the configured maximum lifetime period expires. When unconfigured, this command is configured to the default value.
Range	60 to 86400
Default	3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lifetime *number*

Synopsis	Maximum time that CCR-t messages are replayed
Context	configure subscriber-mgmt diameter-gy-policy <i>string gy ccrt-replay max-lifetime number</i>
Tree	max-lifetime
Description	This command specifies the maximum period of time that CCR-t messages for Diameter Gy sessions that belong to the Diameter application policy are replayed.
Range	1 to 24
Default	24
Units	hours
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-realm-learning *boolean*

Synopsis	Learn the destination realm from the incoming messages
Context	configure subscriber-mgmt diameter-gy-policy <i>string gy destination-realm-learning boolean</i>
Tree	destination-realm-learning
Description	When configured to true , destination realm learning is enabled on the application level. The destination realm is a mandatory configuration parameter used in outgoing Credit Control Request messages (CCR). The configured destination realm is always used in the initial request (CCR-I) message. The consecutive request message of a Gy session can use the destination realm learned from the replies. When configured to false , destination realm learning is disabled and the configured destination realm is used in outgoing request messages.

Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

extended-failure-handling

Synopsis	Enter the extended-failure-handling context
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling
Tree	extended-failure-handling
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Extended Failure Handling
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-credit

Synopsis	Enter the interim-credit context
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling interim-credit
Tree	interim-credit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-attempts (*number* | *keyword*)

Synopsis	Attempts to retry setting up a session to the OCS
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Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling interim-credit max-attempts (<i>number</i> <i>keyword</i>)
Tree	max-attempts
Range	1 to 4294967295
Default	10
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reporting *boolean*

Synopsis	Report interim Credit
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling interim-credit reporting <i>boolean</i>
Tree	reporting
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

validity-time (*number* | *keyword*)

Synopsis	Validity time for interim credit
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling interim-credit validity-time (<i>number</i> <i>keyword</i>)
Tree	validity-time
Range	1 to 4294967295
Default	1800
Units	seconds
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

volume

Synopsis	Enter the volume context
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Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling interim-credit volume
Tree	volume
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credits *number*

Synopsis	Default volume credit value
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling interim-credit volume credits <i>number</i>
Tree	credits
Range	1 to 4294967295
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

units *keyword*

Synopsis	Default volume credit units
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling interim-credit volume units <i>keyword</i>
Tree	units
Default	megabytes
Options	bytes, kilobytes, megabytes, gigabytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

new-session-id *boolean*

Synopsis	Enable use of a new session ID for CCR-i messages
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling new-session-id <i>boolean</i>
Tree	new-session-id
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-avp

Synopsis Enter the **include-avp** context
Context **configure subscriber-mgmt diameter-gy-policy string gy include-avp**
Tree [include-avp](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

aaa-user-name *boolean*

Synopsis Include RADIUS user name AVP in Diameter Gy messages
Context **configure subscriber-mgmt diameter-gy-policy string gy include-avp aaa-user-name boolean**
Tree [aaa-user-name](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-avp *boolean*

Synopsis DCCA AVPs that contain the host address or prefix
Context **configure subscriber-mgmt diameter-gy-policy string gy include-avp address-avp boolean**
Tree [address-avp](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

called-station-id

Synopsis Enable the **called-station-id** context
Context **configure subscriber-mgmt diameter-gy-policy string gy include-avp called-station-id**
Tree [called-station-id](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

id string

Synopsis Called station ID

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [called-station-id](#) [id](#) *string*

Tree [id](#)

String Length 1 to 64

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

charging-rule-base-name

Synopsis Enter the **charging-rule-base-name** context

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [charging-rule-base-name](#)

Tree [charging-rule-base-name](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

category-map

Synopsis Use the category map name in use for this session

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [charging-rule-base-name](#) [category-map](#)

Tree [category-map](#)

Notes The following elements are part of a choice: **category-map**, **not-included**, or **user-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

not-included

Synopsis Do not include Charging-Rule-Base-Name AVP in Diameter DCCA CCR messages

Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp charging-rule-base-name not-included
Tree	not-included
Notes	The following elements are part of a choice: category-map , not-included , or user-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-string *string*

Synopsis	String for charging rule base name
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp charging-rule-base-name user-string <i>string</i>
Tree	user-string
String Length	1 to 64
Notes	The following elements are part of a choice: category-map , not-included , or user-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ggsn-address

Synopsis	Enable the ggsn-address context
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp ggsn-address
Tree	ggsn-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Address type of GGSN address AVP
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp ggsn-address type <i>keyword</i>
Tree	type
Options	ipv4, ipv6
Notes	This element is mandatory.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pdp-context-type *boolean*

Synopsis Include the DCCA PDP-Context-Type AVP Parameter
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [pdp-context-type](#) *boolean*
Tree [pdp-context-type](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ps-information *boolean*

Synopsis Enable reporting of AVPs in grouped PS-Information AVP
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [ps-information](#) *boolean*
Tree [ps-information](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-context-id

Synopsis Enable the **service-context-id** context
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [service-context-id](#)
Tree [service-context-id](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

id *string*

Synopsis Name for the service context ID AVP
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [service-context-id](#) *id* *string*

Tree	id
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-charging-characteristics *boolean*

Synopsis	DCCA 3GPP charging characteristics AVP parameter
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-charging-characteristics <i>boolean</i>
Tree	three-gpp-charging-characteristics
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-charging-id *keyword*

Synopsis	DCCA 3GPP charging ID AVP parameter
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-charging-id <i>keyword</i>
Tree	three-gpp-charging-id
Default	auto
Options	false, auto, esm-info, id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-ggsn-ipv4-address *boolean*

Synopsis	Include the 3GPP-GGSN Address in Diameter Gy messages
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-ggsn-ipv4-address <i>boolean</i>
Tree	three-gpp-ggsn-ipv4-address
Description	When configured to true , this command includes the 3GPP GGSN Address AVP in the Diameter Gy messages. The value is set to the source IPv4 address that is used for outgoing diameter messages.

Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-ggsn-ipv6-address *boolean*

Synopsis	Include the 3GPP-GGSN-Ipv6 address
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-ggsn-ipv6-address <i>boolean</i>
Tree	three-gpp-ggsn-ipv6-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-gprs-negotiated-qos-profile *boolean*

Synopsis	Include the DCCA 3GPP GPRS-negotiated QoS profile AVP parameter
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-gprs-negotiated-qos-profile <i>boolean</i>
Tree	three-gpp-gprs-negotiated-qos-profile
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-imsi *keyword*

Synopsis	Origin of the information to send in the IMSI AVP
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-imsi <i>keyword</i>
Tree	three-gpp-imsi
Default	subscriber-id
Options	false, subscriber-id, circuit-id, imsi
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-nsapi *boolean*

Synopsis	Include the 3GPP-NSAPI
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-nsapi <i>boolean</i>
Tree	three-gpp-nsapi
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-rat-type

Synopsis	Enable the three-gpp-rat-type context
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-rat-type
Tree	three-gpp-rat-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Value for 3GPP-RAT-Type AVP
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-rat-type <i>type</i> <i>number</i>
Tree	type
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-selection-mode *boolean*

Synopsis	DCCA 3GPP selection mode AVP parameter
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-selection-mode <i>boolean</i>
Tree	three-gpp-selection-mode
Default	true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-session-stop-indicator *boolean*

Synopsis DCCA 3GPP session stop indicator AVP parameter
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [three-gpp-session-stop-indicator](#) *boolean*
Tree [three-gpp-session-stop-indicator](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-user-location-info *boolean*

Synopsis DCCA 3GPP session stop indicator AVP parameter
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [three-gpp-user-location-info](#) *boolean*
Tree [three-gpp-user-location-info](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-equipment-info-type

Synopsis Enable the **user-equipment-info-type** context
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [user-equipment-info-type](#)
Tree [user-equipment-info-type](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Information to include in User-Equipment-Info attribute in CCR messages
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [user-equipment-info-type](#) *type* *keyword*
Tree [type](#)

Options	imeisv
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy mac-format <i>string</i>
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-of-credit-reporting *keyword*

Synopsis	Reporting reason when the final granted units are consumed
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy out-of-credit-reporting <i>keyword</i>
Tree	out-of-credit-reporting
Default	final
Options	final, quota-exhausted
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-support *keyword*

Synopsis	Vendor support type announced in capability exchange
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> gy vendor-support <i>keyword</i>
Tree	vendor-support
Default	three-gpp
Options	vodafone, three-gpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

node

Synopsis	Enter the node context
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> node
Tree	node
Notes	The following elements are part of a choice: node or peer-policy .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-realm *string*

Synopsis	Destination-Realm AVP used by the Diameter peer policy
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> node destination-realm <i>string</i>
Tree	destination-realm
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

origin-host *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Origin-host that identifies the diameter-node that is to be used for transmission
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> node origin-host <i>reference</i>
Tree	origin-host
Reference	configure aaa diameter node <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-failure

Synopsis	Enter the on-failure context
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> on-failure
Tree	on-failure

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover *boolean*

Synopsis Session peer failover
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [on-failure](#) [failover](#) *boolean*
Tree [failover](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handling *keyword*

Synopsis Session peer failure handling
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [on-failure](#) [handling](#) *keyword*
Tree [handling](#)
Default terminate
Options terminate, continue, retry-and-terminate
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer-policy *reference*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Policy for the Diameter peers
Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [peer-policy](#) *reference*
Tree [peer-policy](#)
Reference **configure** [aaa](#) [diameter](#) [peer-policy](#) *string*
Notes The following elements are part of a choice: **node** or **peer-policy**.

Introduced	16.0.R4
Deprecated	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-timer *number*

Synopsis	Maximum wait time for a pending session request
Context	configure subscriber-mgmt diameter-gy-policy <i>string</i> tx-timer <i>number</i>
Tree	tx-timer
Range	10 to 1000
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter-nasreq-policy [[name](#)] *string*

Synopsis	Enter the diameter-nasreq-policy list instance
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i>
Tree	diameter-nasreq-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Diameter application policy name
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i>
Tree	diameter-nasreq-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq

Synopsis	Enter the nasreq context
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq
Tree	nasreq
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-avp

Synopsis	Enter the include-avp context
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp
Tree	include-avp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the called station ID AVP
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp called-station-id <i>boolean</i>
Tree	called-station-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-station-id

Synopsis	Enable the calling-station-id context
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp calling-station-id
Tree	calling-station-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Format of the Calling-Station-ID AVP
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp calling-station-id <i>type</i> <i>keyword</i>
Tree	type
Default	sap-string
Options	sap-string, mac, sap-id, remote-id, llid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Include the Agent-Circuit-ID AVP
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp circuit-id <i>boolean</i>
Tree	circuit-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

imei *boolean*

Synopsis	Include the IMEI
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp imei <i>boolean</i>
Tree	imei
Default	false

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port

Synopsis Enable the **nas-port** context
Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [include-avp](#) [nas-port](#)
Tree [nas-port](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis NAS-Port AVP format
Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [include-avp](#) [nas-port](#)
[bit-spec](#) *string*
Tree [bit-spec](#)
String Length 1 to 255
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis Enable the **nas-port-id** context
Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [include-avp](#) [nas-port-id](#)
Tree [nas-port-id](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis Prefix string for NAS-Port-Id AVP
Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [include-avp](#) [nas-port-id](#)
[prefix-string](#) *string*

Tree	prefix-string
String Length	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix

Synopsis	Enter the suffix context
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id suffix
Tree	suffix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Add Circuit ID as suffix
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id suffix circuit-id
Tree	circuit-id
Notes	The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

not-included

Synopsis	Do not add a suffix
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id suffix not-included
Tree	not-included
Notes	The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Add Remote ID as suffix
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id suffix remote-id
Tree	remote-id
Notes	The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-string *string*

Synopsis	Add a user configurable string as suffix
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id suffix user-string <i>string</i>
Tree	user-string
String Length	1 to 64
Notes	The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis	Enable the nas-port-type context
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-type
Tree	nas-port-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type (*keyword* | *number*)

Synopsis	NAS-Port-Type AVP value
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-type <i>type</i> (<i>keyword</i> <i>number</i>)
Tree	type

Range	0 to 255
Default	rfc-aligned
Options	rfc-aligned
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rat-type *boolean*

Synopsis	Include the Radio Access Technology (RAT) type AVP
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp rat-type <i>boolean</i>
Tree	rat-type
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Include the agent remote ID AVP
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp remote-id <i>boolean</i>
Tree	remote-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-location-info *boolean*

Synopsis	Include the 3GPP-User-Location-Information AVP
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp user-location-info <i>boolean</i>
Tree	user-location-info
Description	When configured to true , this command enables the inclusion of the 3GPP-User-Location-Information AVP as signaled in the incoming GTP setup message.
Default	false
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis MAC address format

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [mac-format](#) *string*

Tree [mac-format](#)

String Length 2 to 7

Default aa:

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis AA-request password

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [password](#) *string*

Tree [password](#)

String Length 1 to 115

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis Enter the **user-name** context

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [user-name](#)

Tree [user-name](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-name *string*

Synopsis Domain name

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [user-name](#) [domain-name](#) *string*

Tree [domain-name](#)

String Length 1 to 128

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

format *keyword*

Synopsis Format type for username
Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [user-name](#) **format** *keyword*
Tree [format](#)
Default mac
Options mac, circuit-id, tuple, ascii-converted-circuit-id, ascii-converted-tuple, dhcp-client-vendor-opts, mac-giaddr, nas-port-id
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

operation *keyword*

Synopsis Operation to perform
Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [user-name](#) **operation** *keyword*
Tree [operation](#)
Options append, strip, replace, default
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

node

Synopsis Enter the **node** context
Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* **node**
Tree [node](#)
Notes The following elements are part of a choice: **node** or **peer-policy**.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-realm *string*

Synopsis	Destination-Realm AVP used by the Diameter peer policy
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> node destination-realm <i>string</i>
Tree	destination-realm
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

origin-host *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Origin-host that identifies the diameter-node that is to be used for transmission
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> node origin-host <i>reference</i>
Tree	origin-host
Reference	configure aaa diameter node <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-failure

Synopsis	Enter the on-failure context
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> on-failure
Tree	on-failure
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover *boolean*

Synopsis	Session peer failover
Context	configure subscriber-mgmt diameter-nasreq-policy <i>string</i> on-failure failover <i>boolean</i>
Tree	failover
Default	true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handling *keyword*

Synopsis Session peer failure handling
Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [on-failure](#) [handling](#) *keyword*
Tree [handling](#)
Default terminate
Options terminate, continue, retry-and-terminate
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer-policy *reference*



WARNING:

This element is deprecated and will be removed in a future release.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Policy for the Diameter peers
Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [peer-policy](#) *reference*
Tree [peer-policy](#)
Reference **configure** [aaa](#) [diameter](#) [peer-policy](#) *string*
Notes The following elements are part of a choice: **node** or **peer-policy**.
Introduced 16.0.R4
Deprecated 20.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-timer *number*

Synopsis Maximum wait time for a pending session request
Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [tx-timer](#) *number*
Tree [tx-timer](#)
Range 10 to 1000

Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

explicit-subscriber-map

Synopsis	Enter the explicit-subscriber-map context
Context	configure subscriber-mgmt explicit-subscriber-map
Tree	explicit-subscriber-map
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [[subscriber-id](#)] *string*

Synopsis	Enter the entry list instance
Context	configure subscriber-mgmt explicit-subscriber-map entry <i>string</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[subscriber-id] *string*

Synopsis	Subscriber Identification string
Context	configure subscriber-mgmt explicit-subscriber-map entry <i>string</i>
Tree	entry
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

alias *string*

Synopsis	Alias for subscriber identification string
Context	configure subscriber-mgmt explicit-subscriber-map entry <i>string</i> alias <i>string</i>

Tree	alias
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure subscriber-mgmt explicit-subscriber-map entry <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	configure subscriber-mgmt explicit-subscriber-map entry <i>string</i> sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber profile name
Context	configure subscriber-mgmt explicit-subscriber-map entry <i>string</i> sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-statistics

Synopsis	Enter the group-interface-statistics context
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Context	configure subscriber-mgmt group-interface-statistics
Tree	group-interface-statistics
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state for statistics collection
Context	configure subscriber-mgmt group-interface-statistics admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-template [[name](#)] *string*

Synopsis	Enter the group-interface-template list instance
Context	configure subscriber-mgmt group-interface-template <i>string</i>
Tree	group-interface-template
Description	Commands in this context configure a template for automatically-generated group interfaces that is used when creating CUPS sessions. A template with the name "default" is used when no other instance is created, however, the "default" template must be explicitly provisioned.
Max. Instances	256
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Identifies this group interface template template
Context	configure subscriber-mgmt group-interface-template <i>string</i>
Tree	group-interface-template
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis IP MTU applied to outgoing packets
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ip-mtu](#) *number*
Tree [ip-mtu](#)
Range 512 to 9786
Units bytes
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ipv4](#)
Tree [ipv4](#)
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis Enter the **icmp** context
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ipv4](#) [icmp](#)
Tree [icmp](#)

Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask-reply *boolean*

Synopsis Allow responses to ICMP mask requests on the interface
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ipv4 icmp mask-reply](#) *boolean*
Tree [mask-reply](#)
Default true
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

param-problem

Synopsis Enter the **param-problem** context
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ipv4 icmp param-problem](#)
Tree [param-problem](#)
Description Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of sent Parameter Problem messages
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ipv4 icmp param-problem](#) [admin-state](#) *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp param-problem number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redirects

Synopsis	Enter the redirects context
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp redirects
Tree	redirects
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp redirects admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp redirects number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp redirects seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-expired

Synopsis	Enter the ttl-expired context
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Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp ttl-expired admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp ttl-expired number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp ttl-expired seconds <i>number</i>
Tree	seconds
Range	1 to 60

Default	10
Units	seconds
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unreachables

Synopsis	Enter the unreachables context
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp unreachables admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp unreachables number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp unreachables seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i>
Tree	proxy-arp-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
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Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i>
Tree	remote-proxy-arp
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

urpf-check

Synopsis	Enable the urpf-check context
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 urpf-check
Tree	urpf-check
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv4 urpf-check mode <i>keyword</i>
Tree	mode
Default	strict
Options	strict, loose, strict-no-ecmp
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv6
Tree	ipv6
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

urpf-check

Synopsis	Enable the urpf-check context
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv6 urpf-check
Tree	urpf-check
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure subscriber-mgmt group-interface-template <i>string</i> ipv6 urpf-check mode <i>keyword</i>
Tree	mode
Default	strict
Options	strict, loose, strict-no-ecmp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp

Synopsis	Enter the gtp context
Context	configure subscriber-mgmt gtp
Tree	gtp
Description	This command enables the context to configure box-wide GTP parameters and profiles.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn-policy [*name*] *string*

Synopsis	Enter the apn-policy list instance
Context	configure subscriber-mgmt gtp apn-policy <i>string</i>
Tree	apn-policy
Max. Instances	128
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis APN policy name for a new incoming GTP connection

Context **configure** [subscriber-mgmt](#) [gtp](#) [apn-policy](#) *string*

Tree [apn-policy](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn [[apn-name](#)] *string*

Synopsis Enter the **apn** list instance

Context **configure** [subscriber-mgmt](#) [gtp](#) [apn-policy](#) *string* **apn** *string*

Tree [apn](#)

Max. 1024

Instances

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[apn-name] *string*

Synopsis GTP APN name

Context **configure** [subscriber-mgmt](#) [gtp](#) [apn-policy](#) *string* **apn** *string*

Tree [apn](#)

String Length 1 to 80

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ambr-qos-mapping

Synopsis Enter the **ambr-qos-mapping** context

Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping
Tree	ambr-qos-mapping
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

downlink

Synopsis	Enable the downlink context
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping downlink
Tree	downlink
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

aggregate-rate

Synopsis	Map the downlink APN-AMBR rate to an Aggregate Rate override
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping downlink aggregate-rate
Tree	aggregate-rate
Notes	The following elements are part of a mandatory choice: aggregate-rate , arbiter , policer , queue , or scheduler .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter *string*

Synopsis	Map the downlink APN-AMBR rate to an override for the specified arbiter
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping downlink arbiter <i>string</i>
Tree	arbiter
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: aggregate-rate , arbiter , policer , queue , or scheduler .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer number

Synopsis	Map the downlink APN-AMBR rate to a policer PIR override
Context	configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping downlink policer number
Tree	policer
Range	1 to 63
Notes	The following elements are part of a mandatory choice: aggregate-rate , arbiter , policer , queue , or scheduler .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue number

Synopsis	Map the downlink APN-AMBR rate to a queue PIR override
Context	configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping downlink queue number
Tree	queue
Range	1 to 8
Notes	The following elements are part of a mandatory choice: aggregate-rate , arbiter , policer , queue , or scheduler .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler string

Synopsis	Map the downlink APN-AMBR rate to a scheduler rate override
Context	configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping downlink scheduler string
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: aggregate-rate , arbiter , policer , queue , or scheduler .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uplink

Synopsis	Enable the uplink context
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping uplink
Tree	uplink
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter *string*

Synopsis	Map the uplink APN-AMBR rate to an override for the specified arbiter
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping uplink arbiter <i>string</i>
Tree	arbiter
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: arbiter , policer , queue , or scheduler .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Map the uplink APN-AMBR rate to a policer PIR override
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping uplink policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	The following elements are part of a mandatory choice: arbiter , policer , queue , or scheduler .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue *number*

Synopsis	Map the uplink APN-AMBR rate to a queue PIR override
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping uplink queue <i>number</i>

Tree	queue
Range	1 to 32
Notes	The following elements are part of a mandatory choice: arbiter , policer , queue , or scheduler .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Map the uplink APN-AMBR rate to a scheduler rate override
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping uplink scheduler <i>string</i>
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: arbiter , policer , queue , or scheduler .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the defaults context
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

group-interface

Synopsis	Enable the group-interface context
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> defaults group-interface
Tree	group-interface
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Group interface name
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> defaults group-interface name <i>string</i>
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

svc-name *string*

Synopsis	Service name where the group interface resides
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> defaults group-interface svc-name <i>string</i>
Tree	svc-name
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

diameter-nasreq-policy *reference*

Synopsis	NASREQ authentication policy name
Context	configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> diameter-nasreq-policy <i>reference</i>
Tree	diameter-nasreq-policy
Reference	configure subscriber-mgmt diameter-nasreq-policy <i>string</i>
Notes	The following elements are part of a choice: diameter-nasreq-policy , radius-auth-policy , or user-db .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *reference*

Synopsis	RADIUS authentication policy name
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Context	configure subscriber-mgmt gtp apn-policy <i>string apn string radius-auth-policy reference</i>
Tree	radius-auth-policy
Reference	configure subscriber-mgmt radius-authentication-policy <i>string</i>
Notes	The following elements are part of a choice: diameter-nasreq-policy , radius-auth-policy , or user-db .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

skip-gtp-ipv4-allocation *boolean*

Synopsis	defer IPv4 address allocation to DHCP
Context	configure subscriber-mgmt gtp apn-policy <i>string apn string skip-gtp-ipv4-allocation boolean</i>
Tree	skip-gtp-ipv4-allocation
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database name
Context	configure subscriber-mgmt gtp apn-policy <i>string apn string user-db reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Notes	The following elements are part of a choice: diameter-nasreq-policy , radius-auth-policy , or user-db .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-held-uplink-sessions *number*

Synopsis	Maximum GTP sessions to be held while there is no corresponding ESM state
Context	configure subscriber-mgmt gtp max-held-uplink-sessions <i>number</i>
Tree	max-held-uplink-sessions
Range	0 to 500000

Default	2000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *[name] string*

Synopsis	Enter the peer-profile list instance
Context	configure subscriber-mgmt gtp peer-profile <i>string</i>
Tree	peer-profile
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Peer profile name
Context	configure subscriber-mgmt gtp peer-profile <i>string</i>
Tree	peer-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt gtp peer-profile <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface-type *keyword*

Synopsis	3GPP interface type for connections toward this peer
Context	configure subscriber-mgmt gtp peer-profile <i>string interface-type keyword</i>

Tree	interface-type
Options	gn, s2a, s2b, s11
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-ttl *number*

Synopsis	IP header TTL value for GTP control messages
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> ip-ttl <i>number</i>
Tree	ip-ttl
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

keep-alive

Synopsis	Enter the keep-alive context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> keep-alive
Tree	keep-alive
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of GTP-C echo request messages
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> keep-alive admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Frequency for sending keepalives
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> keep-alive interval <i>number</i>
Tree	interval
Range	60 to 180
Default	60
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Maximum number of unanswered echo retries after which keepalive failure is detected
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> keep-alive retry-count <i>number</i>
Tree	retry-count
Range	1 to 15
Default	4
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout after which an echo request is considered unanswered
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> keep-alive timeout <i>number</i>
Tree	timeout
Range	1 to 20
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-retransmit

Synopsis	Enter the message-retransmit context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> message-retransmit

Tree	message-retransmit
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Maximum number of unanswered retries after which the message is considered failed
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> message-retransmit retry-count <i>number</i>
Tree	retry-count
Range	1 to 8
Default	3
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout after which a message is considered unanswered
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> message-retransmit timeout <i>number</i>
Tree	timeout
Range	1 to 30
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy for MGW profile packets sent or received
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

s11

Synopsis	Enter the s11 context
Context	configure subscriber-mgmt gtp peer-profile <i>string s11</i>
Tree	s11
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

change-reporting-action (*number* | *keyword*)

Synopsis	Value of change reporting action IE sends to the peer
Context	configure subscriber-mgmt gtp peer-profile <i>string s11 change-reporting-action</i> (<i>number</i> <i>keyword</i>)
Tree	change-reporting-action
Description	<p>This command specifies the value of the change reporting action IE sends to the peer in applicable messages. The peer needs to indicate support first using the appropriate flag in the indication IE.</p> <p>This can be overridden by AAA, if AAA explicitly request notification changes for either ECGI, TAI or both. If AAA does not request any notification changes or only the generic location changes, the configured value is used.</p> <p>When unconfigured, this command indicates that the IE is not sent, unless specified by AAA.</p>
Range	0 to 255
Options	cgi-sai, rai, tai, ecgi, cgi-sai-rai, tai-ecgi
Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-marker-count *number*

Synopsis	Number of GTP-U end marker packets that are sent
Context	configure subscriber-mgmt gtp peer-profile <i>string s11 end-marker-count</i> <i>number</i>
Tree	end-marker-count
Description	This command specifies the number of end marker packets that are sent when it is certain no more packets will be sent over the corresponding GTP-U tunnel, such as after a completed mobility event.
Range	0 to 5
Default	1
Introduced	16.0.R5

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-mtu *number*

Synopsis IPv4 MTU signaled in the Protocol Configuration Options (PCO)
Context **configure** [subscriber-mgmt gtp peer-profile](#) *string s11* **ipv4-mtu** *number*
Tree [ipv4-mtu](#)
Range 512 to 9000
Default 1400
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
Context **configure** [subscriber-mgmt gtp peer-profile](#) *string s11* **qos**
Tree [qos](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ambr

Synopsis Enter the **ambr** context
Context **configure** [subscriber-mgmt gtp peer-profile](#) *string s11* **qos ambr**
Tree [ambr](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link *number*

Synopsis Downlink Aggregated Maximum Bit Rate (AMBR)
Context **configure** [subscriber-mgmt gtp peer-profile](#) *string s11* **qos ambr down-link** *number*
Tree [down-link](#)
Range 0 to 10000000
Default 20000

Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-link number

Synopsis	Uplink Aggregated Maximum Bit Rate (AMBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string s11 qos ambr up-link number</i>
Tree	up-link
Range	0 to 10000000
Default	10000
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp number

Synopsis	Allocation or retention priority
Context	configure subscriber-mgmt gtp peer-profile <i>string s11 qos arp number</i>
Tree	arp
Range	1 to 15
Default	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link

Synopsis	Enter the down-link context
Context	configure subscriber-mgmt gtp peer-profile <i>string s11 qos down-link</i>
Tree	down-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gbr number

Synopsis	Guaranteed Bit Rate (GBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string s11 qos down-link gbr number</i>
Tree	gbr
Range	0 to 100000
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbr number

Synopsis	Maximum Bit Rate (MBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string s11 qos down-link mbr number</i>
Tree	mbr
Range	0 to 100000
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qci number

Synopsis	QoS Class Identifier (QCI) value that is used in GTP messages
Context	configure subscriber-mgmt gtp peer-profile <i>string s11 qos qci number</i>
Tree	qci
Range	1 to 9
Default	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-link

Synopsis	Enter the up-link context
Context	configure subscriber-mgmt gtp peer-profile <i>string s11 qos up-link</i>

Tree	up-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gbr number

Synopsis	Guaranteed Bit Rate (GBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> s11 qos up-link gbr <i>number</i>
Tree	gbr
Range	0 to 100000
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbr number

Synopsis	Maximum Bit Rate (MBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> s11 qos up-link mbr <i>number</i>
Tree	mbr
Range	0 to 100000
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uplink

Synopsis	Enter the uplink context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink
Tree	uplink
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-characteristics

Synopsis	Enter the charging-characteristics context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics
Tree	charging-characteristics
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

home

Synopsis	Enter the home context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home
Tree	home
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit0 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit0 <i>boolean</i>
Tree	bit0
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit1 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit1 <i>boolean</i>
Tree	bit1
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit10 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit10 <i>boolean</i>
Tree	bit10
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit11 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit11 <i>boolean</i>
Tree	bit11
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit12 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit12 <i>boolean</i>
Tree	bit12
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit13 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit13 <i>boolean</i>
Tree	bit13
Default	false

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit14 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)
[bit14](#) *boolean*
Tree [bit14](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit15 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)
[bit15](#) *boolean*
Tree [bit15](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit2 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)
[bit2](#) *boolean*
Tree [bit2](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit3 *boolean*

Synopsis Set bit in charging characteristics information element

Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit3 <i>boolean</i>
Tree	bit3
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit4 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit4 <i>boolean</i>
Tree	bit4
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit5 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit5 <i>boolean</i>
Tree	bit5
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit6 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit6 <i>boolean</i>
Tree	bit6
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit7 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit7 <i>boolean</i>
Tree	bit7
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit8 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit8 <i>boolean</i>
Tree	bit8
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit9 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit9 <i>boolean</i>
Tree	bit9
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

roaming

Synopsis	Enter the roaming context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming
Tree	roaming

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit0 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [roaming](#) **bit0** *boolean*
Tree [bit0](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit1 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [roaming](#) **bit1** *boolean*
Tree [bit1](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit10 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [roaming](#) **bit10** *boolean*
Tree [bit10](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit11 *boolean*

Synopsis Set bit in charging characteristics information element

Context **configure subscriber-mgmt gtp peer-profile** *string* **uplink charging-characteristics roaming bit11** *boolean*

Tree **bit11**

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit12 *boolean*

Synopsis Set bit in charging characteristics information element

Context **configure subscriber-mgmt gtp peer-profile** *string* **uplink charging-characteristics roaming bit12** *boolean*

Tree **bit12**

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit13 *boolean*

Synopsis Set bit in charging characteristics information element

Context **configure subscriber-mgmt gtp peer-profile** *string* **uplink charging-characteristics roaming bit13** *boolean*

Tree **bit13**

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit14 *boolean*

Synopsis Set bit in charging characteristics information element

Context **configure subscriber-mgmt gtp peer-profile** *string* **uplink charging-characteristics roaming bit14** *boolean*

Tree **bit14**

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit15 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit15 <i>boolean</i>
Tree	bit15
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit2 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit2 <i>boolean</i>
Tree	bit2
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit3 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit3 <i>boolean</i>
Tree	bit3
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit4 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit4 <i>boolean</i>
Tree	bit4

Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit5 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit5 <i>boolean</i>
Tree	bit5
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit6 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit6 <i>boolean</i>
Tree	bit6
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit7 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit7 <i>boolean</i>
Tree	bit7
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit8 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit8 <i>boolean</i>
Tree	bit8
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit9 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit9 <i>boolean</i>
Tree	bit9
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ggsn

Synopsis	Enter the ggsn context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn
Tree	ggsn
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos
Tree	qos
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ambr

Synopsis	Enable the ambr context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos ambr
Tree	ambr
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link *number*

Synopsis	Downlink Aggregated Maximum Bit Rate (AMBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos ambr down-link <i>number</i>
Tree	down-link
Range	0 to 10000000
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-link *number*

Synopsis	Uplink Aggregated Maximum Bit Rate (AMBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos ambr up-link <i>number</i>
Tree	up-link
Range	0 to 10000000
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp *number*

Synopsis	Allocation or retention priority
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos arp <i>number</i>
Tree	arp

Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link

Synopsis	Enter the down-link context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos down-link
Tree	down-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gbr number

Synopsis	Guaranteed Bit Rate (GBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos down-link gbr <i>number</i>
Tree	gbr
Range	0 to 100000
Default	2000
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbr number

Synopsis	Maximum Bit Rate (MBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos down-link mbr <i>number</i>
Tree	mbr
Range	0 to 100000
Default	2000
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-link

Synopsis	Enter the up-link context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos up-link
Tree	up-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gbr number

Synopsis	Guaranteed Bit Rate (GBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos up-link gbr <i>number</i>
Tree	gbr
Range	0 to 100000
Default	5000
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbr number

Synopsis	Maximum Bit Rate (MBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos up-link mbr <i>number</i>
Tree	mbr
Range	0 to 100000
Default	5000
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pgw

Synopsis	Enter the pgw context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw
Tree	pgw

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [pgw](#) [qos](#)
Tree [qos](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ambr

Synopsis Enter the **ambr** context
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [pgw](#) [qos](#) [ambr](#)
Tree [ambr](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link *number*

Synopsis Downlink Aggregated Maximum Bit Rate (AMBR)
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [pgw](#) [qos](#) [ambr](#) [down-link](#) *number*
Tree [down-link](#)
Range 0 to 10000000
Default 20000
Units kilobps
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-link *number*

Synopsis Uplink Aggregated Maximum Bit Rate (AMBR)
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [pgw](#) [qos](#) [ambr](#) [up-link](#) *number*
Tree [up-link](#)

Range	0 to 10000000
Default	10000
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp number

Synopsis	Allocation or retention priority
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos arp <i>number</i>
Tree	arp
Range	1 to 15
Default	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link

Synopsis	Enter the down-link context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos down-link
Tree	down-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gbr number

Synopsis	Guaranteed Bit Rate (GBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos down-link gbr <i>number</i>
Tree	gbr
Range	0 to 100000
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbr number

Synopsis	Maximum Bit Rate (MBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos down-link <i>mbr number</i>
Tree	mbr
Range	0 to 100000
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qci number

Synopsis	QoS Class Identifier (QCI) value that is used in GTP messages
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos <i>qci number</i>
Tree	qci
Range	1 to 9
Default	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-link

Synopsis	Enter the up-link context
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos <i>up-link</i>
Tree	up-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gbr number

Synopsis	Guaranteed Bit Rate (GBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos up-link <i>gbr number</i>
Tree	gbr
Range	0 to 100000

Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbr number

Synopsis	Maximum Bit Rate (MBR)
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos up-link mbr <i>number</i>
Tree	mbr
Range	0 to 100000
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol-configuration-options keyword

Synopsis	Information element to use for the protocol configuration options
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink protocol-configuration-options <i>keyword</i>
Tree	protocol-configuration-options
Default	pco
Options	pco, apco
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type (number | keyword)

Synopsis	Default Radio Access Type (RAT) signaled in GTP setup
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink rat-type (<i>number</i> <i>keyword</i>)
Tree	rat-type
Description	This command configures the default Radio Access Technology (RAT) type signaled during GTP setup. RAT identifies the underlying physical connection method for a radio-based communication network. This can be overridden by RADIUS.
Range	0 to 255

Default	wlan
Options	utran, geran, wlan, gan, hspa, eutran, virtual
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

report-wlan-location *boolean*

Synopsis	Report WLAN or cellular location of UE during setup
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink report-wlan-location <i>boolean</i>
Tree	report-wlan-location
Description	When configured to true , this command enables reporting of the WLAN location or cellular location of the UE in the signaling interface (S2a or Gn) between the WLAN GW and the mobile gateway (PGW or GGSN). When configured to false , this command disables location reporting.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-hold-time (*number* | *keyword*)

Synopsis	Time to hold a GTP session after its UE is disconnected
Context	configure subscriber-mgmt gtp peer-profile <i>string</i> uplink session-hold-time (<i>number</i> <i>keyword</i>)
Tree	session-hold-time
Range	0 to 3600
Default	30
Units	seconds
Options	remaining-lease-time
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

serving-network

Synopsis	Enable the serving-network context
Context	configure subscriber-mgmt gtp serving-network
Tree	serving-network

Description	Commands in this context configure the 3GPP serving network that the node is part of.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mcc string

Synopsis	Mobile Country Code (MCC) portion of serving network
Context	configure subscriber-mgmt gtp serving-network mcc string
Tree	mcc
String Length	3
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mnc string

Synopsis	Mobile Network Code (MNC) portion of serving network
Context	configure subscriber-mgmt gtp serving-network mnc string
Tree	mnc
String Length	2 to 3
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy [name] string

Synopsis	Enter the host-lockout-policy list instance
Context	configure subscriber-mgmt host-lockout-policy string
Tree	host-lockout-policy
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Host lockout policy name to associate with the SAP
Context	configure subscriber-mgmt host-lockout-policy <i>string</i>
Tree	host-lockout-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt host-lockout-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-key *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Parameters used in host identification for lockout on specified SAP or capture SAP
Context	configure subscriber-mgmt host-lockout-policy <i>string</i> host-key <i>keyword</i>
Tree	host-key
Default	all
Options	all, mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lockout-reset-time *number*

Synopsis	Lockout reset time settings
Context	configure subscriber-mgmt host-lockout-policy <i>string</i> lockout-reset-time <i>number</i>

Tree	lockout-reset-time
Range	1 to 86400
Default	60
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lockout-time

Synopsis	Enter the lockout-time context
Context	configure subscriber-mgmt host-lockout-policy <i>string</i> lockout-time
Tree	lockout-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis	Maximum lockout time
Context	configure subscriber-mgmt host-lockout-policy <i>string</i> lockout-time <i>max number</i>
Tree	max
Range	1 to 86400
Default	3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min number

Synopsis	Minimum lockout time
Context	configure subscriber-mgmt host-lockout-policy <i>string</i> lockout-time <i>min number</i>
Tree	min
Range	1 to 86400
Default	10
Units	seconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lockout-hosts *number*

Synopsis Max lockout hosts
Context **configure** **subscriber-mgmt** **host-lockout-policy** *string* **max-lockout-hosts** *number*
Tree [max-lockout-hosts](#)
Range 1 to 32000
Default 100
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-tracking-policy [*name*] *string*

Synopsis Enter the **host-tracking-policy** list instance
Context **configure** **subscriber-mgmt** **host-tracking-policy** *string*
Tree [host-tracking-policy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis Host tracking policy name
Context **configure** **subscriber-mgmt** **host-tracking-policy** *string*
Tree [host-tracking-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** **subscriber-mgmt** **host-tracking-policy** *string* **description** *string*
Tree [description](#)

String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress-rate-modify

Synopsis Enter the **egress-rate-modify** context
Context **configure subscriber-mgmt host-tracking-policy string egress-rate-modify**
Tree [egress-rate-modify](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis Maximum total rate for all subscriber egress queues
Context **configure subscriber-mgmt host-tracking-policy string egress-rate-modify agg-rate**
Tree [agg-rate](#)
Description This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.
Notes The following elements are part of a choice: **agg-rate** or **scheduler**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler string

Synopsis Scheduler to be applied for rate modification
Context **configure subscriber-mgmt host-tracking-policy string egress-rate-modify scheduler string**
Tree [scheduler](#)
String Length 1 to 32
Notes The following elements are part of a choice: **agg-rate** or **scheduler**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

http-redirect-policy [*name*] *string*

Synopsis	Enter the http-redirect-policy list instance
Context	configure subscriber-mgmt http-redirect-policy <i>string</i>
Tree	http-redirect-policy
Max. Instances	16
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	HTTP redirect policy name
Context	configure subscriber-mgmt http-redirect-policy <i>string</i>
Tree	http-redirect-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-url-parameter *string*

Synopsis	AA URL parameter included for HTTP portal redirect
Context	configure subscriber-mgmt http-redirect-policy <i>string</i> aa-url-parameter <i>string</i>
Tree	aa-url-parameter
String Length	1 to 247
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

application-assurance *reference*

Synopsis	AA application profile used for portal authentication
Context	configure subscriber-mgmt http-redirect-policy <i>string</i> application-assurance <i>reference</i>
Tree	application-assurance
Reference	configure application-assurance <i>group</i> <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	22.2.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port *number*

Synopsis Destination port number of the HTTP request to match
Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **dst-port** *number*
Tree [dst-port](#)
Range 1 to 65535
Default 80
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forward-entry **dst-ip** (*ipv4-prefix* | *ipv6-prefix*) **protocol** *keyword* **dst-port** *number*

Synopsis Add a list entry for **forward-entry**
Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **forward-entry** **dst-ip** (*ipv4-prefix* | *ipv6-prefix*) **protocol** *keyword* **dst-port** *number*
Tree [forward-entry](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-ip (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination address
Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **forward-entry** **dst-ip** (*ipv4-prefix* | *ipv6-prefix*) **protocol** *keyword* **dst-port** *number*
Tree [forward-entry](#)

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*

Synopsis	Destination protocol
Context	configure subscriber-mgmt http-redirect-policy <i>string</i> forward-entry dst-ip (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) protocol keyword dst-port <i>number</i>
Tree	forward-entry
Options	tcp, udp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port *number*

Synopsis	Destination port
Context	configure subscriber-mgmt http-redirect-policy <i>string</i> forward-entry dst-ip (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) protocol keyword dst-port <i>number</i>
Tree	forward-entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ignore-app-profile *boolean*

Synopsis	Ignore application profile attribute in the RADIUS Access-Accept message
Context	configure subscriber-mgmt http-redirect-policy <i>string</i> ignore-app-profile <i>boolean</i>
Tree	ignore-app-profile
Default	false
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

portal-hold-time *number*

Synopsis	Time to hold redirect forwarding resources
Context	configure subscriber-mgmt http-redirect-policy <i>string</i> portal-hold-time <i>number</i>
Tree	portal-hold-time
Range	1 to 60
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url *string*

Synopsis	HTTP URL to which the matching traffic is redirected
Context	configure subscriber-mgmt http-redirect-policy <i>string</i> url <i>string</i>
Tree	url
Description	This command configures the HTTP redirect URL to which the matching traffic is redirected. Use the following variables to insert subscriber session data in the URL: <ul style="list-style-type: none"> • \$URL (Request-URI in the HTTP GET Request received) • \$MAC (a string that represents the MAC address of the subscriber host) • \$IP (a string that represents the IP address of the subscriber host) • \$NASIP (a string that represents the RADIUS IP address of the ISA/ESA-VM)
String Length	1 to 255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

igmp-policy [*name*] *string*

Synopsis	Enter the igmp-policy list instance
Context	configure subscriber-mgmt igmp-policy <i>string</i>
Tree	igmp-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis	Policy name
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Context	configure subscriber-mgmt igmp-policy <i>string</i>
Tree	igmp-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt igmp-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress-rate-modify

Synopsis	Enter the egress-rate-modify context
Context	configure subscriber-mgmt igmp-policy <i>string</i> egress-rate-modify
Tree	egress-rate-modify
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Maximum total rate for all subscriber egress queues
Context	configure subscriber-mgmt igmp-policy <i>string</i> egress-rate-modify agg-rate
Tree	agg-rate
Description	This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.
Notes	The following elements are part of a choice: agg-rate or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Scheduler to be applied for rate modification
Context	configure subscriber-mgmt igmp-policy <i>string</i> egress-rate-modify scheduler <i>string</i>
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: agg-rate or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fast-leave *boolean*

Synopsis	Enable fast leave
Context	configure subscriber-mgmt igmp-policy <i>string</i> fast-leave <i>boolean</i>
Tree	fast-leave
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure subscriber-mgmt igmp-policy <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure subscriber-mgmt igmp-policy <i>string</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than

the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure subscriber-mgmt igmp-policy <i>string</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure subscriber-mgmt igmp-policy <i>string</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multicast-reporter

Synopsis	Enter the multicast-reporter context
Context	configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter
Tree	multicast-reporter
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the multicast reporter
Context	configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination *reference*

Synopsis	Multicast reporter destination
Context	configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter destination <i>reference</i>
Tree	destination
Reference	configure multicast-management multicast-reporting-destination <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

optional-fields

Synopsis	Enter the optional-fields context
Context	configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter optional-fields
Tree	optional-fields
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-mac *boolean*

Synopsis	Include host mac address
Context	configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter optional-fields host-mac <i>boolean</i>
Tree	host-mac
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-session-id *boolean*

Synopsis	Include the PPPoE session ID in multicast reporting messages
Context	configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter optional-fields pppoe-session-id <i>boolean</i>
Tree	pppoe-session-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis	Include sap ID
Context	configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter optional-fields sap-id <i>boolean</i>
Tree	sap-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

svc-id *boolean*

Synopsis	Include service ID
Context	configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter optional-fields svc-id <i>boolean</i>
Tree	svc-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure subscriber-mgmt igmp-policy <i>string</i> query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis Time between group-specific query messages
Context **configure** [subscriber-mgmt igmp-policy](#) *string* [query-last-member-interval](#) *number*
Tree [query-last-member-interval](#)
Range 1 to 1023
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis Time to wait for a response to the host-query messages
Context **configure** [subscriber-mgmt igmp-policy](#) *string* [query-response-interval](#) *number*
Tree [query-response-interval](#)
Range 1 to 1023
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redirection-policy *reference*

Synopsis Multicast redirection action applied to the subscriber
Context **configure** [subscriber-mgmt igmp-policy](#) *string* [redirection-policy](#) *reference*
Tree [redirection-policy](#)
Reference **configure** [policy-options policy-statement](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

replication *keyword*

Synopsis Multicast replication mode for subscriber multicast
Context **configure** [subscriber-mgmt igmp-policy](#) *string* [replication](#) *keyword*
Tree [replication](#)
Default per-sap

Options	per-sap, per-host, per-spi
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure subscriber-mgmt igmp-policy <i>string</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

static

Synopsis	Enter the static context
Context	configure subscriber-mgmt igmp-policy <i>string</i> static
Tree	static
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group [[group-address](#)] *string*

Synopsis	Enter the group list instance
Context	configure subscriber-mgmt igmp-policy <i>string</i> static group <i>string</i>
Tree	group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[group-address] *string*

Synopsis	Group address of static IGMP multicast channel
Context	configure subscriber-mgmt igmp-policy <i>string</i> static group <i>string</i>
Tree	group

Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure subscriber-mgmt igmp-policy <i>string</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure subscriber-mgmt igmp-policy <i>string</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

starg

Synopsis	any source address (*,G)
Context	configure subscriber-mgmt igmp-policy <i>string</i> static group <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-multicast-destination-mac *boolean*

Synopsis	Use multicast destination mac address for outgoing traffic.
Context	configure subscriber-mgmt igmp-policy <i>string</i> use-multicast-destination-mac <i>boolean</i>
Tree	use-multicast-destination-mac
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP protocol version
Context	configure subscriber-mgmt igmp-policy <i>string</i> version <i>keyword</i>
Tree	version
Default	3
Options	1, 2, 3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session-policy [[name](#)] *string*

Synopsis	Enter the ipoe-session-policy list instance
Context	configure subscriber-mgmt ipoe-session-policy <i>string</i>
Tree	ipoe-session-policy
Max. Instances	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	IPoE session policy name
Context	configure subscriber-mgmt ipoe-session-policy <i>string</i>
Tree	ipoe-session-policy
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id-from-auth *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Use the Circuit ID from the authentication server to identify a session
Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* [circuit-id-from-auth](#) *boolean*
Tree [circuit-id-from-auth](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-key

Synopsis Enter the **session-key** context
Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* [session-key](#)
Tree [session-key](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cid *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use the Circuit ID as part of the index
Context	configure subscriber-mgmt ipoe-session-policy <i>string</i> session-key cid <i>boolean</i>
Tree	cid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *boolean*

Synopsis	Use the MAC address as part of the index
Context	configure subscriber-mgmt ipoe-session-policy <i>string</i> session-key mac <i>boolean</i>
Tree	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rid *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use the remote ID as part of the index
Context	configure subscriber-mgmt ipoe-session-policy <i>string</i> session-key rid <i>boolean</i>
Tree	rid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap *boolean*

Synopsis	Use the SAP ID as part of the index
Context	configure subscriber-mgmt ipoe-session-policy <i>string</i> session-key sap <i>boolean</i>
Tree	sap
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-timeout (*number* | *keyword*)

Synopsis Timeout for IPoE sessions

Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* **session-timeout** (*number* | *keyword*)

Tree [session-timeout](#)

Range 1 to 31104000

Default unlimited

Options unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

isa-filter [[name](#)] *string*

Synopsis Enter the **isa-filter** list instance

Context **configure** [subscriber-mgmt isa-filter](#) *string*

Tree [isa-filter](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis ISA filter name

Context **configure** [subscriber-mgmt isa-filter](#) *string*

Tree [isa-filter](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context	configure subscriber-mgmt isa-filter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure subscriber-mgmt isa-filter <i>string</i> ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	Action for non-matching entry
Context	configure subscriber-mgmt isa-filter <i>string</i> ipv4 default-action <i>keyword</i>
Tree	default-action
Default	drop
Options	drop, forward
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure subscriber-mgmt isa-filter <i>string</i> ipv4 entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*id*] *number*

Synopsis	ISA filter entry ID
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Context	configure subscriber-mgmt isa-filter <i>string ipv4 entry number</i>
Tree	entry
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enable the action context
Context	configure subscriber-mgmt isa-filter <i>string ipv4 entry number action</i>
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis	A packet matching the entry will be dropped
Context	configure subscriber-mgmt isa-filter <i>string ipv4 entry number action drop</i>
Tree	drop
Notes	The following elements are part of a mandatory choice: drop , forward , or http-redirect .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis	A packet matching the entry will be forwarded
Context	configure subscriber-mgmt isa-filter <i>string ipv4 entry number action forward</i>
Tree	forward
Notes	The following elements are part of a mandatory choice: drop , forward , or http-redirect .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enable the http-redirect context
Context	configure subscriber-mgmt isa-filter string ipv4 entry number action http-redirect
Tree	http-redirect
Notes	The following elements are part of a mandatory choice: drop , forward , or http-redirect .
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	HTTP URL to which the matching traffic is redirected
Context	configure subscriber-mgmt isa-filter string ipv4 entry number action http-redirect url string
Tree	url
Description	This command specifies the URL to which HTTP flows matching the entry are redirected. The URL can be overridden by AAA. Only macros \$URL, \$MAC, \$IP are supported. For unsupported macros, the string is not modified.
String Length	1 to 255
Notes	This element is mandatory.
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure subscriber-mgmt isa-filter string ipv4 entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the match context
Context	configure subscriber-mgmt isa-filter string ipv4 entry number match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-ip string

Synopsis	Destination IPv4 prefix
Context	configure subscriber-mgmt isa-filter string ipv4 entry number match dst-ip string
Tree	dst-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the dst-port context
Context	configure subscriber-mgmt isa-filter string ipv4 entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

equals number

Synopsis	Exact port number
Context	configure subscriber-mgmt isa-filter string ipv4 entry number match dst-port equals number
Tree	equals
Range	0 1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*

Synopsis	Protocol
Context	configure subscriber-mgmt isa-filter <i>string</i> ipv4 entry <i>number</i> match protocol <i>keyword</i>
Tree	protocol
Options	icmp, tcp, udp, gre
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure subscriber-mgmt isa-filter <i>string</i> ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	Action for non-matching entry
Context	configure subscriber-mgmt isa-filter <i>string</i> ipv6 default-action <i>keyword</i>
Tree	default-action
Default	drop
Options	drop, forward
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure subscriber-mgmt isa-filter <i>string</i> ipv6 entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] number

Synopsis	ISA filter entry ID
Context	configure subscriber-mgmt isa-filter string ipv6 entry number
Tree	entry
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enable the action context
Context	configure subscriber-mgmt isa-filter string ipv6 entry number action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis	A packet matching the entry will be dropped
Context	configure subscriber-mgmt isa-filter string ipv6 entry number action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: drop , forward , or http-redirect .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis	A packet matching the entry will be forwarded
Context	configure subscriber-mgmt isa-filter string ipv6 entry number action forward
Tree	forward
Notes	The following elements are part of a mandatory choice: drop , forward , or http-redirect .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enable the http-redirect context
Context	configure subscriber-mgmt isa-filter string ipv6 entry number action http-redirect
Tree	http-redirect
Notes	The following elements are part of a mandatory choice: drop , forward , or http-redirect .
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	HTTP URL to which the matching traffic is redirected
Context	configure subscriber-mgmt isa-filter string ipv6 entry number action http-redirect url string
Tree	url
Description	This command specifies the URL to which HTTP flows matching the entry are redirected. The URL can be overridden by AAA. Only macros \$URL, \$MAC, \$IP are supported. For unsupported macros, the string is not modified.
String Length	1 to 255
Notes	This element is mandatory.
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure subscriber-mgmt isa-filter string ipv6 entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the match context
Context	configure subscriber-mgmt isa-filter string ipv6 entry number match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-ip string

Synopsis	Destination IPv6 prefix
Context	configure subscriber-mgmt isa-filter string ipv6 entry number match dst-ip string
Tree	dst-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the dst-port context
Context	configure subscriber-mgmt isa-filter string ipv6 entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

equals number

Synopsis	Exact port number
Context	configure subscriber-mgmt isa-filter string ipv6 entry number match dst-port equals number
Tree	equals
Range	0 1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*

Synopsis	Protocol
Context	configure subscriber-mgmt isa-filter <i>string</i> ipv6 entry <i>number</i> match protocol <i>keyword</i>
Tree	protocol
Options	icmp, tcp, udp, gre
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Limit what the ISA filter can be used for
Context	configure subscriber-mgmt isa-filter <i>string</i> type <i>keyword</i>
Tree	type
Default	dsm
Options	dsm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

isa-policer [*name*] *string*

Synopsis	Enter the isa-policer list instance
Context	configure subscriber-mgmt isa-policer <i>string</i>
Tree	isa-policer
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	ISA policer name
Context	configure subscriber-mgmt isa-policer <i>string</i>

Tree	isa-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action keyword

Synopsis	Action to be taken for packets that are in-profile and out-of-profile
Context	configure subscriber-mgmt isa-policer <i>string</i> action <i>keyword</i>
Tree	action
Default	permit-deny
Options	permit-deny, priority-mark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure subscriber-mgmt isa-policer <i>string</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir keyword

Synopsis	Committed information rate
Context	configure subscriber-mgmt isa-policer <i>string</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir *keyword*

Synopsis	Peak Information Rate
Context	configure subscriber-mgmt isa-policer <i>string</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs *number*

Synopsis	Committed burst size
Context	configure subscriber-mgmt isa-policer <i>string</i> cbs <i>number</i>
Tree	cbs
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt isa-policer <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum Burst Size
Context	configure subscriber-mgmt isa-policer <i>string</i> mbs <i>number</i>
Tree	mbs
Range	0 to 131071

Default	0
Units	kilobytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the rate context
Context	configure subscriber-mgmt isa-policer string rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	Committed information rate
Context	configure subscriber-mgmt isa-policer string rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 100000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak Information Rate
Context	configure subscriber-mgmt isa-policer string rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Policing technique
Context **configure** [subscriber-mgmt isa-policer](#) *string type keyword*
Tree [type](#)
Default single-bucket-bandwidth
Options single-bucket-bandwidth, dual-bucket-bandwidth
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

isa-service-chaining

Synopsis Enter the **isa-service-chaining** context
Context **configure** [subscriber-mgmt isa-service-chaining](#)
Tree [isa-service-chaining](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

evpn [*id*] *string*

Synopsis Enter the **evpn** list instance
Context **configure** [subscriber-mgmt isa-service-chaining evpn](#) *string*
Tree [evpn](#)
Max. Instances 1024
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *string*

Synopsis	EVPN service ID
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i>
Tree	evpn
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of EVPN
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bgp

Synopsis	Enter the bgp context
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp
Tree	bgp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

route-distinguisher

Synopsis	Enter the route-distinguisher context
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp route-distinguisher
Tree	route-distinguisher
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rd (*keyword* | *vpn-route-distinguisher*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	High-order 6 bytes that are used as string to compose VSI-ID for use in NLRI
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp route-distinguisher rd (<i>keyword</i> <i>vpn-route-distinguisher</i>)
Tree	rd
Options	auto-rd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

route-target

Synopsis	Enable the route-target context
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp route-target
Tree	route-target
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Extended community name for default export policy for BGP in EVPN service
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp route-target export <i>string</i>
Tree	export
String Length	10 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

import *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Extended community name for default import policy for BGP in EVPN service
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp route-target import <i>string</i>
Tree	import
String Length	10 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export

Synopsis	Enter the export context
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export
Tree	export
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

advertise-pools

Synopsis	Enter the advertise-pools context
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export advertise-pools

Tree	advertise-pools
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of NAT pool route advertisement
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export advertise-pools admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool [router-instance](#) *string* [name](#) *string*

Synopsis	Add a list entry for pool
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export advertise-pools pool router-instance <i>string</i> name <i>string</i>
Tree	pool
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router-instance of the NAT pool
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export advertise-pools pool router-instance <i>string</i> name <i>string</i>
Tree	pool
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	NAT pool name
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export advertise-pools pool router-instance <i>string</i> name <i>string</i>
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-address-range

Synopsis	Enable the gateway-address-range context
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export gateway-address-range
Tree	gateway-address-range
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the gateway address range
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export gateway-address-range <i>end</i> <i>string</i>
Tree	end
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *string*

Synopsis	Lower bound of the gateway address range
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export gateway-address-range <i>start</i> <i>string</i>
Tree	start
Notes	This element is mandatory.

Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan

Synopsis Enter the **vxlan** context
Context **configure** [subscriber-mgmt isa-service-chaining evpn string export vxlan](#)
Tree [vxlan](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vni number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis VNI of the VXLAN created by the EVPN service
Context **configure** [subscriber-mgmt isa-service-chaining evpn string export vxlan vni number](#)
Tree [vni](#)
Range 1 to 16777215
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

import-mode keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Import mode for the EVPN
Context **configure** [subscriber-mgmt isa-service-chaining evpn string import-mode keyword](#)
Tree [import-mode](#)
Default none
Options none, bridged, routed
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-route-resolution *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	How prefix routes should be resolved
Context	configure subscriber-mgmt isa-service-chaining evpn <i>string</i> prefix-route-resolution <i>keyword</i>
Tree	prefix-route-resolution
Default	recursive
Options	recursive, non-recursive
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-prefix *string*

Synopsis	MAC prefix for all NAT groups for Service Chaining
Context	configure subscriber-mgmt isa-service-chaining mac-prefix <i>string</i>
Tree	mac-prefix
String Length	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vas-filter [[name](#)] *string*

Synopsis	Enter the vas-filter list instance
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i>
Tree	vas-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[name](#)] *string*

Synopsis	VAS filter name
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i>

Tree	vas-filter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i>
Tree	entry
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	VAS filter entry ID
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action [*direction*] *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the action list instance
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action <i>keyword</i>
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[direction] *keyword*

Synopsis	Direction for the action in a VAS filter entry
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action <i>keyword</i>
Tree	action
Options	upstream, downstream
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fail-action *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Fail action when sf-ip is not resolved or no forward action specified
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action <i>keyword</i> fail-action <i>keyword</i>
Tree	fail-action
Default	accept
Options	drop, accept
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forward



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **forward** context

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [vas-filter](#) *string entry number action*
keyword forward

Tree [forward](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esi string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis ESI (Ethernet Segment Identifier) for the action in a VAS filter

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [vas-filter](#) *string entry number action*
keyword forward esi string

Tree [esi](#)

Default 00:00:00:00:00:00:00:00:00

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sf-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Forwarding SF (Service Forward) IP address for the action in VAS filter entry

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [vas-filter](#) *string entry number action*
keyword forward sf-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [sf-ip](#)

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

svc reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	EVPN service used for forwarding packets
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>keyword</i> forward svc <i>reference</i>
Tree	svc
Reference	configure subscriber-mgmt isa-service-chaining evpn <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

insert-nsh



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the insert-nsh context
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>keyword</i> insert-nsh
Tree	insert-nsh
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

meta-data



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the meta-data context
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action <i>keyword</i> insert-nsh meta-data
Tree	meta-data
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

insert-subscriber-id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Insert the subscriber-id in the NSH
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action <i>keyword</i> insert-nsh meta-data insert-subscriber-id
Tree	insert-subscriber-id
Notes	The following elements are part of a choice: insert-subscriber-id or opaque-data .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque-data *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Opaque meta-data for the NSH
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action <i>keyword</i> insert-nsh meta-data opaque-data <i>string</i>
Tree	opaque-data
String Length	10 18 26 34
Notes	The following elements are part of a choice: insert-subscriber-id or opaque-data .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

svc-path



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the svc-path context
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action <i>keyword</i> insert-nsh svc-path
Tree	svc-path
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

path-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Path ID used to construct a NSH for the action in a VAS filter entry
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action <i>keyword</i> insert-nsh svc-path path-id <i>number</i>
Tree	path-id
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

svc-index *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service index used to construct a NSH for the action in a VAS filter entry
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action <i>keyword</i> insert-nsh svc-path svc-index <i>number</i>
Tree	svc-index
Range	1 to 255

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the VAS filter
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the match context
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

foreign-ip (*ipv4-unicast-prefix | ipv4-unicast-address*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Foreign IP address or prefix to match in this VAS filter entry
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> match foreign-ip (<i>ipv4-unicast-prefix ipv4-unicast-address</i>)
Tree	foreign-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

foreign-port *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Foreign TCP or UDP port to match in this VAS filter entry
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> match foreign-port <i>number</i>
Tree	foreign-port
Range	1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP protocol to match the VAS filter
Context	configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> match protocol <i>keyword</i>
Tree	protocol
Default	none

Options	tcp-udp, none, icmp, tcp, udp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-user-db *[name]* *string*

Synopsis	Enter the local-user-db list instance
Context	configure subscriber-mgmt local-user-db <i>string</i>
Tree	local-user-db
Max. Instances	127
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Local user database name
Context	configure subscriber-mgmt local-user-db <i>string</i>
Tree	local-user-db
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the local user database
Context	configure subscriber-mgmt local-user-db <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt local-user-db <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe

Synopsis	Enter the ipoe context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe
Tree	ipoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host [[host-name](#)] *string*

Synopsis	Enter the host list instance
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i>
Tree	host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[host-name] *string*

Synopsis	Host name
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i>
Tree	host
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the host
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication

Synopsis	Enter the authentication context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> authentication
Tree	authentication
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auth-domain-name *string*

Synopsis	Domain name appended to the username for the host
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> authentication auth-domain-name <i>string</i>
Tree	auth-domain-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gx-policy *string*

Synopsis	Diameter application policy
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> authentication gx-policy <i>string</i>
Tree	gx-policy
String Length	1 to 32
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq-auth-policy *string*

Synopsis Diameter NASREQ application policy to use for authentication
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [authentication](#) [nasreq-auth-policy](#) *string*
Tree [nasreq-auth-policy](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *string*

Synopsis Host authentication policy
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [authentication](#) [radius-auth-policy](#) *string*
Tree [radius-auth-policy](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-interface

Synopsis Enable the **gtp-interface** context
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [gtp-interface](#)
Tree [gtp-interface](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis IP interface name
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [gtp-interface](#) [name](#) *string*
Tree [name](#)

String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*

Synopsis	Service ID
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> gtp-interface service-id <i>number</i>
Tree	service-id
Range	1 to 2147483647 2147483648 2147483649 2147483650 2147483651 to 2147483690 2147483691 to 2148007980 2148007981 to 2148012076 2148012077 to 2148016172 2148016173 to 2148278316 2148278317 2148278318 to 2148278381 2148278382 2148278383 to 2148278386
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-identification

Synopsis	Enter the host-identification context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification
Tree	host-identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Enter the circuit-id context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as ASCII string
Context	configure subscriber-mgmt local-user-db string ipoe host string host-identification circuit-id ascii-string string
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as hexadecimal string
Context	configure subscriber-mgmt local-user-db string ipoe host string host-identification circuit-id hex-string string
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

derived-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Derived ID string
Context	configure subscriber-mgmt local-user-db string ipoe host string host-identification derived-id string

Tree	derived-id
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-tag-range

Synopsis	Enable the encap-tag-range context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-range
Tree	encap-tag-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

from string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start tag
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-range from <i>string</i>
Tree	from
String Length	1 to 11
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

to string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	End tag
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-range to <i>string</i>

Tree	to
String Length	1 to 11
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-tag-separate-range

Synopsis	Enter the encap-tag-separate-range context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-separate-range
Tree	encap-tag-separate-range
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inner

Synopsis	Enter the inner context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-separate-range inner
Tree	inner
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the inner encapsulation tag range
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-separate-range inner end <i>number</i>
Tree	end
Description	This command configures an inner end tag for the range of encapsulation tags used for host identification.
Range	0 to 4094

Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Lower bound of the inner encapsulation tag range
Context **configure** subscriber-mgmt local-user-db string ipoe host string host-identification encap-tag-separate-range inner start number
Tree start
Description This command configures an inner start tag for the range of encapsulation tags used for host identification.
Range 0 to 4094
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

outer

Synopsis Enter the **outer** context
Context **configure** subscriber-mgmt local-user-db string ipoe host string host-identification encap-tag-separate-range outer
Tree outer
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Upper bound of the outer encapsulation tag range
Context **configure** subscriber-mgmt local-user-db string ipoe host string host-identification encap-tag-separate-range outer end number
Tree end

Description	This command configures an outer end tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the outer encapsulation tag range
Context	configure subscriber-mgmt local-user-db string ipoe host string host-identification encap-tag-separate-range outer start number
Tree	start
Description	This command configures an outer start tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix-with-host-bits* | *ipv6-prefix-with-host-bits*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP interface name
Context	configure subscriber-mgmt local-user-db string ipoe host string host-identification ip-prefix (<i>ipv4-prefix-with-host-bits</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	ip-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address
Context	configure subscriber-mgmt local-user-db string ipoe host string host-identification mac string
Tree	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option60

Synopsis	Enter the option60 context
Context	configure subscriber-mgmt local-user-db string ipoe host string host-identification option60
Tree	option60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Option 60 as ASCII string
Context	configure subscriber-mgmt local-user-db string ipoe host string host-identification option60 ascii-string string
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Option as a hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification option60 hex-string <i>string</i>
Tree	hex-string
String Length	1 to 64
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enter the remote-id context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification remote-id
Tree	remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as ASCII string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification remote-id ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 255
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as hexadecimal string
Context	configure subscriber-mgmt local-user-db string ipoe host string host-identification remote-id hex-string string
Tree	hex-string
String Length	1 to 512
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP ID
Context	configure subscriber-mgmt local-user-db string ipoe host string host-identification sap-id string
Tree	sap-id
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure subscriber-mgmt local-user-db string ipoe host string host-identification service-id number

Tree	service-id
Range	1 to 2147483647 2147483648 2147483649 2147483650 2147483651 to 2147483690 2147483691 to 2148007980 2148007981 to 2148012076 2148012077 to 2148016172 2148016173 to 2148278316 2148278317 2148278318 to 2148278381 2148278382 2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VSO string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification <i>string</i> <i>string</i>
Tree	string
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System ID
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification system-id <i>string</i>
Tree	system-id
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

identification

Synopsis	Enable the identification context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification
Tree	identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification ancp-string <i>string</i>
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile-string *string*

Synopsis	Application profile string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification app-profile-string <i>string</i>
Tree	app-profile-string
String Length	1 to 16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category-map-name *string*

Synopsis	Category map name
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification category-map-name <i>string</i>
Tree	category-map-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification int-dest-id <i>string</i>
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-number *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Identification strings for the subscriber
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification option-number <i>number</i>
Tree	option-number
Range	1 to 254
Default	254
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile-string *string*

Synopsis	SLA profile string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification sla-profile-string <i>string</i>
Tree	sla-profile-string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spi-sharing-group-id *number*

Synopsis	SPI sharing group ID
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification spi-sharing-group-id <i>number</i>
Tree	spi-sharing-group-id
Range	0 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile-string *string*

Synopsis	Sub profile string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification sub-profile-string <i>string</i>
Tree	sub-profile-string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*

Synopsis	Subscriber ID
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification subscriber-id <i>string</i>
Tree	subscriber-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis	Enter the address context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 address
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address *keyword*

Synopsis	Use gi-address to select a pool with the given scope
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 address gi-address <i>keyword</i>
Tree	gi-address
Options	subnet-scope, pool-scope
Notes	The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	Fixed IPv4 address of the host
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 address ip-address <i>string</i>
Tree	ip-address
Notes	The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool

Synopsis	Enable the pool context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 address pool
Tree	pool

Notes	The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter string

Synopsis	Delimiter character to combine primary and secondary pool names
Context	configure subscriber-mgmt local-user-db string ipoe host string ipv4 address pool delimiter string
Tree	delimiter
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary string

Synopsis	Primary pool name
Context	configure subscriber-mgmt local-user-db string ipoe host string ipv4 address pool primary string
Tree	primary
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secondary string

Synopsis	Secondary pool name
Context	configure subscriber-mgmt local-user-db string ipoe host string ipv4 address pool secondary string
Tree	secondary
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure subscriber-mgmt local-user-db <i>string ipoe host string ipv4 address use-pool-from-client</i>
Tree	use-pool-from-client
Notes	The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter character to combine primary and secondary pool names
Context	configure subscriber-mgmt local-user-db <i>string ipoe host string ipv4 address use-pool-from-client delimiter string</i>
Tree	delimiter
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address *string*

Synopsis	GI addresses based on the host entry in the LUDB
Context	configure subscriber-mgmt local-user-db <i>string ipoe host string ipv4 gi-address string</i>
Tree	gi-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [*number*] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure subscriber-mgmt local-user-db <i>string ipoe host string ipv4 option (number keyword)</i>
Tree	option
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv4](#) [option](#) (*number* | *keyword*)

Tree [option](#)

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv4](#) [option](#) (*number* | *keyword*) [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis DHCP option as time duration

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv4](#) [option](#) (*number* | *keyword*) [duration](#) *number*

Tree [duration](#)

Range 10 to 315446399

Units seconds

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option.
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 option (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i>
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis DHCP option as NetBIOS node type
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv4 option (number | keyword) netbios-node-type keyword*
Tree [netbios-node-type](#)
Options b-node, p-node, m-node, h-node
Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis IPv4 address of the DHCP server
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv4 server string*
Tree [server](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis Enter the **ipv6** context
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv6*
Tree [ipv6](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis Fixed IPv6 address of the host
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv6 address string*
Tree [address](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-pool *string*

Synopsis IPv6 address pool name
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv6](#) [address-pool](#) *string*
Tree [address-pool](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix *string*

Synopsis IPv6 delegated prefix of this host
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv6](#) [delegated-prefix](#) *string*
Tree [delegated-prefix](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-length *number*

Synopsis Delegated prefix length
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv6](#) [delegated-prefix-length](#) *number*
Tree [delegated-prefix-length](#)
Range 48 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-pool *string*

Synopsis Delegated prefix pool
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv6](#) [delegated-prefix-pool](#) *string*

Tree	delegated-prefix-pool
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	Link address used for prefix selection at DHCP server
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 link-address <i>string</i>
Tree	link-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis	The number of the DHCPv6 option.
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>)
Tree	option
Range	23
Options	dns-server
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>string ipoe host string ipv6 option (number keyword)</i> hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: hex-string or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure subscriber-mgmt local-user-db <i>string ipoe host string ipv6 option (number keyword)</i> ipv6-address <i>string</i>
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: hex-string or ipv6-address . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-advertisement-policy *string*

Synopsis	IPv6 router advertisement policy
Context	configure subscriber-mgmt local-user-db <i>string ipoe host string ipv6 router-advertisement-policy</i> <i>string</i>
Tree	router-advertisement-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	IPv6 address of the DHCP server
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Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 server <i>string</i>
Tree	server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

slaac-prefix *string*

Synopsis	IPv6 SLAAC prefix of this host
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 slaac-prefix <i>string</i>
Tree	slaac-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

slaac-prefix-pool *string*

Synopsis	IPv6 SLAAC prefix pool of this host
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 slaac-prefix-pool <i>string</i>
Tree	slaac-prefix-pool
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timers

Synopsis	Enter the timers context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 timers
Tree	timers
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number* | *keyword*)

Synopsis	Time for a lease to remain preferred
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 timers preferred-lifetime (<i>number</i> <i>keyword</i>)

Tree	preferred-lifetime
Range	300 to 315446399
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind *number*

Synopsis	Rebind timer (T2)
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 timers rebind <i>number</i>
Tree	rebind
Range	0 to 1209600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew *number*

Synopsis	Renew timer (T1)
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 timers renew <i>number</i>
Tree	renew
Range	0 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis	Time for a lease to remain valid
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 timers valid-lifetime (<i>number</i> <i>keyword</i>)
Tree	valid-lifetime
Range	300 to 315446399

Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-radius-proxy-cache

Synopsis	Enter the match-radius-proxy-cache context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache
Tree	match-radius-proxy-cache
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fail-action *keyword*

Synopsis	Action when no match is found
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache fail-action <i>keyword</i>
Tree	fail-action
Default	drop
Options	continue, drop
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache mac-format <i>string</i>
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the match context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Match circuit ID in DHCP Option 82
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache match circuit-id <i>boolean</i>
Tree	circuit-id
Notes	The following elements are part of a choice: circuit-id , (ipv4-option and ipv6-option), mac , or remote-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-option *number*

Synopsis	DHCP option number
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache match ipv4-option <i>number</i>
Tree	ipv4-option
Range	1 to 254
Notes	The following elements are part of a choice: circuit-id , (ipv4-option and ipv6-option), mac , or remote-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-option *number*

Synopsis	DHCPv6 option number
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache match ipv6-option <i>number</i>

Tree	ipv6-option
Range	1 to 65535
Notes	The following elements are part of a choice: circuit-id , (ipv4-option and ipv6-option), mac , or remote-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *boolean*

Synopsis	Match MAC address of DHCP client
Context	configure subscriber-mgmt local-user-db <i>string ipoe host string match-radius-proxy-cache match mac</i> <i>boolean</i>
Tree	mac
Default	true
Notes	The following elements are part of a choice: circuit-id , (ipv4-option and ipv6-option), mac , or remote-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Match remote ID in DHCP Option 82
Context	configure subscriber-mgmt local-user-db <i>string ipoe host string match-radius-proxy-cache match remote-id</i> <i>boolean</i>
Tree	remote-id
Notes	The following elements are part of a choice: circuit-id , (ipv4-option and ipv6-option), mac , or remote-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server

Synopsis	Enable the server context
Context	configure subscriber-mgmt local-user-db <i>string ipoe host string match-radius-proxy-cache server</i>
Tree	server
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis Local user database server name
Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **match-radius-proxy-cache** **server** **name** *string*
Tree **name**
String Length 1 to 32
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service *number*

Synopsis Service ID
Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **match-radius-proxy-cache** **server** **service** *number*
Tree **service**
Range 1 to 2147483647
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mld-import [**policy-name**] *string*

Synopsis Add a list entry for **mld-import**
Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **mld-import** *string*
Tree **mld-import**
Max. Instances 14
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[policy-name] *string*

Synopsis MLD import policy used to control the multicast group

Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> mld-import <i>string</i>
Tree	mld-import
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap-defaults

Synopsis	Enter the msap-defaults context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults
Tree	msap-defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface

Synopsis	Enable the group-interface context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults group-interface
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	IP interface name
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults group-interface name <i>string</i>
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix *keyword*

Synopsis	Prefix to the IP interface name
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults group-interface prefix <i>keyword</i>
Tree	prefix
Options	port-id
Notes	The following elements are part of a choice: prefix or suffix .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis	Suffix for the group interface
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults group-interface suffix <i>keyword</i>
Tree	suffix
Options	port-id
Notes	The following elements are part of a choice: prefix or suffix .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *string*

Synopsis	MSAP policy
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults policy <i>string</i>
Tree	policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service *number*

Synopsis	Service ID
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults service <i>number</i>

Tree	service
Range	1 to 2147483647 2147483648 2147483649 2147483650 2147483651 to 2147483690 2147483691 to 2148007980 2148007981 to 2148012076 2148012077 to 2148016172 2148016173 to 2148278316 2148278317 2148278318 to 2148278381 2148278382 2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy

Synopsis	Enter the radius-accounting-policy context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> radius-accounting-policy
Tree	radius-accounting-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duplicate *string*

Synopsis	RADIUS accounting policy for generating duplicate accounting information
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> radius-accounting-policy duplicate <i>string</i>
Tree	duplicate
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	RADIUS accounting policy name
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> radius-accounting-policy name <i>string</i>
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retail-service-id *number*

Synopsis	Configure the retail service-id
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> retail-service-id <i>number</i>
Tree	retail-service-id
Range	1 to 2147483647 2147483648 2147483649 2147483650 2147483651 to 2147483690 2147483691 to 2148007980 2148007981 to 2148012076 2148012077 to 2148016172 2148016173 to 2148278316 2148278317 2148278318 to 2148278381 2148278382 2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip-policy *string*

Synopsis	RIP policy
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> rip-policy <i>string</i>
Tree	rip-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

to-client-options

Synopsis	Enter the to-client-options context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options
Tree	to-client-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the ipv4-option list instance
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv4-option (<i>number</i> <i>keyword</i>)
Tree	ipv4-option
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*)

Tree [ipv4-option](#)

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*) [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis DHCP option as time duration

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*) [duration](#) *number*

Tree [duration](#)

Range 10 to 315446399

Units seconds

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv4-option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv4-option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv4-option (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i>
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis DHCP option as NetBIOS node type
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*) **netbios-node-type** *keyword*
Tree [netbios-node-type](#)
Options b-node, p-node, m-node, h-node
Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-option [[number](#)] (*number* | *keyword*)

Synopsis Enter the **ipv6-option** list instance
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*)
Tree [ipv6-option](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis DHCP option to send as identification string
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*)
Tree [ipv6-option](#)
Range 1 to 65535
Options dns-server, domain-name
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i>
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

to-server-options

Synopsis	Enter the to-server-options context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-server-options
Tree	to-server-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the ipv6-option list instance
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Context	configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option (<i>number</i> <i>keyword</i>)
Tree	ipv6-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option (<i>number</i> <i>keyword</i>)
Tree	ipv6-option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string

String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-server-options ipv6-option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-server-options ipv6-option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-server-options ipv6-option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i>
Tree	ipv6-address
Max. Instances	4

Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis	Enter the wpp context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp
Tree	wpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial

Synopsis	Enter the initial context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp initial
Tree	initial
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *string*

Synopsis	Initial application profile name
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp initial app-profile <i>string</i>
Tree	app-profile
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *string*

Synopsis	Initial SLA profile
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Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp initial sla-profile <i>string</i>
Tree	sla-profile
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *string*

Synopsis	Initial subscriber profile
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp initial sub-profile <i>string</i>
Tree	sub-profile
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal

Synopsis	Enter the portal context
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp portal
Tree	portal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Web portal server name
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp portal name <i>string</i>
Tree	name
String Length	1 to 32
Notes	The following elements are part of a choice: portal-group or (name and router-instance).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal-group *string*

Synopsis	WPP portal group for this interface
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp portal portal-group <i>string</i>
Tree	portal-group
String Length	1 to 32
Notes	The following elements are part of a choice: portal-group or (name and router-instance).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance (*keyword* | *number*)

Synopsis	The virtual router instance of the WPP portal for the hosts
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp portal router-instance (<i>keyword</i> <i>number</i>)
Tree	router-instance
Range	1 to 2147483647
Default	base
Options	base
Notes	The following elements are part of a choice: portal-group or (name and router-instance).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

restore-to-initial-on-disconnect *keyword*

Synopsis	Restore initial profiles after a host has disconnected
Context	configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp restore-to-initial-on-disconnect <i>keyword</i>
Tree	restore-to-initial-on-disconnect
Options	restore, no-restore
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask type *keyword*

Synopsis	Enter the mask list instance
Context	configure subscriber-mgmt local-user-db <i>string ipoe mask type keyword</i>
Tree	mask
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Matching type to identify a host
Context	configure subscriber-mgmt local-user-db <i>string ipoe mask type keyword</i>
Tree	mask
Options	circuit-id, remote-id, sap-id, string, system-id, option60
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix

Synopsis	Enable the prefix context
Context	configure subscriber-mgmt local-user-db <i>string ipoe mask type keyword prefix</i>
Tree	prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis	PPP mask prefix length
Context	configure subscriber-mgmt local-user-db <i>string ipoe mask type keyword prefix length number</i>
Tree	length
Range	1 to 127
Notes	The following elements are part of a mandatory choice: length or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Prefix string
Context	configure subscriber-mgmt local-user-db string ipoe mask type keyword prefix string string
Tree	string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: length or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix

Synopsis	Enable the suffix context
Context	configure subscriber-mgmt local-user-db string ipoe mask type keyword suffix
Tree	suffix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis	PPP mask suffix length
Context	configure subscriber-mgmt local-user-db string ipoe mask type keyword suffix length number
Tree	length
Range	1 to 127
Notes	The following elements are part of a mandatory choice: length or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Suffix string
Context	configure subscriber-mgmt local-user-db string ipoe mask type keyword suffix string string
Tree	string

String Length	1 to 127
Notes	The following elements are part of a mandatory choice: length or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-list *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPoE host match type
Context	configure subscriber-mgmt local-user-db <i>string ipoe match-list keyword</i>
Tree	match-list
Options	circuit-id, mac, remote-id, sap-id, service-id, string, system-id, option60, encap-tag-range, dual-stack-remote-id, derived-id, ip, encap-tag-separate-range
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp

Synopsis	Enter the ppp context
Context	configure subscriber-mgmt local-user-db <i>string ppp</i>
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host [[host-name](#)] *string*

Synopsis	Enter the host list instance
Context	configure subscriber-mgmt local-user-db <i>string ppp host string</i>
Tree	host
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[host-name] *string*

Synopsis Host name
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string*
Tree [host](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-loop-encapsulation

Synopsis Enable the **access-loop-encapsulation** context
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [access-loop-encapsulation](#)
Tree [access-loop-encapsulation](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-offset

Synopsis Enter the **encap-offset** context
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [access-loop-encapsulation](#) [encap-offset](#)
Tree [encap-offset](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Egress encapsulation type
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [access-loop-encapsulation](#) [encap-offset](#) *type* *keyword*
Tree [type](#)

Options	pppoa-llc, pppoa-null, pppoeoa-llc, pppoeoa-llc-fcs, pppoeoa-llc-tagged, pppoeoa-llc-tagged-fcs, pppoeoa-null, pppoeoa-null-fcs, pppoeoa-null-tagged, pppoeoa-null-tagged-fcs, ipoa-llc, ipoa-null, ipoeoa-llc, ipoeoa-llc-fcs, ipoeoa-llc-tagged, ipoeoa-llc-tagged-fcs, ipoeoa-null, ipoeoa-null-fcs, ipoeoa-null-tagged, ipoeoa-null-tagged-fcs, pppoe, pppoe-tagged, ipoe, ipoe-tagged
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-down *number*

Synopsis	Last mile link downstream rate in the access loop
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-encapsulation rate-down <i>number</i>
Tree	rate-down
Range	1 to 100000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-loop-information

Synopsis	Enter the access-loop-information context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information
Tree	access-loop-information
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Enable the circuit-id context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	Circuit ID as an ASCII string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information circuit-id ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 63
Notes	The following elements are part of a mandatory choice: ascii-string , sap-id , or use-sap-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use sap-id as circuit-id.
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information circuit-id use-sap-id
Tree	use-sap-id
Notes	The following elements are part of a mandatory choice: ascii-string , sap-id , or use-sap-id .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enable the remote-id context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information remote-id
Tree	remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	String format for the remote ID
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information remote-id ascii-string <i>string</i>
Tree	ascii-string

String Length	1 to 63
Notes	The following elements are part of a mandatory choice: ascii-string , mac , or use-mac-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-mac-address

Synopsis	Use MAC address as remote-id.
Context	configure subscriber-mgmt local-user-db string ppp host string access-loop-information remote-id use-mac-address
Tree	use-mac-address
Notes	The following elements are part of a mandatory choice: ascii-string , mac , or use-mac-address .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the host
Context	configure subscriber-mgmt local-user-db string ppp host string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication

Synopsis	Enter the authentication context
Context	configure subscriber-mgmt local-user-db string ppp host string authentication
Tree	authentication
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gx-policy string

Synopsis	Diameter application policy
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> authentication gx-policy <i>string</i>
Tree	gx-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq-auth-policy string

Synopsis	Diameter NASREQ application policy to use for authentication
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> authentication nasreq-auth-policy <i>string</i>
Tree	nasreq-auth-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padi-auth-policy string

Synopsis	Authentication policy name
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> authentication padi-auth-policy <i>string</i>
Tree	padi-auth-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pre-auth-policy string

Synopsis	Pre-authentication policy of this host
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> authentication pre-auth-policy <i>string</i>
Tree	pre-auth-policy
String Length	1 to 32

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *string*

Synopsis Host authentication policy
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [authentication](#) [radius-auth-policy](#) *string*
Tree [radius-auth-policy](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis Local user DB to use for PPP PAP/CHAP authentication
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [authentication](#) [user-db](#) *string*
Tree [user-db](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-identification

Synopsis Enter the **host-identification** context
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [host-identification](#)
Tree [host-identification](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis Enter the **circuit-id** context
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [host-identification](#) [circuit-id](#)

Tree	circuit-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as ASCII string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification circuit-id ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification circuit-id hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

derived-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Derived ID string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification derived-id <i>string</i>
Tree	derived-id
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-tag-range

Synopsis	Enable the encap-tag-range context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-range
Tree	encap-tag-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

from *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start tag
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-range from <i>string</i>
Tree	from
String Length	1 to 11
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

to string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	End tag
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-range <i>to</i> <i>string</i>
Tree	to
String Length	1 to 11
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-tag-separate-range

Synopsis	Enter the encap-tag-separate-range context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-separate-range
Tree	encap-tag-separate-range
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inner

Synopsis	Enter the inner context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-separate-range inner
Tree	inner
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the inner encapsulation tag range
Context	configure subscriber-mgmt local-user-db string ppp host string host-identification encap-tag-separate-range inner end number
Tree	end
Description	This command configures an inner end tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the inner encapsulation tag range
Context	configure subscriber-mgmt local-user-db string ppp host string host-identification encap-tag-separate-range inner start number
Tree	start
Description	This command configures an inner start tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

outer

Synopsis	Enter the outer context
Context	configure subscriber-mgmt local-user-db string ppp host string host-identification encap-tag-separate-range outer
Tree	outer
Introduced	20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Upper bound of the outer encapsulation tag range

Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [host-identification](#) [encap-tag-separate-range](#) [outer](#) [end](#) *number*

Tree [end](#)

Description This command configures an outer end tag for the range of encapsulation tags used for host identification.

Range 0 to 4094

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Lower bound of the outer encapsulation tag range

Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [host-identification](#) [encap-tag-separate-range](#) [outer](#) [start](#) *number*

Tree [start](#)

Description This command configures an outer start tag for the range of encapsulation tags used for host identification.

Range 0 to 4094

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address
Context	configure subscriber-mgmt local-user-db string ppp host string host-identification mac string
Tree	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enter the remote-id context
Context	configure subscriber-mgmt local-user-db string ppp host string host-identification remote-id
Tree	remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as ASCII string
Context	configure subscriber-mgmt local-user-db string ppp host string host-identification remote-id ascii-string string
Tree	ascii-string
String Length	1 to 255
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification remote-id hex-string <i>string</i>
Tree	hex-string
String Length	1 to 512
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP ID
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification sap-id <i>string</i>
Tree	sap-id
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification service-name <i>string</i>
Tree	service-name

String Length 1 to 255
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis Enable the **user-name** context
Context **configure** [subscriber-mgmt local-user-db string](#) [ppp host string](#) [host-identification user-name](#)
Tree [user-name](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

format *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Username format
Context **configure** [subscriber-mgmt local-user-db string](#) [ppp host string](#) [host-identification user-name format](#) *keyword*
Tree [format](#)
Default full
Options full, no-domain, domain-only
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Host username
Context **configure** [subscriber-mgmt local-user-db string](#) [ppp host string](#) [host-identification user-name name](#) *string*
Tree [name](#)

String Length	1 to 253
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

identification

Synopsis	Enable the identification context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification
Tree	identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification ancp-string <i>string</i>
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile-string *string*

Synopsis	Application profile string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification app-profile-string <i>string</i>
Tree	app-profile-string
String Length	1 to 16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category-map-name *string*

Synopsis	Category map name
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Context **configure** subscriber-mgmt local-user-db *string* ppp host *string* identification category-map-name *string*

Tree [category-map-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis Intermediate destination ID

Context **configure** subscriber-mgmt local-user-db *string* ppp host *string* identification int-dest-id *string*

Tree [int-dest-id](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-number *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Identification strings for the subscriber

Context **configure** subscriber-mgmt local-user-db *string* ppp host *string* identification option-number *number*

Tree [option-number](#)

Range 1 to 254

Default 254

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile-string *string*

Synopsis SLA profile string

Context **configure** subscriber-mgmt local-user-db *string* ppp host *string* identification sla-profile-string *string*

Tree [sla-profile-string](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spi-sharing-group-id *number*

Synopsis SPI sharing group ID
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [identification](#) [spi-sharing-group-id](#) *number*
Tree [spi-sharing-group-id](#)
Range 0 to 65535
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile-string *string*

Synopsis Sub profile string
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [identification](#) [sub-profile-string](#) *string*
Tree [sub-profile-string](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*

Synopsis Subscriber ID
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [identification](#) [subscriber-id](#) *string*
Tree [subscriber-id](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis	Enter the address context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 address
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address *keyword*

Synopsis	Use gi-address to select a pool with the given scope
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 address gi-address <i>keyword</i>
Tree	gi-address
Options	subnet-scope, pool-scope
Notes	The following elements are part of a choice: gi-address , (ip-address and prefix-length), pool , or use-pool-from-client .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	Fixed IPv4 address of the host
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 address ip-address <i>string</i>
Tree	ip-address
Notes	The following elements are part of a choice: gi-address , (ip-address and prefix-length), pool , or use-pool-from-client .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool

Synopsis Enable the **pool** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [ipv4](#) [address](#) [pool](#)

Tree [pool](#)

Notes The following elements are part of a choice: **gi-address**, (**ip-address** and **prefix-length**), **pool**, or **use-pool-from-client**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis Delimiter character to combine primary and secondary pool names

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [ipv4](#) [address](#) [pool](#) [delimiter](#) *string*

Tree [delimiter](#)

String Length 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary *string*

Synopsis Primary pool name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [ipv4](#) [address](#) [pool](#) [primary](#) *string*

Tree [primary](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secondary *string*

Synopsis Secondary pool name

Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 address pool secondary <i>string</i>
Tree	secondary
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv4 host address prefix length
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 address prefix-length <i>number</i>
Tree	prefix-length
Range	1 to 32
Default	32
Notes	The following elements are part of a choice: gi-address , (ip-address and prefix-length), pool , or use-pool-from-client .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 address use-pool-from-client
Tree	use-pool-from-client
Notes	The following elements are part of a choice: gi-address , (ip-address and prefix-length), pool , or use-pool-from-client .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter character to combine primary and secondary pool names
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 address use-pool-from-client delimiter <i>string</i>
Tree	delimiter

String Length 1
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-df-bit *boolean*

Synopsis Ignore the DF bit in the IPv4 header when fragmenting

Context **configure** [subscriber-mgmt local-user-db string ppp host string ipv4 ignore-df-bit boolean](#)

Tree [ignore-df-bit](#)

Description When configured to **true**, this command ignores the DF bit in the IPv4 header for frames egressing the subscriber interface. The frames are fragmented according the applicable egress MTU. The DF bit is reset for frames that are fragmented.

This command applies to PPPoE PTA and L2TP LNS frames only. It is not applicable for L2TP LAC frames.

When configured to **false**, this command does not ignore the DF bit in the IPv4 header for frames egressing the subscriber interface.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [[number](#)] (*number | keyword*)

Synopsis Enter the **option** list instance

Context **configure** [subscriber-mgmt local-user-db string ppp host string ipv4 option \(number | keyword\)](#)

Tree [option](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number | keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** [subscriber-mgmt local-user-db string ppp host string ipv4 option \(number | keyword\)](#)

Tree [option](#)

Range 1 to 254

Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure subscriber-mgmt local-user-db string ppp host string ipv4 option (number keyword) ascii-string string
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option as time duration
Context	configure subscriber-mgmt local-user-db string ppp host string ipv4 option (number keyword) duration number
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option.
Context	configure subscriber-mgmt local-user-db string ppp host string ipv4 option (number keyword) empty
Tree	empty

Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 option (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i>
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 option (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i>
Tree	netbios-node-type

Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	Fixed IPv6 address of the host
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-pool *string*

Synopsis	IPv6 address pool name
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 address-pool <i>string</i>
Tree	address-pool
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix *string*

Synopsis	IPv6 delegated prefix of this host
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 delegated-prefix <i>string</i>

Tree	delegated-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-length *number*

Synopsis	Delegated prefix length
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 delegated-prefix-length <i>number</i>
Tree	delegated-prefix-length
Range	48 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-pool *string*

Synopsis	Delegated prefix pool
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 delegated-prefix-pool <i>string</i>
Tree	delegated-prefix-pool
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-ipv6cp *boolean*

Synopsis	Force IPv6 control protocol
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 force-ipv6cp <i>boolean</i>
Tree	force-ipv6cp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis	The number of the DHCPv6 option.
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>)
Tree	option
Range	23
Options	dns-server
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: hex-string or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i>

Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: hex-string or ipv6-address . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-advertisement-policy *string*

Synopsis	IPv6 router advertisement policy
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 router-advertisement-policy <i>string</i>
Tree	router-advertisement-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

slaac-prefix *string*

Synopsis	IPv6 SLAAC prefix of this host
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 slaac-prefix <i>string</i>
Tree	slaac-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

slaac-prefix-pool *string*

Synopsis	IPv6 SLAAC prefix pool of this host
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 slaac-prefix-pool <i>string</i>
Tree	slaac-prefix-pool
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timers

Synopsis	Enter the timers context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 timers
Tree	timers
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number* | *keyword*)

Synopsis	Time for a lease to remain preferred
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 timers preferred-lifetime (<i>number</i> <i>keyword</i>)
Tree	preferred-lifetime
Range	300 to 315446399
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind *number*

Synopsis	Rebind timer (T2)
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 timers rebind <i>number</i>
Tree	rebind
Range	0 to 1209600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew *number*

Synopsis	Renew timer (T1)
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 timers renew <i>number</i>

Tree	renew
Range	0 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis	Time for a lease to remain valid
Context	configure subscriber-mgmt local-user-db string ppp host string ipv6 timers valid-lifetime (<i>number</i> <i>keyword</i>)
Tree	valid-lifetime
Range	300 to 315446399
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis	Enter the l2tp context
Context	configure subscriber-mgmt local-user-db string ppp host string l2tp
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group

Synopsis	Enable the group context
Context	configure subscriber-mgmt local-user-db string ppp host string l2tp group
Tree	group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	L2TP tunnel group name
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> l2tp group name <i>string</i>
Tree	name
String Length	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*

Synopsis	Service ID for the L2TP tunnel group
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> l2tp group service-id <i>number</i>
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

Ins-interface

Synopsis	Enable the Ins-interface context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> Ins-interface
Tree	Ins-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	IP interface name
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> Ins-interface name <i>string</i>
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*

Synopsis Service ID

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ppp** **host** *string* **lns-interface** **service-id** *number*

Tree **service-id**

Range 1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mld-import [**policy-name**] *string*

Synopsis Add a list entry for **mld-import**

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ppp** **host** *string* **mld-import** *string*

Tree **mld-import**

Max. 14

Instances

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[policy-name] *string*

Synopsis MLD import policy used to control the multicast group

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ppp** **host** *string* **mld-import** *string*

Tree **mld-import**

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap-defaults

Synopsis	Enter the msap-defaults context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> msap-defaults
Tree	msap-defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface

Synopsis	Enable the group-interface context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> msap-defaults group-interface
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	IP interface name
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> msap-defaults group-interface name <i>string</i>
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix *keyword*

Synopsis	Prefix to the IP interface name
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> msap-defaults group-interface prefix <i>keyword</i>
Tree	prefix
Options	port-id
Notes	The following elements are part of a choice: prefix or suffix .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis Suffix for the group interface

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) [group-interface](#) **suffix** *keyword*

Tree [suffix](#)

Options port-id

Notes The following elements are part of a choice: **prefix** or **suffix**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *string*

Synopsis MSAP policy

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) **policy** *string*

Tree [policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service *number*

Synopsis Service ID

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) **service** *number*

Tree [service](#)

Range 1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado-delay *number*

Synopsis	Delay timeout before sending a PADO
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> pado-delay <i>number</i>
Tree	pado-delay
Range	1 to 30
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password

Synopsis	Enter the password context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> password
Tree	password
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

chap *string*

Synopsis	CHAP protocol
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> password chap <i>string</i>
Tree	chap
String Length	1 to 115
Notes	The following elements are part of a choice: chap , ignore , or pap .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore

Synopsis	Ignore the PAP and CHAP passwords
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> password ignore
Tree	ignore
Notes	The following elements are part of a choice: chap , ignore , or pap .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pap string

Synopsis PAP for the password
Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [password](#) [pap](#) [string](#)
Tree [pap](#)
String Length 1 to 115
Notes The following elements are part of a choice: **chap**, **ignore**, or **pap**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-policy-parameters

Synopsis Enter the **ppp-policy-parameters** context
Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [ppp-policy-parameters](#)
Tree [ppp-policy-parameters](#)
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-sessions-per-mac number

Synopsis Maximum number of sessions per MAC address
Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [ppp-policy-parameters](#) [max-sessions-per-mac](#) [number](#)
Tree [max-sessions-per-mac](#)
Description This command sets the maximum PPP sessions that can be opened for a specified MAC address.
Range 1 to 8191
Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy

Synopsis Enter the **radius-accounting-policy** context
Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [radius-accounting-policy](#)

Tree [radius-accounting-policy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duplicate *string*

Synopsis RADIUS accounting policy for generating duplicate accounting information
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [radius-accounting-policy](#)
[duplicate](#) *string*
Tree [duplicate](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis RADIUS accounting policy name
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [radius-accounting-policy](#)
[name](#) *string*
Tree [name](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retail-service-id *number*

Synopsis Configure the retail service-id
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [retail-service-id](#) *number*
Tree [retail-service-id](#)
Range 1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip-policy *string*

Synopsis	RIP policy
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> rip-policy <i>string</i>
Tree	rip-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

steering-profile *string*

Synopsis	Steering profile
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> steering-profile <i>string</i>
Tree	steering-profile
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

to-client-options

Synopsis	Enter the to-client-options context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> to-client-options
Tree	to-client-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the ipv6-option list instance
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>)
Tree	ipv6-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>)
Tree	ipv6-option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i>
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask type *keyword*

Synopsis	Enter the mask list instance
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp mask type <i>keyword</i>
Tree	mask
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Matching type to identify a host
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp mask type <i>keyword</i>
Tree	mask
Options	circuit-id, mac, remote-id, user-name, service-name, sap-id
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix

Synopsis	Enable the prefix context
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp mask type <i>keyword</i> prefix
Tree	prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis	PPP mask prefix length
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp mask type <i>keyword</i> prefix length <i>number</i>
Tree	length
Range	1 to 127
Notes	The following elements are part of a mandatory choice: length or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Prefix string
Context	configure subscriber-mgmt local-user-db string ppp mask type keyword prefix string string
Tree	string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: length or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix

Synopsis	Enable the suffix context
Context	configure subscriber-mgmt local-user-db string ppp mask type keyword suffix
Tree	suffix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis	PPP mask suffix length
Context	configure subscriber-mgmt local-user-db string ppp mask type keyword suffix length number
Tree	length
Range	1 to 127
Notes	The following elements are part of a mandatory choice: length or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Suffix string
Context	configure subscriber-mgmt local-user-db string ppp mask type keyword suffix string string
Tree	string

String Length	1 to 127
Notes	The following elements are part of a mandatory choice: length or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-list *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PPP host match type
Context	configure subscriber-mgmt local-user-db <i>string</i> ppp match-list <i>keyword</i>
Tree	match-list
Options	circuit-id, mac, remote-id, user-name, service-name, sap-id, encap-tag-range, derived-id, encap-tag-separate-range
Max. Instances	3
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mld-policy [*name*] *string*

Synopsis	Enter the mld-policy list instance
Context	configure subscriber-mgmt mld-policy <i>string</i>
Tree	mld-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Policy name
Context	configure subscriber-mgmt mld-policy <i>string</i>
Tree	mld-policy
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt mld-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress-rate-modify

Synopsis	Enter the egress-rate-modify context
Context	configure subscriber-mgmt mld-policy <i>string</i> egress-rate-modify
Tree	egress-rate-modify
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Maximum total rate for all subscriber egress queues
Context	configure subscriber-mgmt mld-policy <i>string</i> egress-rate-modify agg-rate
Tree	agg-rate
Description	This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.
Notes	The following elements are part of a choice: agg-rate or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Scheduler to be applied for rate modification
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Context	configure subscriber-mgmt mld-policy <i>string</i> egress-rate-modify scheduler <i>string</i>
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: agg-rate or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fast-leave *boolean*

Synopsis	Enable fast leave
Context	configure subscriber-mgmt mld-policy <i>string</i> fast-leave <i>boolean</i>
Tree	fast-leave
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	configure subscriber-mgmt mld-policy <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure subscriber-mgmt mld-policy <i>string</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis Maximum number of groups for this interface
Context **configure** **subscriber-mgmt** **mld-policy** *string* **maximum-number-groups** *number*
Tree [maximum-number-groups](#)
Range 1 to 16000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis Maximum number of sources that are allowed per group
Context **configure** **subscriber-mgmt** **mld-policy** *string* **maximum-number-sources** *number*
Tree [maximum-number-sources](#)
Range 1 to 1000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis Time between two consecutive host-query messages
Context **configure** **subscriber-mgmt** **mld-policy** *string* **query-interval** *number*
Tree [query-interval](#)
Range 2 to 1024
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis Time between group-specific query messages
Context **configure** **subscriber-mgmt** **mld-policy** *string* **query-last-member-interval** *number*
Tree [query-last-member-interval](#)

Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure subscriber-mgmt mld-policy <i>string</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redirection-policy *reference*

Synopsis	Multicast redirection action applied to the subscriber
Context	configure subscriber-mgmt mld-policy <i>string</i> redirection-policy <i>reference</i>
Tree	redirection-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

replication *keyword*

Synopsis	Multicast replication mode for subscriber multicast
Context	configure subscriber-mgmt mld-policy <i>string</i> replication <i>keyword</i>
Tree	replication
Default	per-sap
Options	per-sap, per-host, per-spi
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
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Context	configure subscriber-mgmt mld-policy <i>string</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

static

Synopsis	Enter the static context
Context	configure subscriber-mgmt mld-policy <i>string</i> static
Tree	static
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group [group-address] *string*

Synopsis	Enter the group list instance
Context	configure subscriber-mgmt mld-policy <i>string</i> static group <i>string</i>
Tree	group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[group-address] *string*

Synopsis	Group address of multicast channel
Context	configure subscriber-mgmt mld-policy <i>string</i> static group <i>string</i>
Tree	group
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source [source-address] *string*

Synopsis	Add a list entry for source
Context	configure subscriber-mgmt mld-policy <i>string</i> static group <i>string</i> source <i>string</i>

Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[source-address] *string*

Synopsis	Source IP address
Context	configure subscriber-mgmt mld-policy <i>string</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

starg

Synopsis	any source address (*,G)
Context	configure subscriber-mgmt mld-policy <i>string</i> static group <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-multicast-destination-mac *boolean*

Synopsis	Use multicast destination mac address for outgoing traffic.
Context	configure subscriber-mgmt mld-policy <i>string</i> use-multicast-destination-mac <i>boolean</i>
Tree	use-multicast-destination-mac
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	MLD protocol version
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Context	configure subscriber-mgmt mld-policy <i>string</i> <i>version</i> <i>keyword</i>
Tree	<i>version</i>
Default	2
Options	1, 2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap-policy [*name*] *string*

Synopsis	Enter the msap-policy list instance
Context	configure subscriber-mgmt msap-policy <i>string</i>
Tree	<i>msap-policy</i>
Max. Instances	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis	Managed SAP policy name
Context	configure subscriber-mgmt msap-policy <i>string</i>
Tree	<i>msap-policy</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpu-protection

Synopsis	Enter the cpu-protection context
Context	configure subscriber-mgmt msap-policy <i>string</i> cpu-protection
Tree	<i>cpu-protection</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

ip-src-monitoring

Synopsis	Apply the IP source monitoring
Context	configure subscriber-mgmt msap-policy <i>string</i> cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: ip-src-monitoring or mac-monitoring .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

mac-monitoring

Synopsis	Apply the per-source rate limit
Context	configure subscriber-mgmt msap-policy <i>string</i> cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: ip-src-monitoring or mac-monitoring .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

policy-id *reference*

Synopsis	CPM protection policy
Context	configure subscriber-mgmt msap-policy <i>string</i> cpu-protection policy-id <i>reference</i>
Tree	policy-id
Reference	configure system security cpu-protection policy <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt msap-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *string*

Synopsis	Distributed CPU protection policy
Context	configure subscriber-mgmt msap-policy <i>string</i> dist-cpu-protection <i>string</i>
Tree	dist-cpu-protection
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ies-vprn-only-sap-parameters

Synopsis	Enter the ies-vprn-only-sap-parameters context
Context	configure subscriber-mgmt msap-policy <i>string</i> ies-vprn-only-sap-parameters
Tree	ies-vprn-only-sap-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis	Anti-spoof filtering for the MSAP
Context	configure subscriber-mgmt msap-policy <i>string</i> ies-vprn-only-sap-parameters anti-spoof <i>keyword</i>
Tree	anti-spoof
Default	source-ip-and-mac-addr
Options	source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure subscriber-mgmt msap-policy <i>string</i> ies-vprn-only-sap-parameters egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure subscriber-mgmt msap-policy <i>string</i> ies-vprn-only-sap-parameters egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	QoS policy ID or name to associate with the MSAPs
Context	configure subscriber-mgmt msap-policy <i>string</i> ies-vprn-only-sap-parameters egress qos policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure subscriber-mgmt msap-policy <i>string</i> ies-vprn-only-sap-parameters ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure subscriber-mgmt msap-policy <i>string</i> ies-vprn-only-sap-parameters ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	QoS policy ID or name to associate with the MSAPs
Context	configure subscriber-mgmt msap-policy <i>string</i> ies-vprn-only-sap-parameters ingress qos policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis	Queuing type
Context	configure subscriber-mgmt msap-policy <i>string</i> ies-vprn-only-sap-parameters ingress qos queuing-type <i>keyword</i>
Tree	queuing-type
Default	shared
Options	shared, service
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-host-tracking

Synopsis	Enter the igmp-host-tracking context
Context	configure subscriber-mgmt msap-policy <i>string</i> igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	configure subscriber-mgmt msap-policy <i>string</i> igmp-host-tracking expiry-time <i>number</i>
Tree	expiry-time
Range	1 to 65535
Units	seconds

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis Import policy that filters IGMP packets
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [igmp-host-tracking](#) [import-policy](#) *reference*
Tree [import-policy](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis Maximum number of multicast groups to be tracked per group
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [igmp-host-tracking](#) [maximum-number-group-sources](#) *number*
Tree [maximum-number-group-sources](#)
Range 1 to 32000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis Maximum number of multicast groups to be tracked
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [igmp-host-tracking](#) [maximum-number-groups](#) *number*
Tree [maximum-number-groups](#)
Range 1 to 16000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis Maximum number of multicast sources to be tracked

Context	configure subscriber-mgmt msap-policy <i>string</i> igmp-host-tracking maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag-link-map-profile *number*

Synopsis	Map profile for LAG link
Context	configure subscriber-mgmt msap-policy <i>string</i> lag-link-map-profile <i>number</i>
Tree	lag-link-map-profile
Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sticky-msaps *boolean*

Synopsis	Prevent MSAPs from being deleted
Context	configure subscriber-mgmt msap-policy <i>string</i> sticky-msaps <i>boolean</i>
Tree	sticky-msaps
Description	<p>When configured to true, MSAPs associated with the specified MSAP policy are not removed unless a manual clear command is issued.</p> <p>This feature is useful if historical statistics records on MSAPs need to be retained. It can also reduce host creation time because the MSAP is already created.</p> <p>When configured to false, MSAPs can be automatically removed when a host creation fails or when a subscriber is no longer associated with the MSAP, for example, when a subscriber ends the session.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sticky-msaps-idle-timeout *number*

Synopsis	Timeout used for sticky MSAPs
Context	configure subscriber-mgmt msap-policy <i>string</i> sticky-msaps-idle-timeout <i>number</i>
Tree	sticky-msaps-idle-timeout

Description	<p>This command configures the timeout interval which determines when idle sticky MSAPs can be removed.</p> <p>By default, MSAPs are deleted shortly after the subscriber session ends. The system is prevented from automatically deleting sticky MSAPs after the session ends, allowing for a faster subsequent subscriber connection without MSAP creation; however, sticky MSAPs require SAP resources. The configuration of this command allows for the removal of sticky MSAPs that are idle for the specified time period.</p> <p>When unconfigured, no timeout interval is applied.</p>
Range	5 to 604800
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-sla-mgmt

Synopsis	Enter the sub-sla-mgmt context
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt
Tree	sub-sla-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the defaults context
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id

Synopsis Enter the **int-dest-id** context

Context **configure subscriber-mgmt msap-policy string sub-sla-mgmt defaults int-dest-id**

Tree [int-dest-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string string

Synopsis String to be used as the int-dest-id

Context **configure subscriber-mgmt msap-policy string sub-sla-mgmt defaults int-dest-id string string**

Tree [string](#)

String Length 1 to 32

Notes The following elements are part of a choice: **string** or **top-q-tag**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

top-q-tag

Synopsis Derive string based on top most delineating Dot1Q tag from SAP's encapsulation

Context **configure subscriber-mgmt msap-policy string sub-sla-mgmt defaults int-dest-id top-q-tag**

Tree [top-q-tag](#)

Notes The following elements are part of a choice: **string** or **top-q-tag**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile reference

Synopsis Default SLA profile

Context **configure subscriber-mgmt msap-policy string sub-sla-mgmt defaults sla-profile reference**

Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber profile
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the subscriber-id context
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis	Autogenerated sub-id as default sub-id
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults subscriber-id auto-id
Tree	auto-id
Notes	The following elements are part of a choice: auto-id , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	SAP-id as default sub-id
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Context	configure subscriber-mgmt msap-policy string sub-sla-mgmt defaults subscriber-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: auto-id , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string string

Synopsis	String to be used as default sub-id
Context	configure subscriber-mgmt msap-policy string sub-sla-mgmt defaults subscriber-id string string
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: auto-id , sap-id , or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-sub-parameters

Synopsis	Enter the single-sub-parameters context
Context	configure subscriber-mgmt msap-policy string sub-sla-mgmt single-sub-parameters
Tree	single-sub-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

non-sub-traffic-profiles

Synopsis	Enable the non-sub-traffic-profiles context
Context	configure subscriber-mgmt msap-policy string sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles
Tree	non-sub-traffic-profiles
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber profile
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles sub-profile <i>reference</i>
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*

Synopsis	Subscriber identification string
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles subscriber-id <i>string</i>

Tree	subscriber-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profiled-traffic-only *boolean*

Synopsis	Enable/disable profiled-traffic-only.
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt single-sub-parameters profiled-traffic-only <i>boolean</i>
Tree	profiled-traffic-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis	Configure subscriber identification policy
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt sub-ident-policy <i>reference</i>
Tree	sub-ident-policy
Reference	configure subscriber-mgmt sub-ident-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit (*keyword* | *number*)

Synopsis	Maximum subscribers on this SAP
Context	configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt subscriber-limit (<i>keyword</i> <i>number</i>)
Tree	subscriber-limit
Range	1 to 131071
Default	1
Options	no-limit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vpls-only-sap-parameters

Synopsis	Enter the vpls-only-sap-parameters context
Context	configure subscriber-mgmt msap-policy string vpls-only-sap-parameters
Tree	vpls-only-sap-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-host

Synopsis	Enter the arp-host context
Context	configure subscriber-mgmt msap-policy string vpls-only-sap-parameters arp-host
Tree	arp-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis	Maximum number of ARP hosts
Context	configure subscriber-mgmt msap-policy string vpls-only-sap-parameters arp-host host-limit number
Tree	host-limit
Range	1 to 131071
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis	Minimum authentication interval
Context	configure subscriber-mgmt msap-policy string vpls-only-sap-parameters arp-host min-auth-interval number
Tree	min-auth-interval
Range	1 to 6000
Default	15
Units	minutes

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-reply-agent *keyword*

Synopsis Enable arp-reply-agent function
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [arp-reply-agent](#) *keyword*
Tree [arp-reply-agent](#)
Options true, with-subscr-ident
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp

Synopsis Enter the **dhcp** context
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp](#)
Tree [dhcp](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-populate *number*

Synopsis Maximum number of DHCPv4 leases per managed SAP
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp](#) [lease-populate](#) *number*
Tree [lease-populate](#)
Range 1 to 131071
Default 1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-82

Synopsis Enter the **option-82** context
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp](#) [option-82](#)

Tree	option-82
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	DHCP relay forwarding policy action
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 action <i>keyword</i>
Tree	action
Default	keep
Options	replace, drop, keep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *keyword*

Synopsis	Circuit ID suboption of the IPOE relay
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 circuit-id <i>keyword</i>
Tree	circuit-id
Default	ascii-tuple
Options	none, ascii-tuple, vlan-ascii-tuple
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enter the remote-id context
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 remote-id
Tree	remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac

Synopsis	MAC address of the remote end that is encoded in the suboption
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: mac or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	String to encode in the suboption
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 remote-id <i>string</i> string
Tree	string
String Length	1 to 32
Notes	The following elements are part of a choice: mac or string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-specific-option

Synopsis	Enter the vendor-specific-option context
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac-address *boolean*

Synopsis	Send MAC address in Nokia vendor-specific sub-option
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i>
Tree	client-mac-address
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis Send SAP ID in the Nokia vendor-specific sub-option
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp option-82](#)
[vendor-specific-option](#) [sap-id](#) *boolean*
Tree [sap-id](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *boolean*

Synopsis Send service ID in the Nokia vendor-specific sub-option
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp option-82](#)
[vendor-specific-option](#) [service-id](#) *boolean*
Tree [service-id](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis String in the sub-option of the DHCP relay packet
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp option-82](#)
[vendor-specific-option](#) [string](#) *string*
Tree [string](#)
Description This command specifies the string in the Nokia vendor-specific sub-option of the DHCP relay packet.
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-id *boolean*

Synopsis	Send system ID in the Nokia vendor-specific sub-option
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 vendor-specific-option system-id <i>boolean</i>
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the proxy-server context
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp proxy-server admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp proxy-server emulated-server <i>string</i>
Tree	emulated-server
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis Enter the **lease-time** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp proxy-server](#) **lease-time**

Tree [lease-time](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-override *boolean*

Synopsis Use lease time information provided by RADIUS server

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp proxy-server](#) **lease-time** [radius-override](#) *boolean*

Tree [radius-override](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis DHCP lease time

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp proxy-server](#) **lease-time** [value](#) *number*

Tree [value](#)

Range 300 to 315446399

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis Enter the **egress** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) **egress**

Tree [egress](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [egress](#) [qos](#)
Tree [qos](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis QoS policy ID or name to associate with the MSAPs
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [egress](#) [qos](#)
[policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos](#) [sap-egress](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-snooping

Synopsis Enter the **igmp-snooping** context
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [igmp-snooping](#)
Tree [igmp-snooping](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fast-leave *boolean*

Synopsis Allow IGMP fast leave processing
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [igmp-snooping](#)
[fast-leave](#) *boolean*
Tree [fast-leave](#)

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups (*keyword* | *number*)

Synopsis	Maximum number of multicast groups
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping maximum-number-groups (<i>keyword</i> <i>number</i>)
Tree	maximum-number-groups
Range	1 to 16000
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the mcac context
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac
Tree	mcac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the bandwidth context
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	MCAC interface policy name
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Context	configure subscriber-mgmt msap-policy string vpls-only-sap-parameters igmp-snooping mcac interface-policy reference
Tree	interface-policy
Reference	configure mcac interface-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mc-constraints

Synopsis	Enter the mc-constraints context
Context	configure subscriber-mgmt msap-policy string vpls-only-sap-parameters igmp-snooping mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level [[level-id](#)] *number*

Synopsis	Enter the level list instance
Context	configure subscriber-mgmt msap-policy string vpls-only-sap-parameters igmp-snooping mcac mc-constraints level number
Tree	level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[level-id](#)] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure subscriber-mgmt msap-policy string vpls-only-sap-parameters igmp-snooping mcac mc-constraints level number
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac mc-constraints level <i>number</i> bandwidth <i>number</i>
Tree	bandwidth
Max. Range	0 to 4294967295
Default	1
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number-down [**number-lag-port-down**] *number*

Synopsis	Enter the number-down list instance
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac mc-constraints number-down <i>number</i>
Tree	number-down
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number-lag-port-down**] *number*

Synopsis	Number of lag ports down
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac mc-constraints number-down <i>number</i>
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level *number*

Synopsis	Level to be associated with this number of lag ports that are down
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Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac mc-constraints number-down <i>number level number</i>
Tree	level
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight while calculating Multicast CAC constraints
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac mc-constraints use-lag-port-weight <i>boolean</i>
Tree	use-lag-port-weight
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac policy <i>reference</i>
Tree	policy
Reference	configure mcac policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mvr

Synopsis	Enter the mvr context
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mvr
Tree	mvr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

from-vpls *reference*

Synopsis	MVR VPLS from which the multicast channels are taken
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mvr from-vpls <i>reference</i>
Tree	from-vpls
Reference	configure service vpls <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping send-queries <i>boolean</i>
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP version
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Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping version <i>keyword</i>
Tree	version
Default	3
Options	1, 2, 3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	QoS policy ID or name to associate with the MSAPs
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters ingress qos policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis	Queuing type
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters ingress qos queuing-type <i>keyword</i>
Tree	queuing-type
Default	multipoint-shared
Options	multipoint-shared, service
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-da-hashing *boolean*

Synopsis	Include hashing on MAC DA ISO subscriber ID
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters mac-da-hashing <i>boolean</i>
Tree	mac-da-hashing
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

split-horizon-group *string*

Synopsis	Name of the split horizon group for the MSAP
Context	configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters split-horizon-group <i>string</i>
Tree	split-horizon-group
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pfcp

Synopsis	Enter the pfcp context
Context	configure subscriber-mgmt pfcp
Tree	pfcp
Introduced	20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

association *[name] string*

Synopsis Enter the **association** list instance

Context **configure subscriber-mgmt pfcf association string**

Tree [association](#)

Description Commands in this context configure a PFCP association towards a BNG CUPS CPF.

Max. Instances 1

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis PFCP association name

Context **configure subscriber-mgmt pfcf association string**

Tree [association](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the PFCP association

Context **configure subscriber-mgmt pfcf association string admin-state keyword**

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

association-release-timeout (*keyword | number*)

Synopsis	Time to wait for a response to a release request
Context	configure subscriber-mgmt pfcg association <i>string</i> association-release-timeout (<i>keyword number</i>)
Tree	association-release-timeout
Description	<p>This command configures the time to wait to clean up the PFCP association after it has been disabled. After administratively disabling a PFCP association, the system requests a shutdown to the BNG CPF. If the BNG CPF does not gracefully remove the association before expiry of the timer, the full association and all related sessions are forcefully removed.</p> <p>The PFCP protocol encoding does not allow the full range of configured values. The system automatically rounds up the configured value to the nearest value allowed by the protocol. For more information about the protocol encoding, see 3GPP TS 29.244 8.2.78.1.</p>
Range	30 to 3600
Default	3600
Units	seconds
Options	none
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

association-setup-retry *number*

Synopsis	Time to wait between successive association attempts
Context	configure subscriber-mgmt pfcg association <i>string</i> association-setup-retry <i>number</i>
Tree	association-setup-retry
Description	This command configures the time to wait before attempting a retry after a PFCP association setup fails.
Range	1 to 36000
Default	10
Units	seconds
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd-expedited-path-down *boolean*

Synopsis	Track BFD sessions to expedite PFCP path down detection
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Context	configure subscriber-mgmt pfcg association string bfd-expedited-path-down boolean
Tree	bfd-expedited-path-down
Description	When configured to true , the system tracks BFD sessions to expedite PFCP path down detection on BFD down events. This requires the configuration of path-restoration-time .
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure subscriber-mgmt pfcg association string description string
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

heartbeat

Synopsis	Enter the heartbeat context
Context	configure subscriber-mgmt pfcg association string heartbeat
Tree	heartbeat
Description	Commands in this context configure the parameters for transmitting PFCP Heartbeat Request messages to a PFCP peer.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval number

Synopsis	Time between two successful heartbeat request messages
Context	configure subscriber-mgmt pfcg association string heartbeat interval number
Tree	interval
Range	5 to 180
Default	60
Units	seconds

Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retries *number*

Synopsis	Number of retries after the heartbeat timeout expires
Context	configure subscriber-mgmt pfcg association <i>string</i> heartbeat retries <i>number</i>
Tree	retries
Description	This command configures the number of times the same Heartbeat Request is sent before the PFCP path to the peer is considered down.
Range	0 to 15
Default	4
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time the system waits for a heartbeat response message
Context	configure subscriber-mgmt pfcg association <i>string</i> heartbeat timeout <i>number</i>
Tree	timeout
Description	This command configures the timeout after which a Heartbeat Request is considered unanswered.
Range	1 to 20
Default	5
Units	seconds
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface

Synopsis	Enter the interface context
Context	configure subscriber-mgmt pfcg association <i>string</i> interface
Tree	interface
Description	Commands in this context configure the interface from which PFCP messages will be sent and on which PFCP messages will be received.
Introduced	20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the interface to use for the association
Context **configure** [subscriber-mgmt pfcg association](#) *string* [interface name](#) *string*
Tree [name](#)
String Length 1 to 32
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Router context for the PFCP association
Context **configure** [subscriber-mgmt pfcg association](#) *string* [interface router-instance](#) *string*
Tree [router-instance](#)
Description This command configures the name of the interface, along with its routing instance, used as binding interface for PFCP.
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis Enter the **nat** context
Context **configure** [subscriber-mgmt pfcg association](#) *string* **nat**
Tree [nat](#)
Description Commands in this context configure NAT or WLAN-GW groups for BNG CUPS PFCP association.
Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*

Synopsis NAT group used for CUPS NAT functionality
Context **configure** [subscriber-mgmt pfcg association](#) *string* [nat nat-group](#) *reference*
Tree [nat-group](#)
Reference **configure** [isa nat-group](#) *number*
Notes The following elements are part of a choice: **nat-group** or **wlan-gw-group**.
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

Synopsis WLAN gateway group used for CUPS NAT functionality
Context **configure** [subscriber-mgmt pfcg association](#) *string* [nat wlan-gw-group](#) *reference*
Tree [wlan-gw-group](#)
Reference **configure** [isa wlan-gw-group](#) *number*
Notes The following elements are part of a choice: **nat-group** or **wlan-gw-group**.
Introduced 20.10.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

node-id

Synopsis Enter the **node-id** context
Context **configure** [subscriber-mgmt pfcg association](#) *string* [node-id](#)
Tree [node-id](#)
Description Commands in this context configure the UPF Node Identifier as sent in PFCP. It can either be configured to use the linked interface source IP or a preconfigured FQDN.
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fqdn string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN that identifies the local system for PFCP
Context	configure subscriber-mgmt pfcp association string node-id fqdn string
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: fqdn or use-ip-address .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-ip-address



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use the IP address of interface for the association
Context	configure subscriber-mgmt pfcp association string node-id use-ip-address
Tree	use-ip-address
Description	When configured, the binding interface address is used as identification of the local system for PFCP.
Notes	The following elements are part of a choice: fqdn or use-ip-address .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

path-restoration-time number

Synopsis	Time to wait before declaring the path down
Context	configure subscriber-mgmt pfcp association string path-restoration-time number
Tree	path-restoration-time
Description	This command configures the time for which sessions are kept after a PFCP path failure is detected. If the path recovers without a restart before this time expires, the sessions are kept. Otherwise, they are removed.
Range	5 to 1440

Units	minutes
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer

Synopsis	Enter the peer context
Context	configure subscriber-mgmt pfcg association <i>string</i> peer
Tree	peer
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PFCP peer IP address
Context	configure subscriber-mgmt pfcg association <i>string</i> peer ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy to process PFCP messages
Context	configure subscriber-mgmt pfcg association <i>string</i> python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx

Synopsis	Enter the tx context
Context	configure subscriber-mgmt pfcg association string tx
Tree	tx
Description	Commands in this context configure how PFCP messages are sent.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retries number

Synopsis	Number of retries
Context	configure subscriber-mgmt pfcg association string tx retries number
Tree	retries
Description	This command configures the number of times a message is retried before it is considered lost, also known as N1.
Range	0 to 7
Default	3
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout number

Synopsis	Retransmission timer
Context	configure subscriber-mgmt pfcg association string tx timeout number
Tree	timeout
Description	This command configures the time after which a message is considered unanswered, also known as T1.
Range	1 to 30
Default	5
Units	seconds
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl number

Synopsis	TTL value in the IP header of egress PFCP packets
Context	configure subscriber-mgmt pfc association <i>string tx ttl number</i>
Tree	ttl
Range	1 to 255
Default	255
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up-resiliency

Synopsis	Enter the up-resiliency context
Context	configure subscriber-mgmt pfc up-resiliency
Tree	up-resiliency
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pim-policy [name] string

Synopsis	Enter the pim-policy list instance
Context	configure subscriber-mgmt pim-policy <i>string</i>
Tree	pim-policy
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	Policy name
Context	configure subscriber-mgmt pim-policy <i>string</i>
Tree	pim-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [subscriber-mgmt pim-policy](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-policy [[name](#)] *string*

Synopsis Enter the **ppp-policy** list instance
Context **configure** [subscriber-mgmt ppp-policy](#) *string*
Tree [ppp-policy](#)
Max. Instances 256
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis PPP policy name
Context **configure** [subscriber-mgmt ppp-policy](#) *string*
Tree [ppp-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-same-circuit-id-for-dhcp *boolean*

Synopsis Enable support for IPv4 address allocation on a SAP
Context **configure** [subscriber-mgmt ppp-policy](#) *string* [allow-same-circuit-id-for-dhcp](#) *boolean*

Tree	allow-same-circuit-id-for-dhcp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookies *boolean*

Synopsis	Enable/disable the use of AC-Cookie tags.
Context	configure subscriber-mgmt ppp-policy <i>string</i> cookies <i>boolean</i>
Tree	cookies
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pap-password *string*

Synopsis	Default PAP password to be used when the PPP client does not provide a password
Context	configure subscriber-mgmt ppp-policy <i>string</i> default-pap-password <i>string</i>
Tree	default-pap-password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-user-name *string*

Synopsis	Default username used for authentication
Context	configure subscriber-mgmt ppp-policy <i>string</i> default-user-name <i>string</i>
Tree	default-user-name
Description	This command configures the default username for authentication when not provided in PAP/CHAP authentication (no Name field in CHAP Response message or Peer0Id-Length=0 in PAP Authenticate-Request). The PPP session terminates when no username is provided in the PAP/CHAP authentication and no default username is configured.
String Length	1 to 253
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt ppp-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-ppp-mtu-gt-1492 *boolean*

Synopsis	Enable PPPoE MRU negotiations greater than 1492 bytes
Context	configure subscriber-mgmt ppp-policy <i>string</i> force-ppp-mtu-gt-1492 <i>boolean</i>
Tree	force-ppp-mtu-gt-1492
Description	<p>When configured to true, this command enables PPPoE MRU negotiations greater than 1492 bytes without the need to receive a “PPP-Max-Payload” tag in PADI/PADR from the client as defined in RFC 4638, <i>Accommodating a Maximum Transit Unit/ Maximum Receive Unit (MTU/MRU) Greater Than 1492 in the Point-to-Point Protocol over Ethernet (PPPoE)</i>.</p> <p>When configured to false, this command disables PPPoE MRU negotiations greater than 1492 bytes.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *boolean*

Synopsis	Allow IPCP subnet negotiation for PPPoE hosts
Context	configure subscriber-mgmt ppp-policy <i>string</i> ipcp-subnet-negotiation <i>boolean</i>
Tree	ipcp-subnet-negotiation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the keepalive context
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Context	configure subscriber-mgmt ppp-policy <i>string</i> keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-up-multiplier *number*

Synopsis	PPP keepalive multiplier
Context	configure subscriber-mgmt ppp-policy <i>string</i> keepalive hold-up-multiplier <i>number</i>
Tree	hold-up-multiplier
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPP keepalive interval
Context	configure subscriber-mgmt ppp-policy <i>string</i> keepalive interval <i>number</i>
Tree	interval
Range	4 to 300
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-identifier *boolean*

Synopsis	Ignore identifier values in the LCP Echo Reply
Context	configure subscriber-mgmt ppp-policy <i>string</i> lcp-ignore-identifier <i>boolean</i>
Tree	lcp-ignore-identifier
Description	When configured to true , BNG ignores the Identifier field of the Echo-Reply message and keeps the PPP session up. When configured to false , BNG does not ignore the identifier value, discards any incorrect messages, and the PPP session terminates because of the echo timeout.
Default	false

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-magic-numbers *boolean*

Synopsis Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [lcp-ignore-magic-numbers](#) *boolean*

Tree [lcp-ignore-magic-numbers](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-sessions-per-cid

Synopsis Enable the **max-sessions-per-cid** context

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [max-sessions-per-cid](#)

Tree [max-sessions-per-cid](#)

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-sessions-without-cid *boolean*

Synopsis Allow PPPoE sessions without an Agent Circuit ID

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [max-sessions-per-cid](#) [allow-sessions-without-cid](#) *boolean*

Tree [allow-sessions-without-cid](#)

Description When configured to **true**, PPPoE sessions without an Agent Circuit ID can be established on a SAP. The limit configured for the maximum number of sessions allowed per Agent Circuit ID does not apply to these sessions.

When configured to **false**, PPPoE sessions without an Agent Circuit ID are denied.

The command is valid only when a limit is configured for the maximum sessions per Agent Circuit ID on a SAP.

Default false

Introduced 20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

limit number

Synopsis	Maximum sessions per Agent Circuit ID and per SAP
Context	configure subscriber-mgmt ppp-policy string max-sessions-per-cid limit number
Tree	limit
Description	<p>This command configures the maximum number of PPPoE sessions that can be active with the same Agent Circuit ID on the same SAP or MSAP. This limit is enforced in the discovery phase, prior to PAP or CHAP authentication, based on the Agent Circuit ID sub-option present in the vendor-specific PPPoE access loop identification tag added in PADI and PADR messages by a PPPoE intermediate agent.</p> <p>PPPoE sessions without an Agent Circuit ID are not subject to the configured limit; however, sessions without an Agent Circuit ID can only be established when the allow-sessions-without-cid command is configured to true.</p>
Range	1 to 8190
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-sessions-per-mac number

Synopsis	Maximum number of sessions per MAC address
Context	configure subscriber-mgmt ppp-policy string max-sessions-per-mac number
Tree	max-sessions-per-mac
Description	<p>This command sets the maximum PPP sessions that can be opened for a specified MAC address.</p> <p>To enable IPv4 address allocation using the internal DHCPv4 client for multiple PPPoE sessions on a single SAP and having the same MAC address and circuit-ID, the optional CLI parameter allow-same-circuit-id-for-dhcp should be added. The SR OS local DHCP server detects the additional vendor-specific options inserted by the internal DHCPv4 client and use an extended unique key for lease allocation.</p>
Range	1 to 8191
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the mlppp context
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Context	configure subscriber-mgmt ppp-policy <i>string</i> mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

accept-mrru *boolean*

Synopsis	Accept multilink MRRU LCP option
Context	configure subscriber-mgmt ppp-policy <i>string</i> mlppp accept-mrru <i>boolean</i>
Tree	accept-mrru
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the endpoint context
Context	configure subscriber-mgmt ppp-policy <i>string</i> mlppp endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ip (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
Context	configure subscriber-mgmt ppp-policy <i>string</i> mlppp endpoint ip (<i>ipv4-address</i> <i>keyword</i>)
Tree	ip
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mac (*mac-address* | *keyword*)

Synopsis	Endpoint ID as a MAC address
Context	configure subscriber-mgmt ppp-policy <i>string</i> mlppp endpoint mac (<i>mac-address</i> <i>keyword</i>)
Tree	mac
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

short-sequence-numbers *boolean*

Synopsis	Request a peer to send short sequence numbers
Context	configure subscriber-mgmt ppp-policy <i>string</i> mlppp short-sequence-numbers <i>boolean</i>
Tree	short-sequence-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ncp-renegotiation *keyword*

Synopsis	Behavior for subsequent NCP renegotiation messages
Context	configure subscriber-mgmt ppp-policy <i>string</i> ncp-renegotiation <i>keyword</i>
Tree	ncp-renegotiation
Default	terminate-session
Options	ignore, terminate-session
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado-ac-name *string*

Synopsis	Access Concentrator name used in PPPoE PADO message
Context	configure subscriber-mgmt ppp-policy <i>string</i> pado-ac-name <i>string</i>
Tree	pado-ac-name
String Length	1 to 128

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado-delay *number*

Synopsis Delay timeout before sending a PADO
Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [pado-delay](#) *number*
Tree [pado-delay](#)
Range 1 to 30
Units deciseconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-authentication *keyword*

Synopsis PPP authentication protocol to negotiate
Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-authentication](#) *keyword*
Tree [ppp-authentication](#)
Default pref-chap
Options pap, chap, pref-chap, pref-pap
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-chap-challenge-length

Synopsis Enter the **ppp-chap-challenge-length** context
Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-chap-challenge-length](#)
Tree [ppp-chap-challenge-length](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis Maximum length for the PPP CHAP challenge
Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-chap-challenge-length](#) *max* *number*

Tree	max
Range	8 to 64
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min number

Synopsis	Minimum length for the PPP CHAP challenge
Context	configure subscriber-mgmt ppp-policy <i>string</i> ppp-chap-challenge-length <i>min number</i>
Tree	min
Range	8 to 64
Default	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-initial-delay boolean

Synopsis	Select delay timeout before starting the PPP stack
Context	configure subscriber-mgmt ppp-policy <i>string</i> ppp-initial-delay <i>boolean</i>
Tree	ppp-initial-delay
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-mtu number

Synopsis	Maximum PPP MTU size
Context	configure subscriber-mgmt ppp-policy <i>string</i> ppp-mtu <i>number</i>
Tree	ppp-mtu
Range	512 to 9212
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-options

Synopsis	Enter the ppp-options context
Context	configure subscriber-mgmt ppp-policy <i>string</i> ppp-options
Tree	ppp-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

custom-option [protocol](#) *keyword* [option-number](#) *number*

Synopsis	Enter the custom-option list instance
Context	configure subscriber-mgmt ppp-policy <i>string</i> ppp-options custom-option protocol <i>keyword</i> option-number <i>number</i>
Tree	custom-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[protocol](#) *keyword*

Synopsis	Protocol for the custom PPP option
Context	configure subscriber-mgmt ppp-policy <i>string</i> ppp-options custom-option protocol <i>keyword</i> option-number <i>number</i>
Tree	custom-option
Options	lcp, ipcp, ipv6cp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[option-number](#) *number*

Synopsis	PPP option number
Context	configure subscriber-mgmt ppp-policy <i>string</i> ppp-options custom-option protocol <i>keyword</i> option-number <i>number</i>
Tree	custom-option
Range	0 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis IP address of the custom PPP option

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-options](#) [custom-option](#) [protocol](#)
keyword [option-number](#) *number* [address](#) *string*

Tree [address](#)

Notes The following elements are part of a mandatory choice: **address**, **ascii-string**, **empty**, or **hex-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis ASCII string for the customer PPP option

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-options](#) [custom-option](#) [protocol](#)
keyword [option-number](#) *number* [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **address**, **ascii-string**, **empty**, or **hex-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis Configure an empty PPP option.

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-options](#) [custom-option](#) [protocol](#)
keyword [option-number](#) *number* [empty](#)

Tree [empty](#)

Notes The following elements are part of a mandatory choice: **address**, **ascii-string**, **empty**, or **hex-string**.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	Hexadecimal string for the custom PPP option
Context	configure subscriber-mgmt ppp-policy <i>string</i> ppp-options custom-option protocol <i>keyword</i> option-number <i>number</i> hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: address , ascii-string , empty , or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

re-establish-session *boolean*

Synopsis	Reconnect and override an existing session
Context	configure subscriber-mgmt ppp-policy <i>string</i> re-establish-session <i>boolean</i>
Tree	re-establish-session
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reject-unconfigured-ncp *boolean*

Synopsis	Enable/disable reject unconfigured NCP.
Context	configure subscriber-mgmt ppp-policy <i>string</i> reject-unconfigured-ncp <i>boolean</i>
Tree	reject-unconfigured-ncp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reply-on-padt *boolean*

Synopsis	Enable/disable reply on PADT packets.
Context	configure subscriber-mgmt ppp-policy <i>string</i> reply-on-padt <i>boolean</i>
Tree	reply-on-padt
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-timeout *number*

Synopsis	Session timeout interval
Context	configure subscriber-mgmt ppp-policy <i>string</i> session-timeout <i>number</i>
Tree	session-timeout
Range	1 to 31104000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sid-allocation *keyword*

Synopsis	PPPoE session ID allocation method
Context	configure subscriber-mgmt ppp-policy <i>string</i> sid-allocation <i>keyword</i>
Tree	sid-allocation
Description	This command determines the allocation of session IDs for a PPPoE session with a given MAC address that is active on a given SAP.
Default	sequential
Options	sequential, random
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unique-sid *keyword*

Synopsis	Mode in which a unique session ID is allocated
Context	configure subscriber-mgmt ppp-policy <i>string</i> unique-sid <i>keyword</i>
Tree	unique-sid
Description	This command specifies how unique session IDs are assigned to PPPoE sessions that are active on a single SAP. This command is used with the sid-allocation command to determine the assignment of session IDs to subsequent PPPoE sessions.
Default	per-sap-mac
Options	per-sap, per-sap-mac, per-msap

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-client-policy [*name*] *string*

Synopsis Enter the **pppoe-client-policy** list instance
Context **configure** [subscriber-mgmt](#) [pppoe-client-policy](#) *string*
Tree [pppoe-client-policy](#)
Max. Instances 256
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis PPPoE client policy name
Context **configure** [subscriber-mgmt](#) [pppoe-client-policy](#) *string*
Tree [pppoe-client-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [subscriber-mgmt](#) [pppoe-client-policy](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis Enter the **keepalive** context

Context	configure subscriber-mgmt pppoe-client-policy <i>string</i> keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-up-multiplier *number*

Synopsis	PPPoE keepalive multiplier
Context	configure subscriber-mgmt pppoe-client-policy <i>string</i> keepalive hold-up-multiplier <i>number</i>
Tree	hold-up-multiplier
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPPoE keepalive interval
Context	configure subscriber-mgmt pppoe-client-policy <i>string</i> keepalive interval <i>number</i>
Tree	interval
Range	10 to 300
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mru *number*

Synopsis	PPPoE MRU
Context	configure subscriber-mgmt pppoe-client-policy <i>string</i> mru <i>number</i>
Tree	mru
Range	512 to 9154
Default	1492
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu number

Synopsis PPPoE MTU
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [mtu number](#)
Tree [mtu](#)
Range 512 to 9154
Default 1492
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy reference

Synopsis Python policy to be applied to all messages in the PPPoE client policy
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [python-policy reference](#)
Tree [python-policy](#)
Reference **configure** [python python-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

restart-backoff

Synopsis Enter the **restart-backoff** context
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [restart-backoff](#)
Tree [restart-backoff](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial-time number

Synopsis Initial backoff time
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [restart-backoff](#) [initial-time number](#)
Tree [initial-time](#)
Range 10 to 3600

Default	30
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-time *number*

Synopsis	Maximum backoff time
Context	configure subscriber-mgmt pppoe-client-policy <i>string</i> restart-backoff max-time <i>number</i>
Tree	max-time
Range	10 to 3600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stack

Synopsis	Enter the stack context
Context	configure subscriber-mgmt pppoe-client-policy <i>string</i> stack
Tree	stack
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 *boolean*

Synopsis	Start IPCP to retrieve an IPv4 address
Context	configure subscriber-mgmt pppoe-client-policy <i>string</i> stack ipv4 <i>boolean</i>
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-slaac *boolean*

Synopsis	Start IPv6CP and use SLAAC to retrieve an IPv6 prefix
Context	configure subscriber-mgmt pppoe-client-policy <i>string</i> stack ipv6-slaac <i>boolean</i>
Tree	ipv6-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy [[name](#)] *string*

Synopsis	Enter the radius-accounting-policy list instance
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i>
Tree	radius-accounting-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[name](#)] *string*

Synopsis	RADIUS-based accounting policy name
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i>
Tree	radius-accounting-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-tunnel-connection-fmt *string*

Synopsis	String sent in the accounting message
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> acct-tunnel-connection-fmt <i>string</i>
Tree	acct-tunnel-connection-fmt
String Length	1 to 253

Default	%n
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

custom-record

Synopsis	Enter the custom-record context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record
Tree	custom-record
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queue [id] number

Synopsis	Enter the queue list instance
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue <i>number</i>
Tree	queue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] number

Synopsis	Queue ID for which counters are collected in the record
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue <i>number</i>
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

e-counters

Synopsis	Enter the e-counters context
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Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters
Tree	e-counters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-forwarded-count *boolean*

Synopsis Include the out-of-profile packets forwarded count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [e-counters](#) [out-profile-packets-forwarded-count](#) *boolean*
Tree [out-profile-packets-forwarded-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

i-counters

Synopsis Enter the **i-counters** context
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#)
Tree [i-counters](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-octets-offered-count *boolean*

Synopsis Include the all octets offered count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) [all-octets-offered-count](#) *boolean*
Tree [all-octets-offered-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-packets-offered-count *boolean*

Synopsis Include all packets offered count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) [all-packets-offered-count](#) *boolean*

Tree	all-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue <i>number</i> i-counters high-octets-discarded-count <i>boolean</i>
Tree	high-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-octets-offered-count *boolean*

Synopsis	Include the high octets offered count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue <i>number</i> i-counters high-octets-offered-count <i>boolean</i>
Tree	high-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-packets-discarded-count *boolean*

Synopsis	Include the high packets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue <i>number</i> i-counters high-packets-discarded-count <i>boolean</i>
Tree	high-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-packets-offered-count *boolean*

Synopsis	Include the high packets offered count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters high-packets-offered-count <i>boolean</i>
Tree	high-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters low-octets-discarded-count <i>boolean</i>
Tree	low-octets-discarded-count
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-octets-offered-count *boolean*

Synopsis Include the low octets offered count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#)
[number](#) [i-counters](#) **low-octets-offered-count** *boolean*
Tree [low-octets-offered-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-packets-discarded-count *boolean*

Synopsis Include the low packets discarded count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#)
[number](#) [i-counters](#) **low-packets-discarded-count** *boolean*
Tree [low-packets-discarded-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-packets-offered-count *boolean*

Synopsis Include the low packets offered count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#)
[number](#) [i-counters](#) **low-packets-offered-count** *boolean*
Tree [low-packets-offered-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-forwarded-count *boolean*

Synopsis Include the out-of-profile octets forwarded count

Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ref-queue

Synopsis	Enter the ref-queue context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue
Tree	ref-queue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Apply significant change to counters for all queues
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue all
Tree	all
Notes	The following elements are part of a choice: all or id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

e-counters

Synopsis	Enter the e-counters context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters
Tree	e-counters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

i-counters

Synopsis	Enter the i-counters context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters
Tree	i-counters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters all-octets-offered-count <i>boolean</i>
Tree	all-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-packets-offered-count *boolean*

Synopsis	Include all packets offered count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters all-packets-offered-count <i>boolean</i>
Tree	all-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters high-octets-discarded-count <i>boolean</i>
Tree	high-octets-discarded-count
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-octets-offered-count *boolean*

Synopsis Include the high octets offered count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) **high-octets-offered-count** *boolean*

Tree [high-octets-offered-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-packets-discarded-count *boolean*

Synopsis Include the high packets discarded count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) **high-packets-discarded-count** *boolean*

Tree [high-packets-discarded-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-packets-offered-count *boolean*

Synopsis Include the high packets offered count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) **high-packets-offered-count** *boolean*

Tree [high-packets-offered-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-forwarded-count *boolean*

Synopsis Include the in-profile octets forwarded count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) **in-profile-octets-forwarded-count** *boolean*

Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters low-octets-discarded-count <i>boolean</i>
Tree	low-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-octets-offered-count *boolean*

Synopsis	Include the low octets offered count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters low-octets-offered-count <i>boolean</i>
Tree	low-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-packets-discarded-count *boolean*

Synopsis	Include the low packets discarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters low-packets-discarded-count <i>boolean</i>
Tree	low-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-packets-offered-count *boolean*

Synopsis	Include the low packets offered count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters low-packets-offered-count <i>boolean</i>
Tree	low-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uncoloured-octets-offered-count *boolean*

Synopsis Include the uncolored octets offered count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [uncoloured-octets-offered-count](#) *boolean*
Tree [uncoloured-octets-offered-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uncoloured-packets-offered-count *boolean*

Synopsis Include the uncolored packets offered count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [uncoloured-packets-offered-count](#) *boolean*
Tree [uncoloured-packets-offered-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis Queue ID
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [id](#) *reference*
Tree [id](#)
Reference **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) *number*
Notes The following elements are part of a choice: **all** or **id**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

significant-change *number*

Synopsis	Significant change required to generate the record
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record significant-change <i>number</i>
Tree	significant-change
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delay-start-time *number*

Synopsis	Accounting start delay
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> delay-start-time <i>number</i>
Tree	delay-start-time
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-accounting

Synopsis	Enter the host-accounting context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> host-accounting
Tree	host-accounting
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of per-host accounting
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> host-accounting admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis	Allow interim-update accounting messages to be sent
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> host-accounting interim-update <i>boolean</i>
Tree	interim-update
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis	Enter the include-radius-attribute context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute
Tree	include-radius-attribute
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-loop-options *boolean*

Synopsis	Include access loop information
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute access-loop-options <i>boolean</i>
Tree	access-loop-options
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-authentic *boolean*

Synopsis Enable/disable include of the acct-authentic attribute.
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [acct-authentic](#) *boolean*
Tree [acct-authentic](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-delay-time *boolean*

Synopsis Include the acct-delay-time RADIUS attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [acct-delay-time](#) *boolean*
Tree [acct-delay-time](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-triggered-reason *boolean*

Synopsis Include Alc-Acct-Triggered-Reason attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [acct-triggered-reason](#) *boolean*
Tree [acct-triggered-reason](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-authorized-session-addresses *boolean*

Synopsis Include all included and authorized address/prefix attributes in session accounting

Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute all-authorized-session-addresses <i>boolean</i>
Tree	all-authorized-session-addresses
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

apn *boolean*

Synopsis	Enable/disable include of the APN attribute.
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute apn <i>boolean</i>
Tree	apn
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bearer-fteid *boolean*

Synopsis	Include bearer-fteid attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute bearer-fteid <i>boolean</i>
Tree	bearer-fteid
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bonding-active-connections *boolean*

Synopsis	Include the RADIUS Alc-Bonding-Active-Connection VSA
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute bonding-active-connections <i>boolean</i>
Tree	bonding-active-connections
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bonding-id *boolean*

Synopsis	Include the Alc-Bonding-Id VSA
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute bonding-id <i>boolean</i>
Tree	bonding-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

brg-num-active-sessions *boolean*

Synopsis	Include the RADIUS Alc-BRG-Num-Active-Sessions VSA
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute brg-num-active-sessions <i>boolean</i>
Tree	brg-num-active-sessions
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include called-station-id attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute called-station-id <i>boolean</i>
Tree	called-station-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-station-id

Synopsis	Enable the calling-station-id context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute calling-station-id
Tree	calling-station-id

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Format of the Calling-Station-ID attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [calling-station-id](#) *type* **keyword**
Tree [type](#)
Default sap-string
Options sap-string, mac, sap-id, remote-id, llid
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis Include circuit-id attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [circuit-id](#) *boolean*
Tree [circuit-id](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-ipv6-prefix *boolean*

Synopsis Include delegated-ipv6-prefix attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [delegated-ipv6-prefix](#) *boolean*
Tree [delegated-ipv6-prefix](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

detailed-acct-attributes *boolean*

Synopsis	Include more detailed accounting attributes
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute detailed-acct-attributes <i>boolean</i>
Tree	detailed-acct-attributes
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-vendor-class-id *boolean*

Synopsis	Include the RADIUS Alc-DHCP-Vendor-Class-Id VSA
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute dhcp-vendor-class-id <i>boolean</i>
Tree	dhcp-vendor-class-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

error-code *boolean*

Synopsis	Include detailed error codes
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute error-code <i>boolean</i>
Tree	error-code
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

firewall-info *boolean*

Synopsis	Include the Firewall Information VSA in AAA protocols
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute firewall-info <i>boolean</i>
Tree	firewall-info
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-interface-id *boolean*

Synopsis Include framed-interface-id attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#)
[framed-interface-id](#) *boolean*
Tree [framed-interface-id](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-ip-address *boolean*

Synopsis Include framed-ip-address attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#)
[framed-ip-address](#) *boolean*
Tree [framed-ip-address](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-ip-netmask *boolean*

Synopsis Include framed-ip-netmask attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#)
[framed-ip-netmask](#) *boolean*
Tree [framed-ip-netmask](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-ipv6-prefix *boolean*

Synopsis Include framed-ipv6-prefix attribute

Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute framed-ipv6-prefix <i>boolean</i>
Tree	framed-ipv6-prefix
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-ipv6-route *boolean*

Synopsis	Include framed-ipv6-route attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute framed-ipv6-route <i>boolean</i>
Tree	framed-ipv6-route
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-route *boolean*

Synopsis	Include framed-route attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute framed-route <i>boolean</i>
Tree	framed-route
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

imei *boolean*

Synopsis	Enable/disable include of the IMEI attribute.
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute imei <i>boolean</i>
Tree	imei
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi *boolean*

Synopsis	Include the IMSI attribute for FWA sessions
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute imsi <i>boolean</i>
Tree	imsi
Default	false
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *boolean*

Synopsis	Include the IPv6 address attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute ipv6-address <i>boolean</i>
Tree	ipv6-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lanext-bridge-id *boolean*

Synopsis	Include Alc-Bridge-Id in RADIUS accounting packets
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute lanext-bridge-id <i>boolean</i>
Tree	lanext-bridge-id
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext-device-type *boolean*

Synopsis	Include Alc-HLE-Device-type in accounting packets
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute lanext-device-type <i>boolean</i>
Tree	lanext-device-type

Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext-route-distinguisher *boolean*

Synopsis	Include route distinguisher (Alc-RD) in RADIUS packets
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute lanext-route-distinguisher <i>boolean</i>
Tree	lanext-route-distinguisher
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext-route-target *boolean*

Synopsis	Include route target (Alc-RT) in RADIUS packets
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute lanext-route-target <i>boolean</i>
Tree	lanext-route-target
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext-vni *boolean*

Synopsis	Enable/disable include of the lanext-vni attribute.
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute lanext-vni <i>boolean</i>
Tree	lanext-vni
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *boolean*

Synopsis	Include the client MAC address in the RADIUS message
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute mac-address <i>boolean</i>
Tree	mac-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msisdn *boolean*

Synopsis	Enable/disable include of the MSISDN attribute.
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute msisdn <i>boolean</i>
Tree	msisdn
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Enable/disable include of the NAS-Identifier attribute.
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nas-identifier <i>boolean</i>
Tree	nas-identifier
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port

Synopsis	Enable the nas-port context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nas-port
Tree	nas-port
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis RADIUS NAS-Port attribute

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port](#) **bit-spec** *string*

Tree [bit-spec](#)

String Length 1 to 255

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis Enable the **nas-port-id** context

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#)

Tree [nas-port-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis String to be prefixed to the NAS-Port-Id attribute

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#) **prefix-string** *string*

Tree [prefix-string](#)

String Length 1 to 8

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis String to be suffixed to the NAS-Port-Id attribute

Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nas-port-id suffix <i>keyword</i>
Tree	suffix
Options	circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis	Enable the nas-port-type context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nas-port-type
Tree	nas-port-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type (*keyword* | *number*)

Synopsis	Value for RADIUS NAS-Port-Type attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nas-port-type <i>type</i> (<i>keyword</i> <i>number</i>)
Tree	type
Range	0 to 255
Default	rfc-aligned
Options	rfc-aligned
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-port-range *boolean*

Synopsis	Include NAT port range attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nat-port-range <i>boolean</i>
Tree	nat-port-range
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis Include remote-id attribute
Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **remote-id** *boolean*
Tree **remote-id**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *boolean*

Synopsis Include sla-profile attribute
Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **sla-profile** *boolean*
Tree **sla-profile**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spi-sharing-id *boolean*

Synopsis Include spi-sharing-id attribute
Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **spi-sharing-id** *boolean*
Tree **spi-sharing-id**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

std-acct-attributes *boolean*

Synopsis Include standard accounting attributes
Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **std-acct-attributes** *boolean*

Tree	std-acct-attributes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

steering-profile *boolean*

Synopsis	Include the RADIUS Alc-Steering-Profile VSA
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute steering-profile <i>boolean</i>
Tree	steering-profile
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *boolean*

Synopsis	Include sub-profile attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute sub-profile <i>boolean</i>
Tree	sub-profile
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *boolean*

Synopsis	Include subscriber-id attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute subscriber-id <i>boolean</i>
Tree	subscriber-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-client-attrs *boolean*

Synopsis	Enable/disable include of tunnel-client attributes.
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute tunnel-client-attrs <i>boolean</i>
Tree	tunnel-client-attrs
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-server-attrs *boolean*

Synopsis	Enable/disable include of tunnel-server attributes.
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute tunnel-server-attrs <i>boolean</i>
Tree	tunnel-server-attrs
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uli *boolean*

Synopsis	Generate the ULI RADIUS attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute uli <i>boolean</i>
Tree	uli
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-name *boolean*

Synopsis	Include the user-name attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute user-name <i>boolean</i>
Tree	user-name
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

v6-aggregate-stats *boolean*

Synopsis Report IPv6 aggregated forwarded octet and packet counters using RADIUS VSAs
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [v6-aggregate-stats](#) *boolean*
Tree [v6-aggregate-stats](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-num-attached-ues *boolean*

Synopsis Include the RADIUS Alc-Num-Attached-UEs VSA
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [wifi-num-attached-ues](#) *boolean*
Tree [wifi-num-attached-ues](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-rssi *boolean*

Synopsis Include 802.11 received signal strength indicator
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [wifi-rssi](#) *boolean*
Tree [wifi-rssi](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-ssid-vlan *boolean*

Synopsis Include per-SSID VLAN ID in the Alc-Wlan-SSID-VLAN VSA

Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute wifi-ssid-vlan <i>boolean</i>
Tree	wifi-ssid-vlan
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-home-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute xconnect-tunnel-home-address <i>boolean</i>
Tree	xconnect-tunnel-home-address
Default	false
Introduced	16.0.R3
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mcs-interval

Synopsis	Enter the mcs-interval context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> mcs-interval
Tree	mcs-interval
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval (*keyword* | *number*)

Synopsis	MCS synchronization interval of usage counters
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> mcs-interval interval (<i>keyword</i> <i>number</i>)
Tree	interval
Description	This command specifies the interval at which the active BNG in a dual-homed deployment synchronizes subscriber accounting data using MCS to the standby BNG. The MCS interval is a statically configured value or equal to the configured RADIUS accounting update-interval.
Range	5 to 60
Units	minutes

Options	none, use-update-interval
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queue-instance-accounting

Synopsis	Enter the queue-instance-accounting context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> queue-instance-accounting
Tree	queue-instance-accounting
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of per-queue instance accounting
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> queue-instance-accounting admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis	Send accounting interim-update messages for the queue instance
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> queue-instance-accounting interim-update <i>boolean</i>
Tree	interim-update
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis	Referenced RADIUS server policy
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Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> radius-server-policy <i>reference</i>
Tree	radius-server-policy
Reference	configure aaa radius server-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-accounting

Synopsis	Enter the session-accounting context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> session-accounting
Tree	session-accounting
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of per-session accounting
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> session-accounting admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-update *boolean*

Synopsis	Allow host updates
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> session-accounting host-update <i>boolean</i>
Tree	host-update
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis	Allow interim-update accounting messages to be sent
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> session-accounting interim-update <i>boolean</i>
Tree	interim-update
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-id-format *keyword*

Synopsis	Format used in accounting session ID attributes
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> session-id-format <i>keyword</i>
Tree	session-id-format
Default	description
Options	description, number
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

triggered-updates

Synopsis	Enter the triggered-updates context
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> triggered-updates
Tree	triggered-updates
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-mobility *boolean*

Synopsis	Enable/disable gtp triggered updates.
Context	configure subscriber-mgmt radius-accounting-policy <i>string</i> triggered-updates gtp-mobility <i>boolean</i>
Tree	gtp-mobility
Default	false
Introduced	16.0.R5

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

update-interval

Synopsis Enter the **update-interval** context

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **update-interval**

Tree **update-interval**

Description Commands in this context configure the attributes of the intermediate update interval.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis Intermediate update interval

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **update-interval** **interval** *number*

Tree **interval**

Description This command specifies the interval at which accounting data of subscriber hosts is updated in a RADIUS Accounting Interim-Update message. The **interim-update** option must be enabled when specifying the accounting mode in the RADIUS accounting policy.

A RADIUS-specified interim interval (attribute [85] Acct-Interim-Interval) overrides the CLI configured value.

Range 5 to 259200

Units minutes

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

jitter (*keyword* | *number*)

Synopsis Maximum random delay for intermediate update interval

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **update-interval** **jitter** (*keyword* | *number*)

Tree **jitter**

Description This command specifies the absolute maximum random delay introduced on the update interval between two accounting interim update messages. The effective maximum random delay value is the minimum of the configured absolute jitter value and 10% of the configured update-interval.

A value of zero sends the accounting interim update message without introducing an additional random delay.

Range	0 to 3600
Default	auto
Units	seconds
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-authentication-policy *[name]* *string*

Synopsis	Enter the radius-authentication-policy list instance
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i>
Tree	radius-authentication-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	RADIUS authentication policy name
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i>
Tree	radius-authentication-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fallback

Synopsis Enter the **fallback** context

Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* **fallback**

Tree [fallback](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis Enter the **action** context

Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* **fallback** **action**

Tree [action](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept

Synopsis Automatically accept all authentication requests

Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* **fallback** **action** **accept**

Tree [accept](#)

Notes The following elements are part of a choice: **accept** or **user-db**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis Local user database used to authenticate to the server

Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* **fallback** **action** **user-db** *string*

Tree [user-db](#)

String Length 1 to 32

Notes The following elements are part of a choice: **accept** or **user-db**.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-probing *boolean*

Synopsis Enable force probing
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [fallback](#) [force-probing](#) *boolean*
Tree [force-probing](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis Enter the **include-radius-attribute** context
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#)
Tree [include-radius-attribute](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-loop-options *boolean*

Synopsis Include access loop information
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [access-loop-options](#) *boolean*
Tree [access-loop-options](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-session-id

Synopsis Enable the **acct-session-id** context
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [acct-session-id](#)

Tree [acct-session-id](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Format of the accounting session ID attribute
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [acct-session-id](#) *type* *keyword*
Tree [type](#)
Default host
Options host, session
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

apn *boolean*

Synopsis Enable/disable include of the APN attribute.
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [apn](#) *boolean*
Tree [apn](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis Include called-station-id attribute
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [called-station-id](#) *boolean*
Tree [called-station-id](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-station-id

Synopsis	Enable the calling-station-id context
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute calling-station-id
Tree	calling-station-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Format of the Calling-Station-ID attribute
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute calling-station-id <i>type</i> <i>keyword</i>
Tree	type
Default	sap-string
Options	sap-string, mac, sap-id, remote-id, llid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Include circuit-id attribute
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute circuit-id <i>boolean</i>
Tree	circuit-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-options *boolean*

Synopsis	Generate the DHCP options RADIUS attribute
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute dhcp-options <i>boolean</i>
Tree	dhcp-options
Default	false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-vendor-class-id *boolean*

Synopsis Include the RADIUS Alc-DHCP-Vendor-Class-Id VSA
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [dhcp-vendor-class-id](#) *boolean*
Tree [dhcp-vendor-class-id](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp6-options *boolean*

Synopsis Generate the DHCPv6 options RADIUS attribute
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [dhcp6-options](#) *boolean*
Tree [dhcp6-options](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gprs-negotiated-qos-profile *boolean*

Synopsis Generate the GPRS negotiated QoS profile RADIUS attribute
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [gprs-negotiated-qos-profile](#) *boolean*
Tree [gprs-negotiated-qos-profile](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

imei *boolean*

Synopsis Enable/disable include of the IMEI attribute.

Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute imei <i>boolean</i>
Tree	imei
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi *boolean*

Synopsis	Include the IMSI attribute for FWA sessions
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute imsi <i>boolean</i>
Tree	imsi
Default	false
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *boolean*

Synopsis	Include the client MAC address in the RADIUS message
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute mac-address <i>boolean</i>
Tree	mac-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msisdn *boolean*

Synopsis	Enable/disable include of the MSISDN attribute.
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute msisdn <i>boolean</i>
Tree	msisdn
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Enable/disable include of the NAS-Identifier attribute.
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute nas-identifier <i>boolean</i>
Tree	nas-identifier
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port

Synopsis	Enable the nas-port context
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute nas-port
Tree	nas-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis	RADIUS NAS-Port attribute
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute nas-port bit-spec <i>string</i>
Tree	bit-spec
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis	Enable the nas-port-id context
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute nas-port-id
Tree	nas-port-id

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis String to be prefixed to the NAS-Port-Id attribute
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#) **prefix-string** *string*
Tree [prefix-string](#)
String Length 1 to 8
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis String to be suffixed to the NAS-Port-Id attribute
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#) **suffix** *keyword*
Tree [suffix](#)
Options circuit-id, remote-id
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis Enable the **nas-port-type** context
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [nas-port-type](#)
Tree [nas-port-type](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type (*keyword* | *number*)

Synopsis Value for RADIUS NAS-Port-Type attribute
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [nas-port-type](#) **type** (*keyword* | *number*)

Tree	type
Range	0 to 255
Default	rfc-aligned
Options	rfc-aligned
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-service-name *boolean*

Synopsis	Generate the pppoe-service-name RADIUS attribute
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute pppoe-service-name <i>boolean</i>
Tree	pppoe-service-name
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rat-type *boolean*

Synopsis	Generate the RAT type RADIUS attribute
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute rat-type <i>boolean</i>
Tree	rat-type
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Include remote-id attribute
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute remote-id <i>boolean</i>
Tree	remote-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-session-index *boolean*

Synopsis	Generate the per-SAP unique session index
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute sap-session-index <i>boolean</i>
Tree	sap-session-index
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-server-attribs *boolean*

Synopsis	Enable/disable include of tunnel-server attributes.
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute tunnel-server-attribs <i>boolean</i>
Tree	tunnel-server-attribs
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uli *boolean*

Synopsis	Generate the ULI RADIUS attribute
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute uli <i>boolean</i>
Tree	uli
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wifi-num-attached-ues *boolean*

Synopsis	Include the RADIUS Alc-Num-Attached-UEs VSA
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute wifi-num-attached-ues <i>boolean</i>
Tree	wifi-num-attached-ues

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-ssid-vlan *boolean*

Synopsis	Include per-SSID VLAN ID in the Alc-Wlan-SSID-VLAN VSA
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute wifi-ssid-vlan <i>boolean</i>
Tree	wifi-ssid-vlan
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-home-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute xconnect-tunnel-home-address <i>boolean</i>
Tree	xconnect-tunnel-home-address
Default	false
Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	RADIUS request password
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-user-name

Synopsis	Enter the ppp-user-name context
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Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> ppp-user-name
Tree	ppp-user-name
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-name *string*

Synopsis	Domain name
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> ppp-user-name domain-name <i>string</i>
Tree	domain-name
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-operation *keyword*

Synopsis	Operation to perform on the PAP or CHAP username
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> ppp-user-name domain-operation <i>keyword</i>
Tree	domain-operation
Description	This command specifies the operation to perform on the PAP or CHAP username. When unconfigured, there is no operation and the PAP or CHAP username is not changed.
Options	append, strip, replace, default
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-access-method *keyword*

Synopsis	PPPoE access method
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> pppoe-access-method <i>keyword</i>
Tree	pppoe-access-method
Default	padi
Options	none, padi, pap-chap

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis Referenced RADIUS server policy
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [radius-server-policy](#) *reference*
Tree [radius-server-policy](#)
Reference **configure** [aaa](#) [radius](#) [server-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

re-authentication *boolean*

Synopsis Enable re-authentication on IPOE renewal
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [re-authentication](#) *boolean*
Tree [re-authentication](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-acct-stop-on-fail

Synopsis Enter the **send-acct-stop-on-fail** context
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [send-acct-stop-on-fail](#)
Tree [send-acct-stop-on-fail](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-accept-failure *boolean*

Synopsis Send an accounting stop message when a failure occurs
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [send-acct-stop-on-fail](#) [on-accept-failure](#) *boolean*
Tree [on-accept-failure](#)

Description	When configured to true , the system sends an accounting stop message when a failure occurs after the reception of a RADIUS Access-Accept message (such as a duplicate IP address).
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-reject *boolean*

Synopsis	Send an accounting stop message for Access-Reject
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> send-acct-stop-on-fail on-reject <i>boolean</i>
Tree	on-reject
Description	When configured to true , the system sends an accounting stop message when an Access-Reject message is received.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-request-failure *boolean*

Synopsis	Send an accounting stop message for failures
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> send-acct-stop-on-fail on-request-failure <i>boolean</i>
Tree	on-request-failure
Description	When configured to true , the system sends an accounting stop message when a RADIUS Access-Request message cannot be sent (for example, there is no server configured, or timeout).
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis	Enter the user-name context
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> user-name
Tree	user-name

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-name *string*

Synopsis Domain name
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [user-name](#) [domain-name](#) *string*
Tree [domain-name](#)
String Length 1 to 128
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-operation *keyword*

Synopsis Operation to perform on the username
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [user-name](#) [domain-operation](#) *keyword*
Tree [domain-operation](#)
Description This command specifies the operation to perform on the username.
When unconfigured, there is no operation and the username is not changed.
Options append, strip, replace, default
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

format *keyword*

Synopsis User name format in the RADIUS message
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [user-name](#) [format](#) *keyword*
Tree [format](#)
Default mac
Options mac, circuit-id, tuple, ascii-converted-circuit-id, ascii-converted-tuple, dhcp-client-vendor-opts, mac-giaddr, ppp-user-name
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-format *keyword*

Synopsis	Username format used for FWA sessions
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> user-name gtp-format <i>keyword</i>
Tree	gtp-format
Description	This command specifies the username format to use for FWA sessions. If a PAP message is present in the PCO IE of the Create Session request, the system uses that for authentication instead of the format specified for this command. If you specify a format that includes APN, the separator is an @ character; for example, msisdn@apn.
Default	imsi
Options	imsi, imsi-apn, msisdn, msisdn-apn
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format when contacting a RADIUS server
Context	configure subscriber-mgmt radius-authentication-policy <i>string</i> user-name mac-format <i>string</i>
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip-policy [*name*] *string*

Synopsis	Enter the rip-policy list instance
Context	configure subscriber-mgmt rip-policy <i>string</i>
Tree	rip-policy
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	RIP policy name
Context	configure subscriber-mgmt rip-policy <i>string</i>
Tree	rip-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-key *string*

Synopsis	Authentication key
Context	configure subscriber-mgmt rip-policy <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 51
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-type *keyword*

Synopsis	Authentication type used between RIP neighbors
Context	configure subscriber-mgmt rip-policy <i>string</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest, message-digest-20
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt rip-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-advertisement-policy [*name*] *string*

Synopsis	Enter the router-advertisement-policy list instance
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i>
Tree	router-advertisement-policy
Max. Instances	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Router advertisement policy name
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i>
Tree	router-advertisement-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast *keyword*

Synopsis	Protocol with forced multicast
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> force-mcast <i>keyword</i>
Tree	force-mcast
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-advertisement-interval *number*

Synopsis	Maximum advertisement interval
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> max-advertisement-interval <i>number</i>
Tree	max-advertisement-interval
Range	900 to 1800

Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-advertisement-interval *number*

Synopsis	Minimum advertisement interval
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> min-advertisement-interval <i>number</i>
Tree	min-advertisement-interval
Range	900 to 1350
Default	900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

current-hop-limit *number*

Synopsis	Hop limit to be advertised
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> options current-hop-limit <i>number</i>
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enter the dns context
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> options dns
Tree	dns
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis	Include the RDNSS server option 25
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> options dns include-rdnss <i>boolean</i>
Tree	include-rdnss
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime (*number* | *keyword*)

Synopsis	Maximum time for the RDNSS address to remain valid
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> options dns rdnss-lifetime (<i>number</i> <i>keyword</i>)
Tree	rdnss-lifetime
Range	900 to 3600
Default	3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-configuration *boolean*

Synopsis	Managed address configuration flag
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> options managed-configuration <i>boolean</i>

Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu (*number* | *keyword*)

Synopsis	Advertised MTU value
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> options mtu (<i>number</i> <i>keyword</i>)
Tree	mtu
Range	1280 to 9212
Default	not-included
Units	bytes
Options	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other-stateful-configuration *boolean*

Synopsis	Other stateful configuration flag
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> options other-stateful-configuration <i>boolean</i>
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reachable-time *number*

Synopsis	Neighbor discovery reachable time that is advertised for this group interface
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> options reachable-time <i>number</i>
Tree	reachable-time
Range	0 to 3600000
Default	0

Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retransmit-timer *number*

Synopsis	Neighbor discovery retransmit timer that is advertised for this group interface
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> options retransmit-timer <i>number</i>
Tree	retransmit-timer
Range	0 to 1800000
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-lifetime (*number* | *keyword*)

Synopsis	Router lifetime
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> options router-lifetime (<i>number</i> <i>keyword</i>)
Tree	router-lifetime
Range	2700 to 9000
Default	4500
Units	seconds
Options	no-default-router
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-options

Synopsis	Enter the prefix-options context
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options
Tree	prefix-options
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stateful

Synopsis Enter the **stateful** context
Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateful](#)
Tree [stateful](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-lifetimes *boolean*

Synopsis Use automatic lifetimes for stateful prefixes
Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateful](#) [auto-lifetimes](#) *boolean*
Tree [auto-lifetimes](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis Assign the prefix to an interface on the specified link
Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateful](#) [on-link](#) *boolean*
Tree [on-link](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number* | *keyword*)

Synopsis Time for a prefix to remain preferred
Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateful](#) [preferred-lifetime](#) (*number* | *keyword*)
Tree [preferred-lifetime](#)

Range	0 to 4294967294
Default	3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis	Time for a prefix to remain valid
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateful valid-lifetime (<i>number</i> <i>keyword</i>)
Tree	valid-lifetime
Range	0 to 4294967294
Default	86400
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stateless

Synopsis	Enter the stateless context
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateless
Tree	stateless
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateless on-link <i>boolean</i>
Tree	on-link
Default	true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number* | *keyword*)

Synopsis Time for a prefix to remain preferred

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateless](#) [preferred-lifetime](#) (*number* | *keyword*)

Tree [preferred-lifetime](#)

Range 0 to 4294967294

Default 3600

Units seconds

Options infinite

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis Time for a prefix to remain valid

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [prefix-options](#) [stateless](#) [valid-lifetime](#) (*number* | *keyword*)

Tree [valid-lifetime](#)

Range 0 to 4294967294

Default 86400

Units seconds

Options infinite

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-template [[name](#)] *string*

Synopsis Enter the **sap-template** list instance

Context **configure** [subscriber-mgmt](#) [sap-template](#) *string*

Tree [sap-template](#)

Description Commands in this context configure a template for automatically-generated subscriber SAPs that is used when creating CUPS sessions. A template with name "default"

is used when no other instance is created, however, the "default" template must be explicitly provisioned.

Max. Instances	256
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	SAP template name
Context	configure subscriber-mgmt sap-template <i>string</i>
Tree	sap-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpu-protection

Synopsis	Enter the cpu-protection context
Context	configure subscriber-mgmt sap-template <i>string</i> cpu-protection
Tree	cpu-protection
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

ip-src-monitoring

Synopsis	Apply CPU protection policy on IP sources
Context	configure subscriber-mgmt sap-template <i>string</i> cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: ip-src-monitoring or mac-monitoring .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

mac-monitoring

Synopsis	Apply CPU protection policy on MAC sources
Context	configure subscriber-mgmt sap-template string cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: ip-src-monitoring or mac-monitoring .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

policy-id *reference*

Synopsis	CPU protection policy ID
Context	configure subscriber-mgmt sap-template string cpu-protection policy-id reference
Tree	policy-id
Reference	configure system security cpu-protection policy number
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt sap-template string description string
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy name
Context	configure subscriber-mgmt sap-template string dist-cpu-protection reference
Tree	dist-cpu-protection
Reference	configure system security dist-cpu-protection policy string
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time (*number* | *keyword*)

Synopsis	Time to hold a SAP after last PFCP session is removed
Context	configure subscriber-mgmt sap-template <i>string</i> hold-time (<i>number</i> <i>keyword</i>)
Tree	hold-time
Description	This command configures the time for which an SAP will be kept after the last session has been removed. Idle SAPs can be forcefully removed by the command clear subscriber-mgmt sap-template template-name idle-saps .
Range	0 30 to 2592000
Default	30
Units	seconds
Options	infinite
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy [*name*] *string*

Synopsis	Enter the shcv-policy list instance
Context	configure subscriber-mgmt shcv-policy <i>string</i>
Tree	shcv-policy
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	SHCV policy name
Context	configure subscriber-mgmt shcv-policy <i>string</i>
Tree	shcv-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt shcv-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

layer-3

Synopsis	Enter the layer-3 context
Context	configure subscriber-mgmt shcv-policy <i>string</i> layer-3
Tree	layer-3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-origin *keyword*

Synopsis	Source IP address to be used for SHCV messages
Context	configure subscriber-mgmt shcv-policy <i>string</i> layer-3 source-ip-origin <i>keyword</i>
Tree	source-ip-origin
Default	interface
Options	interface, vrrp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unnumbered-source-ip *string*

Synopsis	Source IPv4 address for unnumbered subscriber hosts
Context	configure subscriber-mgmt shcv-policy <i>string</i> layer-3 unnumbered-source-ip <i>string</i>
Tree	unnumbered-source-ip
Description	This command configures the source IPv4 address (also known as the sender IP address) used in SHCV ARP requests for unnumbered hosts. When unconfigured, 0.0.0.0 is used as the source IPv4 address in SHCV ARP requests.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

periodic

Synopsis Enter the **periodic** context

Context **configure** [subscriber-mgmt shcv-policy](#) *string* **periodic**

Tree [periodic](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis Action when periodic connectivity verification fails

Context **configure** [subscriber-mgmt shcv-policy](#) *string* **periodic** **action** *keyword*

Tree [action](#)

Default alarm

Options alarm, remove

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of periodic connectivity check

Context **configure** [subscriber-mgmt shcv-policy](#) *string* **periodic** **admin-state** *keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis Time interval which all known sources are verified

Context **configure** [subscriber-mgmt shcv-policy](#) *string* **periodic** **interval** *number*

Tree [interval](#)

Description	This command specifies the time interval which all known sources are verified. The actual rate is dependent on the number of known hosts and intervals.
Range	1 to 6000
Default	30
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Number of retransmissions in connectivity verification
Context	configure subscriber-mgmt shcv-policy <i>string</i> periodic retry-count <i>number</i>
Tree	retry-count
Range	1 to 29
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout before connectivity verification retransmitted
Context	configure subscriber-mgmt shcv-policy <i>string</i> periodic timeout <i>number</i>
Tree	timeout
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trigger

Synopsis	Enter the trigger context
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger
Tree	trigger
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit-exceeded

Synopsis Enter the **host-limit-exceeded** context
Context **configure subscriber-mgmt shcv-policy string trigger host-limit-exceeded**
Tree [host-limit-exceeded](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of trigger for host-limit exceeded
Context **configure subscriber-mgmt shcv-policy string trigger host-limit-exceeded admin-state keyword**
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis Number of retransmissions in periodic connectivity test
Context **configure subscriber-mgmt shcv-policy string trigger host-limit-exceeded retry-count number**
Tree [retry-count](#)
Range 1 to 29
Default 1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis Timeout before a retransmission

Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger host-limit-exceeded <i>timeout number</i>
Tree	timeout
Range	1 to 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inactivity

Synopsis	Enter the inactivity context
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger inactivity
Tree	inactivity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the trigger for inactive hosts
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger inactivity admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger inactivity retry-count <i>number</i>
Tree	retry-count
Range	1 to 29
Default	2
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis Timeout before a retransmission
Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger inactivity](#) *timeout number*
Tree [timeout](#)
Range 1 to 60
Default 10
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-conflict

Synopsis Enter the **ip-conflict** context
Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger ip-conflict](#)
Tree [ip-conflict](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the trigger for IP conflict
Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger ip-conflict](#) **admin-state** *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis Number of retransmissions in periodic connectivity test
Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger ip-conflict](#) **retry-count** *number*

Tree	retry-count
Range	1 to 29
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout before a retransmission
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger ip-conflict timeout <i>number</i>
Tree	timeout
Range	1 to 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-learning

Synopsis	Enter the mac-learning context
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger mac-learning
Tree	mac-learning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of trigger for MAC learning
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger mac-learning admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger mac-learning retry-count <i>number</i>
Tree	retry-count
Range	1 to 29
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout before a retransmission
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger mac-learning timeout <i>number</i>
Tree	timeout
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mobility

Synopsis	Enter the mobility context
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger mobility
Tree	mobility
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of trigger for SAP IP/MAC conflict
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger mobility admin-state <i>keyword</i>
Tree	admin-state
Default	enable

Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger mobility retry-count <i>number</i>
Tree	retry-count
Range	1 to 29
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout before a retransmission
Context	configure subscriber-mgmt shcv-policy <i>string</i> trigger mobility timeout <i>number</i>
Tree	timeout
Range	1 to 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vpls

Synopsis	Enter the vpls context
Context	configure subscriber-mgmt shcv-policy <i>string</i> vpls
Tree	vpls
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip *string*

Synopsis	Source IPv4 address for connectivity verification
Context	configure subscriber-mgmt shcv-policy <i>string</i> vpls source-ip <i>string</i>
Tree	source-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-mac *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source MAC address for connectivity verification
Context	configure subscriber-mgmt shcv-policy <i>string</i> vpls source-mac <i>string</i>
Tree	source-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile [[name](#)] *string*

Synopsis	Enter the sla-profile list instance
Context	configure subscriber-mgmt sla-profile <i>string</i>
Tree	sla-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[name](#)] *string*

Synopsis	SLA profile name
Context	configure subscriber-mgmt sla-profile <i>string</i>
Tree	sla-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

control

Synopsis Enter the **control** context

Context **configure** [subscriber-mgmt sla-profile](#) *string* **control**

Tree [control](#)

Description Commands in this context determine which sessions can use the SLA profile.
By default, only sessions set up by the local system can use the SLA profile, but the SLA profile can also be enabled for sessions set up by a BNG CUPS Control Plane Function (CPF).

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cups *boolean*

Synopsis Allow the CUPS control plane to use the profile

Context **configure** [subscriber-mgmt sla-profile](#) *string* **control cups** *boolean*

Tree [cups](#)

Description When configured to **true**, the profile can be used by sessions set up by a BNG CUPS Control Plane Function (CPF).

Default false

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local *boolean*

Synopsis Allow the local control plane to use the profile

Context **configure** [subscriber-mgmt sla-profile](#) *string* **control local** *boolean*

Tree [local](#)

Description When configured to **true**, the profile can be used by sessions set up by the local system.

Default true

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-control-policy *reference*

Synopsis	Credit policy for this SLA profile
Context	configure subscriber-mgmt sla-profile <i>string</i> credit-control-policy <i>reference</i>
Tree	credit-control-policy
Reference	configure subscriber-mgmt credit-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

def-instance-sharing *keyword*

Synopsis	Default method for SLA Profile Instance sharing of IPoE and PPPoE sessions
Context	configure subscriber-mgmt sla-profile <i>string</i> def-instance-sharing <i>keyword</i>
Tree	def-instance-sharing
Default	per-sap
Options	per-sap, per-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt sla-profile <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bonding-selection

Synopsis	Enter the bonding-selection context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection
Tree	bonding-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-thresholds

Synopsis	Enter the rate-thresholds context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection rate-thresholds
Tree	rate-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High threshold rate percentage
Context	configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection rate-thresholds high number
Tree	high
Range	56 to 99
Default	90
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low threshold rate percentage
Context	configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection rate-thresholds low number
Tree	low
Range	55 to 98
Default	80

Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weight

Synopsis	Enter the weight context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection weight
Tree	weight
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

change number

Synopsis	Weight change of the preferred connection
Context	configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection weight change number
Tree	change
Range	0 to 10
Default	5
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis	Initial weight of the preferred connection
Context	configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection weight initial number
Tree	initial
Range	1 to 100
Default	100
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-filter *reference*

Synopsis	IPv4 filter policy name
Context	configure subscriber-mgmt sla-profile <i>string</i> egress ip-filter <i>reference</i>
Tree	ip-filter
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-filter *reference*

Synopsis	IPv6 filter policy name
Context	configure subscriber-mgmt sla-profile <i>string</i> egress ipv6-filter <i>reference</i>
Tree	ipv6-filter
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hs-agg-rate *number*

Synopsis	Maximum rate for expanded egress HS queues
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos hs-agg-rate <i>number</i>
Tree	hs-agg-rate
Range	1 to 100000000
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

qos-marking-from-sap *boolean*

Synopsis	Set policy where egress QoS marking rules are applied
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos qos-marking-from-sap <i>boolean</i>
Tree	qos-marking-from-sap
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-egress

Synopsis	Enter the sap-egress context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the overrides context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hs-queue-stat-mode *keyword*

Synopsis	Egress HS queue stats mode
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides hs-queue-stat-mode <i>keyword</i>
Tree	hs-queue-stat-mode
Options	v4-v6
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [*id*] *reference*

Synopsis	Enter the hs-wrr-group list instance
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i>
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[id] *reference*

Synopsis	HS WRR group ID to override in the QoS policy table
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i>
Tree	hs-wrr-group
Reference	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override for WRR group
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	PIR rate override for WRR group
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 2000000000

Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer [*id*] *reference*

Synopsis	Enter the policer list instance
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer reference
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *reference*

Synopsis	Policer ID
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer reference
Tree	policer
Reference	configure qos sap-egress <i>string</i> policer number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-byte-offset *number*

Synopsis	Packet byte offset
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the rate context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer <i>reference</i> rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	CIR override for the packet byte offset
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)

Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	PIR override for the packet byte offset
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer reference stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, v4-v6, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue [*id*] *reference*

Synopsis	Enter the queue list instance
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference
Tree	queue

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *reference*

Synopsis Queue ID
Context **configure** [subscriber-mgmt](#) [sla-profile](#) *string* [egress qos sap-egress overrides queue reference](#)
Tree [queue](#)
Reference **configure** [qos sap-egress](#) *string* [queue number](#)
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avg-frame-overhead *decimal-number*

Synopsis Average frame overhead
Context **configure** [subscriber-mgmt](#) [sla-profile](#) *string* [egress qos sap-egress overrides queue reference](#) [avg-frame-overhead](#) *decimal-number*
Tree [avg-frame-overhead](#)
Range 0.00 to 100.00
Units percent
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs (*number | keyword*)

Synopsis CBS
Context **configure** [subscriber-mgmt](#) [sla-profile](#) *string* [egress qos sap-egress overrides queue reference](#) [cbs](#) (*number | keyword*)
Tree [cbs](#)
Range 0 to 1048576
Units kilobytes
Options auto
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-prio-only (*number* | *keyword*)

Synopsis	High priority burst size
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference high-prio-only (<i>number</i> <i>keyword</i>)
Tree	high-prio-only
Range	0 to 100
Units	percent
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hs-class-weight *number*

Synopsis	Class-weight override for expanded egress HS queues
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the hs-wred-queue context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R4
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Name of the slope-policy override applied to HS queue
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue policy <i>reference</i>

Tree	policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R4
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	Maximum rate for expanded egress HS queues
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference hs-wrr-weight <i>number</i>
Tree	hs-wrr-weight
Range	1 to 127
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the rate context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	CIR for the queue
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	PIR for the queue
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue <i>reference</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	v4-v6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	SAP-egress QoS policy
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-parent-location *keyword*

Synopsis	Scheduling type for queued traffic
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress port-parent-location <i>keyword</i>
Tree	port-parent-location
Default	port
Options	port, vport
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the overrides context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler [[scheduler-name](#)] *reference*

Synopsis	Enter the scheduler list instance
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i>
Tree	scheduler
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[scheduler-name] *reference*

Synopsis	Scheduler policy name
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i>
Tree	scheduler
Reference	configure qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the rate context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i> rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 3200000000

Default	sum
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides scheduler reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-ingress-l2tp-dscp *boolean*

Synopsis	Use outer L2TP header for LAC sessions
Context	configure subscriber-mgmt sla-profile <i>string</i> egress qos use-ingress-l2tp-dscp <i>boolean</i>
Tree	use-ingress-l2tp-dscp
Description	When configured to true , egress classification is based on the outer L2TP header DSCP instead of the inner IP header for LAC sessions.

This command is ignored for non-LAC sessions.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

report-rate

Synopsis	Enter the report-rate context
Context	configure subscriber-mgmt sla-profile <i>string</i> egress report-rate
Tree	report-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Report the aggregate rate
Context	configure subscriber-mgmt sla-profile <i>string</i> egress report-rate agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Report the rate of the specified policer
Context	configure subscriber-mgmt sla-profile <i>string</i> egress report-rate policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-actual-rate

Synopsis	Report rate from the DSL characteristics PPPoE tags
Context	configure subscriber-mgmt sla-profile <i>string</i> egress report-rate pppoe-actual-rate
Tree	pppoe-actual-rate
Notes	The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rfc5515-actual-rate

Synopsis	Report the rate as specified in RFC5515
Context	configure subscriber-mgmt sla-profile <i>string</i> egress report-rate rfc5515-actual-rate
Tree	rfc5515-actual-rate
Notes	The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Report the rate of the specified scheduler
Context	configure subscriber-mgmt sla-profile <i>string</i> egress report-rate scheduler <i>string</i>
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limits

Synopsis	Enter the host-limits context
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits
Tree	host-limits

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp number

Synopsis	Maximum number of IPv4 ARP hosts
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv4 arp <i>number</i>
Tree	arp
Description	This command configures the maximum number of IPv4 ARP hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp number

Synopsis	Maximum number of IPv4 DHCP hosts
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv4 dhcp <i>number</i>
Tree	dhcp
Description	This command configures the maximum number of IPv4 DHCP hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall number

Synopsis	Maximum number of IPv4 hosts
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv4 overall <i>number</i>
Tree	overall
Description	This command configures the maximum number of IPv4 hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp number

Synopsis	Maximum number of IPv4 PPP hosts
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv4 ppp <i>number</i>
Tree	ppp
Description	This command configures the maximum number of IPv4 PPP hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall number

Synopsis	Maximum number of IPv6 hosts
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Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 overall <i>number</i>
Tree	overall
Description	This command configures the maximum number of IPv6 hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-ipoe-dhcp *number*

Synopsis	Maximum number of IPv6 IPoE DHCP PD hosts
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 pd-ipoe-dhcp <i>number</i>
Tree	pd-ipoe-dhcp
Description	This command configures the maximum number of IPv6 IPoE DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-overall *number*

Synopsis	Maximum number of IPv6 DHCP PD hosts
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 pd-overall <i>number</i>
Tree	pd-overall
Description	The command configures the maximum number of IPv6 DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-ppp-dhcp *number*

Synopsis	Maximum number of IPv6 PPPoE DHCP PD hosts
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 pd-ppp-dhcp <i>number</i>
Tree	pd-ppp-dhcp
Description	This command configures the maximum number of IPv6 PPPoE DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ipoe-dhcp *number*

Synopsis	Maximum number of IPv6 IPoE DHCP WAN hosts
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 wan-ipoe-dhcp <i>number</i>
Tree	wan-ipoe-dhcp
Description	This command configures the maximum number of IPv6 IPoE DHCP WAN hosts (IA-NA) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ipoe-slaac *number*

Synopsis	Maximum number of IPv6 IPoE SLAAC WAN hosts
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 wan-ipoe-slaac <i>number</i>
Tree	wan-ipoe-slaac
Description	This command configures the maximum number of IPv6 IPoE SLAAC WAN hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-overall *number*

Synopsis Maximum number of IPv6 WAN hosts

Context **configure** **subscriber-mgmt sla-profile** *string* **host-limits ipv6 wan-overall** *number*

Tree [wan-overall](#)

Description This command configures the maximum number of IPv6 WAN hosts per SLA profile instance.
The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ppp-dhcp *number*

Synopsis Maximum number IPv6 PPPoE DHCP WAN hosts

Context **configure** **subscriber-mgmt sla-profile** *string* **host-limits ipv6 wan-ppp-dhcp** *number*

Tree [wan-ppp-dhcp](#)

Description This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts (IANA) per SLA profile instance.
The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ppp-slaac *number*

Synopsis Maximum number of IPv6 PPPoE SLAAC WAN hosts

Context **configure** **subscriber-mgmt sla-profile** *string* **host-limits ipv6 wan-ppp-slaac** *number*

Tree [wan-ppp-slaac](#)

Description This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts per SLA profile instance.
The operational maximum value may be smaller due to equipped hardware dependencies.

Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac-overall *number*

Synopsis	Maximum number of L2TP LAC hosts
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits lac-overall <i>number</i>
Tree	lac-overall
Description	This command configures the maximum number of L2TP LAC hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of subscriber hosts
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits overall <i>number</i>
Tree	overall
Description	This command configures the maximum number of subscriber hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	1 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remove-oldest *boolean*

Synopsis	Remove oldest
Context	configure subscriber-mgmt sla-profile <i>string</i> host-limits remove-oldest <i>boolean</i>
Tree	remove-oldest
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout

Synopsis	Enable the idle-timeout context
Context	configure subscriber-mgmt sla-profile <i>string</i> idle-timeout
Tree	idle-timeout
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

category [[category-name](#)] *reference*

Synopsis	Enter the category list instance
Context	configure subscriber-mgmt sla-profile <i>string</i> idle-timeout category <i>reference</i>
Tree	category
Max. Instances	16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[category-name] *reference*

Synopsis	Category name
Context	configure subscriber-mgmt sla-profile <i>string</i> idle-timeout category <i>reference</i>
Tree	category
Description	This command specifies the category name where the queues and policers are defined for the idle-timeout monitoring for subscriber hosts.
Reference	configure subscriber-mgmt category-map <i>string</i> category <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action when the idle-timeout is reached
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Context	configure subscriber-mgmt sla-profile <i>string</i> idle-timeout <i>category</i> <i>reference</i> action <i>keyword</i>
Tree	action
Description	This command specifies the action to be executed when the idle-timeout is reached. The action is performed for all hosts associated with the SLA profile instance.
Default	terminate
Options	terminate, shcv
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time the category can stay below its activity threshold
Context	configure subscriber-mgmt sla-profile <i>string</i> idle-timeout <i>category</i> <i>reference</i> timeout <i>number</i>
Tree	timeout
Range	60 to 15552000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

category-map-name *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Category map name
Context	configure subscriber-mgmt sla-profile <i>string</i> idle-timeout <i>category-map-name</i> <i>reference</i>
Tree	category-map-name
Reference	configure subscriber-mgmt category-map <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-filter reference

Synopsis	IPv4 filter policy name
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress ip-filter <i>reference</i>
Tree	ip-filter
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-filter reference

Synopsis	IPv6 filter policy name
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress ipv6-filter <i>reference</i>
Tree	ipv6-filter
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-ingress

Synopsis	Enter the sap-ingress context
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress
Tree	sap-ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the overrides context
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer [*id*] *reference*

Synopsis	Enter the policer list instance
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i>
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*id*] *reference*

Synopsis	Policer ID
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i>
Tree	policer
Reference	configure qos sap-ingress <i>string</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-byte-offset *number*

Synopsis	Packet byte offset
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the rate context
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Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer reference rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	CIR override for the packet byte offset
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	PIR override for the packet byte offset
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer reference stat-mode <i>keyword</i>
Tree	stat-mode

Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir, v4-v6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue [*id*] *reference*

Synopsis	Enter the queue list instance
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue reference
Tree	queue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *reference*

Synopsis	Queue ID
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue reference
Tree	queue
Reference	configure qos sap-ingress <i>string</i> queue number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-prio-only (*number* | *keyword*)

Synopsis High priority burst size

Context **configure** **subscriber-mgmt sla-profile** *string* **ingress qos sap-ingress overrides queue**
reference **high-prio-only** (*number* | *keyword*)

Tree **high-prio-only**

Range 0 to 100

Units percent

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mbs (*number* | *keyword*)

Synopsis MBS

Context **configure** **subscriber-mgmt sla-profile** *string* **ingress qos sap-ingress overrides queue**
reference **mbs** (*number* | *keyword*)

Tree **mbs**

Range 0 to 1073741824

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis Enter the **rate** context

Context **configure** **subscriber-mgmt sla-profile** *string* **ingress qos sap-ingress overrides queue**
reference **rate**

Tree **rate**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	CIR for the queue
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	PIR for the queue
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	v4-v6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	SAP-ingress QoS policy
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Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis	Queuing type
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress queuing-type <i>keyword</i>
Tree	queuing-type
Default	service
Options	service, shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

report-rate

Synopsis	Enter the report-rate context
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress report-rate
Tree	report-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Report the aggregate rate
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress report-rate agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Report the rate of the specified policer
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress report-rate policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-actual-rate

Synopsis	Report rate from the DSL characteristics PPPoE tags
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress report-rate pppoe-actual-rate
Tree	pppoe-actual-rate
Notes	The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rfc5515-actual-rate

Synopsis	Report the rate as specified in RFC5515
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress report-rate rfc5515-actual-rate
Tree	rfc5515-actual-rate
Notes	The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Report the rate of the specified scheduler
Context	configure subscriber-mgmt sla-profile <i>string</i> ingress report-rate scheduler <i>string</i>
Tree	scheduler

String Length	1 to 32
Notes	The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

one-time-http-redirection

Synopsis	Enter the one-time-http-redirection context
Context	configure subscriber-mgmt sla-profile <i>string</i> one-time-http-redirection
Tree	one-time-http-redirection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-filter reference

Synopsis	IPv4 filter policy name
Context	configure subscriber-mgmt sla-profile <i>string</i> one-time-http-redirection ip-filter <i>reference</i>
Tree	ip-filter
Reference	configure filter ip-filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pfc-p mappings

Synopsis	Enter the pfc-p mappings context
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-p mappings
Tree	pfc-p mappings
Description	Commands in this context configure the mapping of packet forwarding control protocol (PFCP) QoS IEs (such as QoS enforcement rule (QER) GBR/MBR IEs), to local QoS overrides (such as queue and policer rates).
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-qer

Synopsis	Enter the session-qer context
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer
Tree	session-qer
Description	<p>Commands in this context configure the mapping of the PFCP session QER rate to the local QoS rate.</p> <p>If a signaled PFCP QER rate applies to all data-plane rules, it is interpreted as the session QER rate and is mapped to the QoS overrides in the configuration. Examples of such QER rates are APN-AMBR for 4G FWA sessions and session-AMBR for 5G FWA sessions.</p> <p>A QER that contains a QER correlation ID does not use the QER mapping because it is assumed not to be a per-session construct.</p>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

downlink

Synopsis	Enter the downlink context
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink
Tree	downlink
Description	Commands in this context configure the downlink MBR/GBR to QoS override mapping.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

aggregate-rate

Synopsis	Map MBR/GBR to a rate override for the aggregate rate
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink aggregate-rate
Tree	aggregate-rate
Notes	The following elements are part of a choice: aggregate-rate , arbiter , policer , queue , or scheduler .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter string

Synopsis	Arbiter target of MBR/GBR override
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink arbiter <i>string</i>
Tree	arbiter
String Length	1 to 32
Notes	The following elements are part of a choice: aggregate-rate , arbiter , policer , queue , or scheduler .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer number

Synopsis	Policer target of MBR/GBR override
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink policer <i>number</i>
Tree	policer
Range	1 to 8
Notes	The following elements are part of a choice: aggregate-rate , arbiter , policer , queue , or scheduler .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue number

Synopsis	Queue target of MBR/GBR override
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink queue <i>number</i>
Tree	queue
Range	1 to 8
Notes	The following elements are part of a choice: aggregate-rate , arbiter , policer , queue , or scheduler .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Scheduler target of MBR/GBR override
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink scheduler <i>string</i>
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: aggregate-rate , arbiter , policer , queue , or scheduler .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uplink

Synopsis	Enter the uplink context
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer uplink
Tree	uplink
Description	Commands in this context configure the uplink MBR/GBR to QoS override mapping.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter *string*

Synopsis	Arbiter target of MBR/GBR override
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer uplink arbiter <i>string</i>
Tree	arbiter
String Length	1 to 32
Notes	The following elements are part of a choice: arbiter , policer , queue , or scheduler .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Policer target of MBR/GBR override
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer uplink policer <i>number</i>

Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: arbiter , policer , queue , or scheduler .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue number

Synopsis	Queue target of MBR/GBR override
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-p-mappings session-qer uplink queue number
Tree	queue
Range	1 to 32
Notes	The following elements are part of a choice: arbiter , policer , queue , or scheduler .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler string

Synopsis	Scheduler target of MBR/GBR override
Context	configure subscriber-mgmt sla-profile <i>string</i> pfc-p-mappings session-qer uplink scheduler string
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: arbiter , policer , queue , or scheduler .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the session-limits context
Context	configure subscriber-mgmt sla-profile <i>string</i> session-limits
Tree	session-limits
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe number

Synopsis	Maximum number of IPoE sessions
Context	configure subscriber-mgmt sla-profile string session-limits ipoe number
Tree	ipoe
Description	This command configures the maximum number of IPoE sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis	Enter the l2tp context
Context	configure subscriber-mgmt sla-profile string session-limits l2tp
Tree	l2tp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lns number

Synopsis	Maximum number of L2TP LNS sessions
Context	configure subscriber-mgmt sla-profile string session-limits l2tp lns number
Tree	lns
Description	This command configures the maximum number of L2TP LNS sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lts number

Synopsis	Maximum number of L2TP LTS sessions
Context	configure subscriber-mgmt sla-profile string session-limits l2tp lts number
Tree	lts

Description	This command configures the maximum number of L2TP LTS sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall number

Synopsis	Maximum number of L2TP sessions
Context	configure subscriber-mgmt sla-profile <i>string session-limits l2tp overall number</i>
Tree	overall
Description	This command configures the maximum number of L2TP sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall number

Synopsis	Maximum number of subscriber sessions
Context	configure subscriber-mgmt sla-profile <i>string session-limits overall number</i>
Tree	overall
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the pppoe context
Context	configure subscriber-mgmt sla-profile <i>string session-limits pppoe</i>
Tree	pppoe
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac number

Synopsis	Maximum number of PPPoE L2TP LAC sessions
Context	configure subscriber-mgmt sla-profile <i>string</i> session-limits pppoe lac number
Tree	lac
Description	This command configures the maximum number of PPPoE L2TP LAC sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local number

Synopsis	Maximum number of PPPoE local terminated sessions
Context	configure subscriber-mgmt sla-profile <i>string</i> session-limits pppoe local number
Tree	local
Description	This command configures the maximum number of PPPoE local terminated sessions (PTA) per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall number

Synopsis	Maximum number of PPPoE sessions
Context	configure subscriber-mgmt sla-profile <i>string</i> session-limits pppoe overall number
Tree	overall
Description	This command configures the maximum number of PPPoE sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

steering-profile [name] string

Synopsis	Enter the steering-profile list instance
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Context	configure subscriber-mgmt steering-profile <i>string</i>
Tree	steering-profile
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Steering profile name
Context	configure subscriber-mgmt steering-profile <i>string</i>
Tree	steering-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access

Synopsis	Enter the access context
Context	configure subscriber-mgmt steering-profile <i>string</i> access
Tree	access
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance to be used as an access VAS router
Context	configure subscriber-mgmt steering-profile <i>string</i> access router-instance <i>string</i>
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt steering-profile <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

network

Synopsis	Enter the network context
Context	configure subscriber-mgmt steering-profile <i>string</i> network
Tree	network
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-hop *string*

Synopsis	Next-hop IP address used for network next-hop
Context	configure subscriber-mgmt steering-profile <i>string</i> network next-hop <i>string</i>
Tree	next-hop
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance to be used as an access VAS router
Context	configure subscriber-mgmt steering-profile <i>string</i> network router-instance <i>string</i>
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy [[name](#)] *string*

Synopsis	Enter the sub-ident-policy list instance
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Context	configure subscriber-mgmt sub-ident-policy string
Tree	sub-ident-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	Subscriber identification policy name
Context	configure subscriber-mgmt sub-ident-policy string
Tree	sub-ident-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile-map

Synopsis	Enter the app-profile-map context
Context	configure subscriber-mgmt sub-ident-policy string app-profile-map
Tree	app-profile-map
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [app-profile-string] string

Synopsis	Enter the entry list instance
Context	configure subscriber-mgmt sub-ident-policy string app-profile-map entry string
Tree	entry
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[app-profile-string] string

Synopsis	Application profile string
Context	configure subscriber-mgmt sub-ident-policy string app-profile-map entry string

Tree	entry
String Length	1 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> app-profile-map entry <i>string</i> app-profile <i>reference</i>
Tree	app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-direct-map-as-default *boolean*

Synopsis	Enable direct mapping of application profile as default
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> app-profile-map use-direct-map-as-default <i>boolean</i>
Tree	use-direct-map-as-default
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis	Enter the primary context
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> primary
Tree	primary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of script execution
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> primary admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

script-url *string*

Synopsis	Identification script URL
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> primary script-url <i>string</i>
Tree	script-url
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secondary

Synopsis	Enter the secondary context
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> secondary
Tree	secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of script execution
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> secondary admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

script-url *string*

Synopsis	Identification script URL
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> secondary script-url <i>string</i>
Tree	script-url
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile-map

Synopsis	Enter the sla-profile-map context
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> sla-profile-map
Tree	sla-profile-map
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [[sla-profile-string](#)] *string*

Synopsis	Enter the entry list instance
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> sla-profile-map entry <i>string</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sla-profile-string] *string*

Synopsis	SLA profile string
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> sla-profile-map entry <i>string</i>
Tree	entry
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> sla-profile-map entry <i>string</i> sla-profile <i>reference</i>
Tree	sla-profile
Reference	configure subscriber-mgmt sla-profile <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-direct-map-as-default *boolean*

Synopsis	Allow direct mapping of SLA profile as default
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> sla-profile-map use-direct-map-as-default <i>boolean</i>
Tree	use-direct-map-as-default
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

strings-from-option *number*

Synopsis	IPOE option to get the identification strings
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> strings-from-option <i>number</i>

Tree	strings-from-option
Range	1 to 254
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile-map

Synopsis	Enter the sub-profile-map context
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> sub-profile-map
Tree	sub-profile-map
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [[sub-profile-string](#)] *string*

Synopsis	Enter the entry list instance
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> sub-profile-map entry <i>string</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sub-profile-string] *string*

Synopsis	Subscriber identification string
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> sub-profile-map entry <i>string</i>
Tree	entry
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber profile
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Context	configure subscriber-mgmt sub-ident-policy string sub-profile-map entry string sub-profile reference
Tree	sub-profile
Reference	configure subscriber-mgmt sub-profile string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-direct-map-as-default *boolean*

Synopsis	Allow direct mapping of subscriber profile as default
Context	configure subscriber-mgmt sub-ident-policy string sub-profile-map use-direct-map-as-default boolean
Tree	use-direct-map-as-default
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tertiary

Synopsis	Enter the tertiary context
Context	configure subscriber-mgmt sub-ident-policy string tertiary
Tree	tertiary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of script execution
Context	configure subscriber-mgmt sub-ident-policy string tertiary admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

script-url *string*

Synopsis	Identification script URL
Context	configure subscriber-mgmt sub-ident-policy <i>string</i> tertiary script-url <i>string</i>
Tree	script-url
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-mcac-policy [[name](#)] *string*

Synopsis	Enter the sub-mcac-policy list instance
Context	configure subscriber-mgmt sub-mcac-policy <i>string</i>
Tree	sub-mcac-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

[[name](#)] *string*

Synopsis	Policy name
Context	configure subscriber-mgmt sub-mcac-policy <i>string</i>
Tree	sub-mcac-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the subscriber MCAC policy
Context	configure subscriber-mgmt sub-mcac-policy <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

bandwidth

Synopsis Enter the **bandwidth** context

Context **configure** [subscriber-mgmt sub-mcac-policy](#) *string* **bandwidth**

Tree [bandwidth](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure** [subscriber-mgmt sub-mcac-policy](#) *string* **bandwidth mandatory** (*number* | *keyword*)

Tree [mandatory](#)

Range 0 to 2147483647

Default unlimited

Options unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

total (*number* | *keyword*)

Synopsis Maximum allowed bandwidth

Context **configure** [subscriber-mgmt sub-mcac-policy](#) *string* **bandwidth total** (*number* | *keyword*)

Tree [total](#)

Range 0 to 2147483647

Default unlimited

Options unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis Text description

Context **configure subscriber-mgmt sub-mcac-policy** *string description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

sub-profile [\[name\]](#) *string*

Synopsis Enter the **sub-profile** list instance
Context **configure subscriber-mgmt sub-profile** *string*
Tree [sub-profile](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Subscriber profile name
Context **configure subscriber-mgmt sub-profile** *string*
Tree [sub-profile](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy
Context **configure subscriber-mgmt sub-profile** *string accounting-policy reference*
Tree [accounting-policy](#)
Reference **configure log accounting-policy** *number*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accu-stats-policy *reference*

Synopsis	Accumulated statistics policy
Context	configure subscriber-mgmt sub-profile <i>string</i> accu-stats-policy <i>reference</i>
Tree	accu-stats-policy
Reference	configure subscriber-mgmt accu-stats-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp

Synopsis	Enter the ancp context
Context	configure subscriber-mgmt sub-profile <i>string</i> ancp
Tree	ancp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-policy *reference*

Synopsis	ANCP policy for this subscriber profile
Context	configure subscriber-mgmt sub-profile <i>string</i> ancp ancp-policy <i>reference</i>
Tree	ancp-policy
Reference	configure subscriber-mgmt ancp ancp-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure subscriber-mgmt sub-profile <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

control

Synopsis	Enter the control context
Context	configure subscriber-mgmt sub-profile <i>string</i> control
Tree	control
Description	Commands in this context determine which sessions can use the subscriber profile. By default, only sessions set up by the local system can use the profile, however, the profile can also be enabled for sessions set up by a BNG CUPS CPF.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cups *boolean*

Synopsis	Allow the CUPS control plane to use the profile
Context	configure subscriber-mgmt sub-profile <i>string</i> control cups <i>boolean</i>
Tree	cups
Description	When configured to true , the profile can be used by sessions set up by a BNG CUPS Control Plane Function (CPF).
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local *boolean*

Synopsis	Allow the local control plane to use the profile
Context	configure subscriber-mgmt sub-profile <i>string</i> control local <i>boolean</i>
Tree	local
Description	When configured to true , the profile can be used by sessions set up by the local system.
Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt sub-profile <i>string</i> description <i>string</i>

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure subscriber-mgmt sub-profile string egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag-per-link-hash

Synopsis	Enter the lag-per-link-hash context
Context	configure subscriber-mgmt sub-profile string egress lag-per-link-hash
Tree	lag-per-link-hash
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

class number

Synopsis	Class used to select a LAG link
Context	configure subscriber-mgmt sub-profile string egress lag-per-link-hash class number
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight number

Synopsis	Weight associated with SAP when selecting a LAG link
Context	configure subscriber-mgmt sub-profile string egress lag-per-link-hash weight number

Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure subscriber-mgmt sub-profile string egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Enter the agg-rate context
Context	configure subscriber-mgmt sub-profile string egress qos agg-rate
Tree	agg-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule *keyword*

Synopsis	Adaptation rule for operational PIR value of subscriber
Context	configure subscriber-mgmt sub-profile string egress qos agg-rate adaptation-rule keyword
Tree	adaptation-rule
Description	This command configures the adaptation rule for the PIR value of the subscriber aggregate rate. This rule determines which configured value is adapted to oper-agg-rate based on hardware capabilities.
Default	closest
Options	max, min, closest
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit (*number* | *keyword*)

Synopsis	Burst limit of the subscriber aggregate rate
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos agg-rate burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

min-resv-bw *number*

Synopsis	Reserved minimum total rate of all egress queues
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos agg-rate min-resv-bw <i>number</i>
Tree	min-resv-bw
Range	0 to 800000000
Default	1
Units	kilobps
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on all policers and queues associated with context
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos agg-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate number

Synopsis	Maximum total rate of all egress queues
Context	configure subscriber-mgmt sub-profile string egress qos agg-rate rate number
Tree	rate
Range	1 to 800000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-offset

Synopsis	Enable the encap-offset context
Context	configure subscriber-mgmt sub-profile string egress qos encap-offset
Tree	encap-offset
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis	Offset type
Context	configure subscriber-mgmt sub-profile string egress qos encap-offset type keyword
Tree	type
Options	pppoa-llc, pppoa-null, pppoeoa-llc, pppoeoa-llc-fcs, pppoeoa-llc-tagged, pppoeoa-llc-tagged-fcs, pppoeoa-null, pppoeoa-null-fcs, pppoeoa-null-tagged, pppoeoa-null-tagged-fcs, ipoa-llc, ipoa-null, ipoeoa-llc, ipoeoa-llc-fcs, ipoeoa-llc-tagged, ipoeoa-llc-tagged-fcs, ipoeoa-null, ipoeoa-null-fcs, ipoeoa-null-tagged, ipoeoa-null-tagged-fcs, pppoe, pppoe-tagged, ipoe, ipoe-tagged
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hs-agg-rate number

Synopsis	Maximum rate for single egress HS queues
Context	configure subscriber-mgmt sub-profile string egress qos hs-agg-rate number
Tree	hs-agg-rate
Range	1 to 100000000

Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-low-burst-max-class *number*

Synopsis	Scheduling classes to map the low burst limit threshold
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos hs-low-burst-max-class <i>number</i>
Tree	hs-low-burst-max-class
Range	1 to 6
Default	6
Introduced	16.0.R4
Platforms	7750 SR-7/12/12e

hs-min-resv-bw *number*

Synopsis	Reserved minimum total rate of all egress queues
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos hs-min-resv-bw <i>number</i>
Tree	hs-min-resv-bw
Range	0 to 100000000
Default	1
Units	kilobps
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the overrides context
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

root

Synopsis	Enable the root context
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum rate
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum threshold separation
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority [[level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[level] *number*

Synopsis	Strict priority level
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	MBS size
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Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the overrides context
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler [[scheduler-name](#)] *reference*

Synopsis	Enter the scheduler list instance
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i>
Tree	scheduler
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[scheduler-name] *reference*

Synopsis	Scheduler policy name
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i>
Tree	scheduler
Reference	configure qos scheduler-policy <i>string</i> tier number scheduler <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the rate context
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i> rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	CIR to override administrative CIR used by scheduler
Context	configure subscriber-mgmt sub-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 3200000000
Default	sum

Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	PIR to override administrative PIR used by scheduler
Context	configure subscriber-mgmt sub-profile string egress qos scheduler-policy overrides scheduler reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure subscriber-mgmt sub-profile string egress qos scheduler-policy policy-name reference
Tree	policy-name
Reference	configure qos scheduler-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

firewall-policy *reference*

Synopsis	Firewall policy
Context	configure subscriber-mgmt sub-profile string firewall-policy reference
Tree	firewall-policy
Reference	configure service nat firewall-policy string
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

host-limits

Synopsis Enter the **host-limits** context

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits**

Tree [host-limits](#)

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits ipv4**

Tree [ipv4](#)

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp number

Synopsis Maximum number of IPv4 ARP hosts

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits ipv4 arp number**

Tree [arp](#)

Description This command configures the maximum number of IPv4 ARP hosts per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp number

Synopsis Maximum number of IPv4 DHCP hosts

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits ipv4 dhcp number**

Tree [dhcp](#)

Description	This command configures the maximum number of IPv4 DHCP hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall number

Synopsis	Maximum number of IPv4 hosts
Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv4 overall <i>number</i>
Tree	overall
Description	This command configures the maximum number of IPv4 hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp number

Synopsis	Maximum number of IPv4 PPP hosts
Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv4 ppp <i>number</i>
Tree	ppp
Description	This command configures the maximum number of IPv4 PPP hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the ipv6 context
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Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6
Tree	ipv6
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of IPv6 hosts
Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 overall <i>number</i>
Tree	overall
Description	This command configures the maximum number of IPv6 hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-ipoe-dhcp *number*

Synopsis	Maximum number of IPv6 IPoE DHCP PD hosts
Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 pd-ipoe-dhcp <i>number</i>
Tree	pd-ipoe-dhcp
Description	This command configures the maximum number of IPv6 IPoE DHCP Prefix Delegation hosts (IA-PD) per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-overall *number*

Synopsis	Maximum number of IPv6 DHCP PD hosts
Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 pd-overall <i>number</i>
Tree	pd-overall

Description	The command configures the maximum number of IPv6 DHCP Prefix Delegation hosts (IA-PD) per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-ppp-dhcp *number*

Synopsis	Maximum number of IPv6 PPPoE DHCP PD hosts
Context	configure subscriber-mgmt sub-profile string host-limits ipv6 pd-ppp-dhcp number
Tree	pd-ppp-dhcp
Description	This command configures the maximum number of IPv6 PPPoE DHCP Prefix Delegation hosts (IA-PD) per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ipoe-dhcp *number*

Synopsis	Maximum number of IPv6 IPoE DHCP WAN hosts
Context	configure subscriber-mgmt sub-profile string host-limits ipv6 wan-ipoe-dhcp number
Tree	wan-ipoe-dhcp
Description	This command configures the maximum number of IPv6 IPoE DHCP WAN hosts (IA-NA) per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ipoe-slaac *number*

Synopsis	Maximum number of IPv6 IPoE SLAAC WAN hosts
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Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 wan-ipoe-slaac <i>number</i>
Tree	wan-ipoe-slaac
Description	This command configures the maximum number of IPv6 IPoE SLAAC WAN hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-overall *number*

Synopsis	Maximum number of IPv6 WAN hosts
Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 wan-overall <i>number</i>
Tree	wan-overall
Description	This command configures the maximum number of IPv6 WAN hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ppp-dhcp *number*

Synopsis	Maximum number of IPv6 PPPoE DHCP WAN hosts
Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 wan-ppp-dhcp <i>number</i>
Tree	wan-ppp-dhcp
Description	This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ppp-slaac *number*

Synopsis	Maximum number of IPv6 PPPoE SLAAC WAN hosts
Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 wan-ppp-slaac <i>number</i>
Tree	wan-ppp-slaac
Description	This command configures the maximum number of IPv6 PPPoE SLAAC WAN hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac-overall *number*

Synopsis	Maximum number of L2TP LAC hosts
Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits lac-overall <i>number</i>
Tree	lac-overall
Description	This command configures the maximum number of L2TP LAC hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of subscriber hosts
Context	configure subscriber-mgmt sub-profile <i>string</i> host-limits overall <i>number</i>
Tree	overall
Description	This command configures the maximum number of subscriber hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	1 to 131071
Introduced	20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-tracking-policy *reference*

Synopsis Host tracking policy
Context **configure** [subscriber-mgmt sub-profile](#) *string* [host-tracking-policy](#) *reference*
Tree [host-tracking-policy](#)
Reference **configure** [subscriber-mgmt](#) [host-tracking-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hs-sla-mode *keyword*

Synopsis HS board subscriber SLA mode
Context **configure** [subscriber-mgmt sub-profile](#) *string* [hs-sla-mode](#) *keyword*
Tree [hs-sla-mode](#)
Default expanded
Options expanded, single
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

igmp-policy *reference*

Synopsis IGMP policy
Context **configure** [subscriber-mgmt sub-profile](#) *string* [igmp-policy](#) *reference*
Tree [igmp-policy](#)
Reference **configure** [subscriber-mgmt](#) [igmp-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis Enter the **ingress** context
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress](#)
Tree [ingress](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos](#)
Tree [qos](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis Enter the **policer-control-policy** context
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos](#) [policer-control-policy](#)
Tree [policer-control-policy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis Enter the **overrides** context
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos](#) [policer-control-policy](#) [overrides](#)
Tree [overrides](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

root

Synopsis Enable the **root** context
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos](#) [policer-control-policy](#) [overrides](#) [root](#)
Tree [root](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum rate
Context	configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum threshold separation
Context	configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority [[level](#)] *number*

Synopsis	Enter the priority list instance
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Context	configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds <i>priority</i> <i>number</i>
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[level] *number*

Synopsis	Strict priority level
Context	configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds <i>priority</i> <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	MBS size
Context	configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds <i>priority</i> <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name

Reference **configure qos policer-control-policy** *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy

Synopsis Enter the **scheduler-policy** context
Context **configure subscriber-mgmt sub-profile** *string* ingress qos scheduler-policy
Tree [scheduler-policy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis Enter the **overrides** context
Context **configure subscriber-mgmt sub-profile** *string* ingress qos scheduler-policy overrides
Tree [overrides](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler [[scheduler-name](#)] *reference*

Synopsis Enter the **scheduler** list instance
Context **configure subscriber-mgmt sub-profile** *string* ingress qos scheduler-policy overrides
[scheduler](#) *reference*
Tree [scheduler](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[scheduler-name] *reference*

Synopsis Scheduler policy name
Context **configure subscriber-mgmt sub-profile** *string* ingress qos scheduler-policy overrides
[scheduler](#) *reference*
Tree [scheduler](#)
Reference **configure qos scheduler-policy** *string* tier number scheduler *string*

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the rate context
Context	configure subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	CIR to override administrative CIR used by scheduler
Context	configure subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference rate cir (number keyword)
Tree	cir
Range	0 to 3200000000
Default	sum
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	PIR to override administrative PIR used by scheduler
Context	configure subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference rate pir (number keyword)
Tree	pir
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Scheduler policy name
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos scheduler-policy policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos scheduler-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mld-policy *reference*

Synopsis MLD policy
Context **configure** [subscriber-mgmt sub-profile](#) *string* [mld-policy](#) *reference*
Tree [mld-policy](#)
Reference **configure** [subscriber-mgmt mld-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis Enter the **nat** context
Context **configure** [subscriber-mgmt sub-profile](#) *string* **nat**
Tree [nat](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-mode *keyword*

Synopsis The subscriber NAT access mode
Context **configure** [subscriber-mgmt sub-profile](#) *string* [nat access-mode](#) *keyword*
Tree [access-mode](#)

Default	auto
Options	auto, bridged
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow-bypass *boolean*

Synopsis	Allow traffic to bypass NAT
Context	configure subscriber-mgmt sub-profile <i>string nat allow-bypass</i> <i>boolean</i>
Tree	allow-bypass
Description	When configured to true , the system enables L2-Aware NAT subscribers for NAT bypass. When enabled, the IP filter configuration applied in the subscriber profile determines whether the traffic is bypassed. When configured to false , traffic is subject to L2-Aware NAT operation.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	NAT policy associated with the subscriber profile
Context	configure subscriber-mgmt sub-profile <i>string nat policy</i> <i>reference</i>
Tree	policy
Reference	configure service nat nat-policy <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-list *reference*

Synopsis	NAT prefix list name
Context	configure subscriber-mgmt sub-profile <i>string nat prefix-list</i> <i>reference</i>
Tree	prefix-list
Reference	configure service nat prefix-list <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim-policy *reference*

Synopsis	Protocol Independent Multicast (PIM) policy
Context	configure subscriber-mgmt sub-profile <i>string</i> pim-policy reference
Tree	pim-policy
Reference	configure subscriber-mgmt pim-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Relative preference value for the subscriber profile
Context	configure subscriber-mgmt sub-profile <i>string</i> preference number
Tree	preference
Range	1 to 10
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting

Synopsis	Enter the radius-accounting context
Context	configure subscriber-mgmt sub-profile <i>string</i> radius-accounting
Tree	radius-accounting
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	RADIUS accounting policies
Context	configure subscriber-mgmt sub-profile <i>string</i> radius-accounting policy reference
Tree	policy
Reference	configure subscriber-mgmt radius-accounting-policy <i>string</i>
Max. Instances	5

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-optimized-stop *boolean*

Synopsis	Optimize PPPoE session accounting stop behavior
Context	configure subscriber-mgmt sub-profile <i>string</i> radius-accounting session-optimized-stop <i>boolean</i>
Tree	session-optimized-stop
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secondary-shaper-hashing *boolean*

Synopsis	Include LAG hashing on secondary shaper
Context	configure subscriber-mgmt sub-profile <i>string</i> secondary-shaper-hashing <i>boolean</i>
Tree	secondary-shaper-hashing
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the session-limits context
Context	configure subscriber-mgmt sub-profile <i>string</i> session-limits
Tree	session-limits
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe *number*

Synopsis	Maximum number of IPoE sessions
Context	configure subscriber-mgmt sub-profile <i>string</i> session-limits ipoe <i>number</i>

Tree	ipoe
Description	This command configures the maximum number of IPoE sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

I2tp

Synopsis	Enter the I2tp context
Context	configure subscriber-mgmt sub-profile string session-limits I2tp
Tree	I2tp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

Ins number

Synopsis	Maximum number of L2TP LNS sessions
Context	configure subscriber-mgmt sub-profile string session-limits I2tp Ins <i>number</i>
Tree	Ins
Description	This command configures the maximum number of L2TP LNS sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

Its number

Synopsis	Maximum number of L2TP LTS sessions
Context	configure subscriber-mgmt sub-profile string session-limits I2tp Its <i>number</i>
Tree	Its
Description	This command configures the maximum number of L2TP LTS sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall number

Synopsis Maximum number of L2TP sessions
Context **configure** *subscriber-mgmt sub-profile string session-limits l2tp overall number*
Tree *overall*
Description This command configures the maximum number of L2TP sessions per subscriber instance.
Range 0 to 131071
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall number

Synopsis Maximum number of subscriber sessions
Context **configure** *subscriber-mgmt sub-profile string session-limits overall number*
Tree *overall*
Description This command configures the maximum number of subscriber sessions per subscriber instance.
Range 0 to 131071
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis Enter the **pppoe** context
Context **configure** *subscriber-mgmt sub-profile string session-limits pppoe*
Tree *pppoe*
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac number

Synopsis Maximum number of PPPoE L2TP LAC sessions
Context **configure** *subscriber-mgmt sub-profile string session-limits pppoe lac number*

Tree	lac
Description	This command configures the maximum number of PPPoE L2TP LAC sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local number

Synopsis	Maximum number of PPPoE local-terminated sessions
Context	configure subscriber-mgmt sub-profile string session-limits pppoe local number
Tree	local
Description	This command configures the maximum number of PPPoE local-terminated sessions (PTA) per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall number

Synopsis	Maximum number of PPPoE sessions
Context	configure subscriber-mgmt sub-profile string session-limits pppoe overall number
Tree	overall
Description	This command configures the maximum number of PPPoE sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile-map

Synopsis	Enter the sla-profile-map context
Context	configure subscriber-mgmt sub-profile string sla-profile-map
Tree	sla-profile-map
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [sla-profile-string] *string*

Synopsis Enter the **entry** list instance
Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string*
Tree [entry](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sla-profile-string] *string*

Synopsis SLA profile string
Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string*
Tree [entry](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis SLA profile
Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string* sla-profile *reference*
Tree [sla-profile](#)
Reference **configure** subscriber-mgmt sla-profile *string*
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-direct-map-as-default *boolean*

Synopsis Allow direct mapping of SLA profile as default
Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map use-direct-map-as-default *boolean*

Tree	use-direct-map-as-default
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-mcac-policy *reference*

Synopsis	Subscriber MCAC policy
Context	configure subscriber-mgmt sub-profile <i>string</i> sub-mcac-policy <i>reference</i>
Tree	sub-mcac-policy
Reference	configure subscriber-mgmt sub-mcac-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

upnp-policy *reference*

Synopsis	UPnP policy for the subscriber profile
Context	configure subscriber-mgmt sub-profile <i>string</i> upnp-policy <i>reference</i>
Tree	upnp-policy
Description	This command specifies the Universal Plug 'n Play policy (UPnP) IGD service for the subscriber profile. All ESM hosts of the subscriber can use the UPnP protocol to create port mapping. This feature only supports L2-Aware NAT hosts. The UPnP parameters are defined in the referenced UPnP policy configured in the configure service upnp context.
Reference	configure service upnp policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

volume-stats-type *keyword*

Synopsis	Include non-IP headers in the accounting statistics
Context	configure subscriber-mgmt sub-profile <i>string</i> volume-stats-type <i>keyword</i>
Tree	volume-stats-type
Default	l2
Options	l2, ip
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vport-hashing *boolean*

Synopsis Include LAG hashing on Vport
Context **configure** [subscriber-mgmt sub-profile string vport-hashing boolean](#)
Tree [vport-hashing](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-interface-statistics

Synopsis Enter the **subscriber-interface-statistics** context
Context **configure** [subscriber-mgmt subscriber-interface-statistics](#)
Tree [subscriber-interface-statistics](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state for statistics collection
Context **configure** [subscriber-mgmt subscriber-interface-statistics admin-state keyword](#)
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

svlan-statistics

Synopsis Enter the **svlan-statistics** context
Context **configure** [subscriber-mgmt svlan-statistics](#)
Tree [svlan-statistics](#)
Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of statistics collection

Context **configure** [subscriber-mgmt](#) [svlan-statistics](#) **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-behavior

Synopsis Enter the **system-behavior** context

Context **configure** [subscriber-mgmt](#) [system-behavior](#)

Tree [system-behavior](#)

Description Commands in this context configure the attributes of system-wide subscriber management behavior.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

legacy-dns-nbns *boolean*

Synopsis Restrict authentication origins for name servers

Context **configure** [subscriber-mgmt](#) [system-behavior](#) **legacy-dns-nbns** *boolean*

Tree [legacy-dns-nbns](#)

Description When configured to **true**, this command enables legacy DNS NBNS behavior, which restricts the supported default extended authentication origins for DNS and NBNS name servers. The main differences include:

- only support DHCP server as origin for DHCP relay: IPoE DHCPv4/DHCPv6 and PPPoE DHCPv6
- Local Address Assignment (LAA) is highest priority origin: IPoE and PPPoE SLAAC DNSv6 and PPPoE DNSv4
- no default DNS for IPoE DHCPv4 proxy

When configured to **false**, this command reverts to the recommended default extended DNS and NBNS name server origin priorities.

Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up-resiliency

Synopsis	Enter the up-resiliency context
Context	configure subscriber-mgmt up-resiliency
Tree	up-resiliency
Description	Commands in this context configure the inter-UPF resiliency in a CUPS system.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fate-sharing-group-template [[name](#)] *string*

Synopsis	Enter the fate-sharing-group-template list instance
Context	configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i>
Tree	fate-sharing-group-template
Description	Commands in this context configure resiliency parameters per FSG.
Max. Instances	256
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	FSG template ID
Context	configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i>
Tree	fate-sharing-group-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gratuitous-arp *keyword*

Synopsis	Granularity for sending GARP packets on switchover
Context	configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> gratuitous-arp <i>keyword</i>
Tree	gratuitous-arp
Default	one-per-sap
Options	one-per-outer-tag, one-per-sap
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redundant-interface

Synopsis	Enter the redundant-interface context
Context	configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> redundant-interface
Tree	redundant-interface
Description	Commands in this context configure downstream traffic shunting from a standby BNG UPF to an active BNG UPF. Downstream traffic that is received for standby sessions is sent over the redundant interface to the active BNG UPF. This requires the configuration of the multi-chassis-shunt-id in the service that receives the session traffic.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Redundant interface name
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Context	configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> redundant-interface <i>name</i> <i>string</i>
Tree	name
Description	This command configures the name of the redundant interface. It must exist in the service that contains the redundant interface.
String Length	1 to 32
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service *string*

Synopsis	Service that contains the redundant interface
Context	configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> redundant-interface <i>service</i> <i>string</i>
Tree	service
Description	This command configures the service that contains the redundant interface. It can be different from the service where the session traffic is terminated.
String Length	1 to 64
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uplink-forwarding-while-standby *boolean*

Synopsis	Allows a standby BNG UPF to forward packets
Context	configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> uplink-forwarding-while-standby <i>boolean</i>
Tree	uplink-forwarding-while-standby
Description	This command allows a standby BNG UPF to forward uplink traffic. To prevent the possibility of packet replication towards the network, this command should only be enabled if the access network is provisioned not to replicate unicast packets to the BNG UPF.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vrgw

Synopsis	Enter the vrgw context
Context	configure subscriber-mgmt vrgw
Tree	vrgw
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

brg-profile [[brg-profile-name](#)] *string*

Synopsis	Enter the brg-profile list instance
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i>
Tree	brg-profile
Max. Instances	16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[brg-profile-name](#)] *string*

Synopsis	BRG profile name
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i>
Tree	brg-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

connectivity-verification

Synopsis	Enter the connectivity-verification context
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> connectivity-verification
Tree	connectivity-verification
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BRG connectivity verification
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> connectivity-verification admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

count *number*

Synopsis	Connection attempts before BRG is considered down
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> connectivity-verification count <i>number</i>
Tree	count
Range	1 to 5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-time *number*

Synopsis	Time the system will wait after a successful connectivity check before starting a new check
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> connectivity-verification retry-time <i>number</i>
Tree	retry-time
Range	300 to 3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout after which a message is considered unanswered
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> connectivity-verification timeout <i>number</i>

Tree	timeout
Range	5 to 60
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	The time to hold on to a BRG after it went down
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> hold-time <i>number</i>
Tree	hold-time
Range	0 30 to 2592000
Default	0
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

home-pool

Synopsis	Enter the home-pool context
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool
Tree	home-pool
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time *number*

Synopsis	Lease time used when allocating addresses from the pool
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool lease-time <i>number</i>
Tree	lease-time
Range	300 to 315446399
Default	21600
Units	seconds
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	ASCII string of the DHCP option
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>

Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option as time duration.
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option.
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option as a hexadecimal string
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string

String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i>
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type.
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i>
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

standby-ip-lifetime *number*

Synopsis	The lifetime of the standby IP addresses
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool standby-ip-lifetime <i>number</i>

Tree	standby-ip-lifetime
Range	300 to 315446399
Default	21600
Units	seconds
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet

Synopsis	Enter the subnet context
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool subnet
Tree	subnet
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end string

Synopsis	Upper bound of the IP address range
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool subnet end <i>string</i>
Tree	end
Default	192.168.0.254
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix string

Synopsis	Prefix and default-gateway to be used inside the home
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool subnet prefix <i>string</i>
Tree	prefix
Default	192.168.0.1/24
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *string*

Synopsis	Lower bound of the IP address range
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool subnet start <i>string</i>
Tree	start
Default	192.168.0.2
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial-hold-time *number*

Synopsis	Hold time for BRG instances created without any hosts
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> initial-hold-time <i>number</i>
Tree	initial-hold-time
Range	0 to 900
Default	300
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-authentication

Synopsis	Enter the radius-authentication context
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-authentication
Tree	radius-authentication
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password used for authentication
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-authentication password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-policy *reference*

Synopsis	Radius servers to be used for authentication
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-authentication server-policy reference
Tree	server-policy
Reference	configure aaa radius server-policy <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-proxy-server [[router-instance](#)] *string name string*

Synopsis	Add a list entry for radius-proxy-server
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-proxy-server <i>string name string</i>
Tree	radius-proxy-server
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[router-instance] *string*

Synopsis	router-instance
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-proxy-server <i>string name string</i>
Tree	radius-proxy-server
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	RADIUS proxy server name
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-proxy-server <i>string name string</i>

Tree	radius-proxy-server
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile-string *string*

Synopsis	Default SLA profile string on BRG level, overridable via AAA
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> sla-profile-string <i>string</i>
Tree	sla-profile-string
String Length	0 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile-string *string*

Synopsis	Default subscriber profile string on BRG level, overridable via AAA
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> sub-profile-string <i>string</i>
Tree	sub-profile-string
String Length	0 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uplink-initial-wait *number*

Synopsis	Wait time for non-routed uplink to become operational
Context	configure subscriber-mgmt vrgw brg-profile <i>string</i> uplink-initial-wait <i>number</i>
Tree	uplink-initial-wait
Range	10 to 300
Default	30
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lanext

Synopsis	Enter the lanext context
Context	configure subscriber-mgmt vrgw lanext
Tree	lanext
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-target-as-number *number*

Synopsis	AS number that derives the route target and distinguisher for vRGW LAN Extension bridge domains
Context	configure subscriber-mgmt vrgw lanext router-target-as-number <i>number</i>
Tree	router-target-as-number
Range	1 to 65535
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the wlan-gw context
Context	configure subscriber-mgmt wlan-gw
Tree	wlan-gw
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queries

Synopsis	Enter the queries context
Context	configure subscriber-mgmt wlan-gw queries
Tree	queries
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel [*name*] *string*

Synopsis	Enter the tunnel list instance
Context	configure subscriber-mgmt wlan-gw queries tunnel <i>string</i>
Tree	tunnel
Max. Instances	1024
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Tunnel query name
Context	configure subscriber-mgmt wlan-gw queries tunnel <i>string</i>
Tree	tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-point-mac-address-learning-status *keyword*

Synopsis	Matching criteria of tunnels based on learning status
Context	configure subscriber-mgmt wlan-gw queries tunnel <i>string</i> access-point-mac-address-learning-status <i>keyword</i>
Tree	access-point-mac-address-learning-status
Options	failed, succeeded
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

calculate-counts *boolean*

Synopsis	Count the number of tunnels matching the criteria
Context	configure subscriber-mgmt wlan-gw queries tunnel <i>string</i> calculate-counts <i>boolean</i>
Tree	calculate-counts
Default	false

Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulation

Synopsis Enable the **encapsulation** context
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [encapsulation](#)
Tree [encapsulation](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gre *boolean*

Synopsis Controls whether the query returns Soft GRE tunnels
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [encapsulation](#) [gre](#) *boolean*
Tree [gre](#)
Default true
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2 *boolean*

Synopsis Enable matching on Layer 2 tunnels
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [encapsulation](#) [l2](#) *boolean*
Tree [l2](#)
Default true
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2tp *boolean*

Synopsis Controls whether the query returns Soft L2TPv3 tunnels
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [encapsulation](#) [l2tp](#) *boolean*
Tree [l2tp](#)
Default true

Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan boolean

Synopsis Controls whether the query returns VXLAN tunnels
Context **configure subscriber-mgmt wlan-gw queries tunnel** *string encapsulation vxlan boolean*
Tree [vxlan](#)
Default true
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2

Synopsis Enter the **I2** context
Context **configure subscriber-mgmt wlan-gw queries tunnel** *string I2*
Tree [I2](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inner-vlan number

Synopsis Value to match the Layer 2 access point of the tunnel
Context **configure subscriber-mgmt wlan-gw queries tunnel** *string I2 inner-vlan number*
Tree [inner-vlan](#)
Range 0 to 4095
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

outer-vlan number

Synopsis Layer 2 access point matching with a specified S-VLAN
Context **configure subscriber-mgmt wlan-gw queries tunnel** *string I2 outer-vlan number*
Tree [outer-vlan](#)
Range 0 to 4095

Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap string

Synopsis Value to match the L2-AP Access Point of the tunnel
Context **configure** [subscriber-mgmt wlan-gw queries tunnel string l2 sap string](#)
Tree [sap](#)
String Length 1 to 45
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

I3

Synopsis Enter the **I3** context
Context **configure** [subscriber-mgmt wlan-gw queries tunnel string l3](#)
Tree [I3](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-type keyword

Synopsis Address type to match
Context **configure** [subscriber-mgmt wlan-gw queries tunnel string l3 address-type keyword](#)
Tree [address-type](#)
Options ipv4, ipv6
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis IP address as local endpoint to match
Context **configure** [subscriber-mgmt wlan-gw queries tunnel string l3 local-address \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)
Tree [local-address](#)
Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address as remote endpoint to match
Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string* **l3** [remote-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [remote-address](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis Router instance to match
Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string* **l3** [router-instance](#) *string*
Tree [router-instance](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ues

Synopsis Enter the **ues** context
Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string* **ues**
Tree [ues](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

maximum *number*

Synopsis Maximum number of UEs
Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string* **ues** [maximum](#) *number*
Tree [maximum](#)
Max. Range 0 to 4294967295
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

minimum *number*

Synopsis	Minimum number of UEs
Context	configure subscriber-mgmt wlan-gw queries tunnel <i>string ues minimum number</i>
Tree	minimum
Max. Range	0 to 4294967295
Default	1
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

state

Synopsis	Enable the state context
Context	configure subscriber-mgmt wlan-gw queries tunnel <i>string ues state</i>
Tree	state
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

cross-connect *boolean*

Synopsis	Match on tunnels with cross-connect UEs
Context	configure subscriber-mgmt wlan-gw queries tunnel <i>string ues state cross-connect boolean</i>
Tree	cross-connect
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dsm *boolean*

Synopsis	Match on DSM UEs
Context	configure subscriber-mgmt wlan-gw queries tunnel <i>string ues state dsm boolean</i>
Tree	dsm
Default	true
Introduced	19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm *boolean*

Synopsis Match on ESM UEs
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [ues](#) [state](#) **esm** *boolean*
Tree [esm](#)
Default true
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2 *boolean*

Synopsis Match on tunnels with L2W UEs
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [ues](#) [state](#) **l2** *boolean*
Tree [l2](#)
Default true
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

migrant *boolean*

Synopsis Match on tunnels with migrant UEs
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [ues](#) [state](#) **migrant** *boolean*
Tree [migrant](#)
Default true
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ue [[name](#)] *string*

Synopsis Enter the **ue** list instance
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [ue](#) *string*
Tree [ue](#)
Max. Instances 1024

Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis UE query name
Context **configure** [subscriber-mgmt wlan-gw queries ue string](#)
Tree [ue](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis Enter the **address** context
Context **configure** [subscriber-mgmt wlan-gw queries ue string address](#)
Tree [address](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6-na *string*

Synopsis DHCPv6 IA-NA address to match for UEs
Context **configure** [subscriber-mgmt wlan-gw queries ue string address dhcp6-na string](#)
Tree [dhcp6-na](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 *string*

Synopsis IPv4 address to match for UEs
Context **configure** [subscriber-mgmt wlan-gw queries ue string address ipv4 string](#)
Tree [ipv4](#)
Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac string

Synopsis SLAAC prefix to match for UEs
Context **configure subscriber-mgmt wlan-gw queries ue string address slaac string**
Tree [slaac](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis Address type to match for UEs
Context **configure subscriber-mgmt wlan-gw queries ue string address type keyword**
Tree [type](#)
Options ipv4, ipv6, ipv4-only, ipv6-only, ipv4v6
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bridge-domain number

Synopsis Bridge Domain to match for UEs
Context **configure subscriber-mgmt wlan-gw queries ue string bridge-domain number**
Tree [bridge-domain](#)
Range 0 to 4294967294
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

connection-state

Synopsis Enable the **connection-state** context
Context **configure subscriber-mgmt wlan-gw queries ue string connection-state**
Tree [connection-state](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

already-signed-in *boolean*

Synopsis	Enable matching on UEs that are already signed in
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state already-signed-in <i>boolean</i>
Tree	already-signed-in
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

authorized-only *boolean*

Synopsis	Enable matching on UEs in an authorized state
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state authorized-only <i>boolean</i>
Tree	authorized-only
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

cross-connect *boolean*

Synopsis	Enable matching on cross-connected UEs
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state cross-connect <i>boolean</i>
Tree	cross-connect
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

data-triggered *boolean*

Synopsis	Enable matching on UEs in a data-triggered state
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state data-triggered <i>boolean</i>
Tree	data-triggered

Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

delete-pending *boolean*

Synopsis	Enable matching on UEs in a delete-pending state
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state delete-pending <i>boolean</i>
Tree	delete-pending
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-triggered *boolean*

Synopsis	Enable matching on UEs in DHCP-triggered state
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state dhcp-triggered <i>boolean</i>
Tree	dhcp-triggered
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dsm *boolean*

Synopsis	Controls whether the query returns UEs in DSM state
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state dsm <i>boolean</i>
Tree	dsm
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm *boolean*

Synopsis	Controls whether the query returns UEs in ESM state
----------	---

Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state esm <i>boolean</i>
Tree	esm
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-authorized *boolean*

Synopsis	Enable matching on UEs in GTP-authorized state
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state gtp-authorized <i>boolean</i>
Tree	gtp-authorized
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-assigned *boolean*

Synopsis	Controls whether the query returns UEs in IP-assigned state
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state ip-assigned <i>boolean</i>
Tree	ip-assigned
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-assigned-authorized *boolean*

Synopsis	Controls whether the query returns UEs in IP-assigned-authorized state
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state ip-assigned-authorized <i>boolean</i>
Tree	ip-assigned-authorized
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2 boolean

Synopsis	Match on Layer-2 wholesale state for UEs
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state l2 <i>boolean</i>
Tree	l2
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

portal boolean

Synopsis	Controls whether the query returns UEs in portal state
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state portal <i>boolean</i>
Tree	portal
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address string

Synopsis	MAC address to use for matching on UEs
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> mac-address <i>string</i>
Tree	mac-address
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

soft-quota-exhausted boolean

Synopsis	Send interim update message when the quota is reached
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> soft-quota-exhausted <i>boolean</i>
Tree	soft-quota-exhausted
Default	false
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel

Synopsis	Enter the tunnel context
Context	configure subscriber-mgmt wlan-gw queries ue string tunnel
Tree	tunnel
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulation *keyword*

Synopsis	Tunnel type to match for active UEs
Context	configure subscriber-mgmt wlan-gw queries ue string tunnel encapsulation keyword
Tree	encapsulation
Options	gre, l2tp, l2, vxlan
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address as local tunnel endpoint to match for UEs
Context	configure subscriber-mgmt wlan-gw queries ue string tunnel local-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	local-address
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address as remote tunnel endpoint to match for UEs
Context	configure subscriber-mgmt wlan-gw queries ue string tunnel remote-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	remote-address
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance of tunnels to match for UEs
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> tunnel router-instance <i>string</i>
Tree	router-instance
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan *number*

Synopsis	VLAN tag within the tunnel to match for UEs
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> vlan <i>number</i>
Tree	vlan
Range	0 to 4095
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group

Synopsis	Enable the wlan-gw-group context
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> wlan-gw-group
Tree	wlan-gw-group
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *number*

Synopsis	WLAN-GW ISA group ID
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> wlan-gw-group id <i>number</i>
Tree	id
Range	1 to 4
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

member number

Synopsis	The member of the WLAN-GW ISA group
Context	configure subscriber-mgmt wlan-gw queries ue <i>string</i> wlan-gw-group member <i>number</i>
Tree	member
Range	1 to 1024
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

virtual-chassis-identifier string

Synopsis	WLAN Gateway virtual chassis ID or dual homing key
Context	configure subscriber-mgmt wlan-gw virtual-chassis-identifier <i>string</i>
Tree	virtual-chassis-identifier
String Length	1 to 16
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.46 system commands

```

configure
- system
- alarm-contact-in-power boolean
- alarm-contact-input number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-message string
- description string
- normal-state keyword
- trigger-message string
- alarms
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- max-cleared number
- allow-boot-license-violations boolean
- apply-groups reference
- apply-groups-exclude reference
- bluetooth
- admin-state keyword
- advertising-timeout number
- apply-groups reference
- apply-groups-exclude reference
- device string
- apply-groups reference
- apply-groups-exclude reference
- description string
- module string
- apply-groups reference
- apply-groups-exclude reference
- provisioned-identifier string
- pairing-button boolean
- passkey string
- power-mode keyword
- boot-bad-exec string
- boot-good-exec string
- central-frequency-clock
- apply-groups reference
- apply-groups-exclude reference
- bits
- input
- admin-state keyword
- interface-type keyword
- output
- admin-state keyword
- line-length keyword
- ql-minimum keyword
- source keyword
- sqlch boolean
- ql-override keyword
- ssm-bit number
- gnss
- admin-state keyword
- ql-override keyword
- ptp
- admin-state keyword
- ql-override keyword
- ql-minimum keyword

```

configure system central-frequency-clock ql-selection

- **ql-selection** *boolean*
- **ref-order**
 - **fifth** *keyword*
 - **first** *keyword*
 - **fourth** *keyword*
 - **second** *keyword*
 - **sixth** *keyword*
 - **third** *keyword*
- **ref1**
 - **admin-state** *keyword*
 - **ql-override** *keyword*
 - **source-port** *string*
- **ref2**
 - **admin-state** *keyword*
 - **ql-override** *keyword*
 - **source-port** *string*
- **revert** *boolean*
- **synce**
 - **admin-state** *keyword*
 - **ql-override** *keyword*
- **wait-to-restore** *number*
- **cli-code** *string*
- **congestion-management** *boolean*
- **contact** *string*
- **coordinates** *string*
- **cpm-http-redirect**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **optimized-mode** *boolean*
- **cron**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **schedule** *string* **owner** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **count** *number*
 - **day-of-month** *number*
 - **description** *string*
 - **end-time**
 - **date-and-time** *string*
 - **day** *keyword*
 - **time** *string*
 - **hour** *number*
 - **interval** *number*
 - **minute** *number*
 - **month** (*keyword* | *number*)
 - **script-policy**
 - **name** *string*
 - **owner** *string*
 - **type** *keyword*
 - **weekday** (*keyword* | *number*)
- **dhcp6**
 - **adv-noaddrs-global** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **dns**
 - **address-pref** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dnssec**
 - **ad-validation** *keyword*
- **efm-oam**
 - **apply-groups** *reference*

configure system efm-oam apply-groups-exclude

```
– apply-groups-exclude reference
– dying-gasp-tx-on-reset boolean
– grace-tx boolean
– eth-cfm
– apply-groups reference
– apply-groups-exclude reference
– grace boolean
– md-auto-id
– ma-index-range
– apply-groups reference
– apply-groups-exclude reference
– end number
– start number
– md-index-range
– apply-groups reference
– apply-groups-exclude reference
– end number
– start number
– redundancy
– apply-groups reference
– apply-groups-exclude reference
– mc-lag
– propagate-hold-time (number | keyword)
– standby-mep boolean
– sender-id
– local-name string
– type keyword
– slm
– apply-groups reference
– apply-groups-exclude reference
– inactivity-timer number
– grpc
– admin-state keyword
– allow-unsecure-connection
– apply-groups reference
– apply-groups-exclude reference
– gnmi
– admin-state keyword
– auto-config-save boolean
– gnoi
– cert-mgmt
– admin-state keyword
– file
– admin-state keyword
– system
– admin-state keyword
– max-msg-size number
– md-cli
– admin-state keyword
– rib-api
– admin-state keyword
– purge-timeout number
– tcp-keepalive
– admin-state keyword
– idle-time number
– interval number
– retries number
– tls-server-profile reference
– grpc-tunnel
– apply-groups reference
– apply-groups-exclude reference
– destination-group string
– allow-unsecure-connection
– apply-groups reference
```

configure system grpc-tunnel destination-group apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name) port number
  - apply-groups reference
  - apply-groups-exclude reference
  - local-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - originated-qos-marking keyword
  - router-instance string
- tcp-keepalive
  - admin-state keyword
  - idle-time number
  - interval number
  - retries number
- tls-client-profile reference
- tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - destination-group reference
  - handler string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - port number
    - target-type
      - custom-type string
      - grpc-server
      - ssh-server
  - target-name
    - custom-string string
    - node-name
    - user-agent
- icmp-vse boolean
- ip
  - allow-qinq-network-interface boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - enforce-unique-if-index boolean
  - forward-6in4 boolean
  - forward-ip-over-gre boolean
  - ipv6-eh keyword
  - mpls
    - label-stack-statistics-count number
- l2tp
  - apply-groups reference
  - apply-groups-exclude reference
  - non-multi-chassis-tunnel-id-range
    - end number
    - start number
- lacp
  - apply-groups reference
  - apply-groups-exclude reference
  - system-priority number
- lldp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - message-fast-tx number
  - message-fast-tx-init number
  - notification-interval number
  - reinit-delay number
  - tx-credit-max number

```

configure system lldp tx-hold-multiplier

- tx-hold-multiplier *number*
- tx-interval *number*
- load-balancing
 - apply-groups *reference*
 - apply-groups-exclude *reference*
 - l2tp-load-balancing *boolean*
 - l4-load-balancing *boolean*
 - lsr-load-balancing *keyword*
 - mc-enh-load-balancing *boolean*
 - service-id-lag-hashing *boolean*
 - system-ip-load-balancing *boolean*
- location *string*
- login-control
 - apply-groups *reference*
 - apply-groups-exclude *reference*
 - exponential-backoff *boolean*
 - ftp
 - inbound-max-sessions *number*
 - idle-timeout (*keyword* | *number*)
 - login-banner *boolean*
 - login-scripts
 - global-script *string*
 - per-user-script
 - file-name *string*
 - user-directory *string*
 - motd
 - text *string*
 - url *string*
 - pre-login-message
 - message *string*
 - name *boolean*
- ssh
 - graceful-shutdown *boolean*
 - inbound-max-sessions *number*
 - outbound-max-sessions *number*
 - ttl-security *number*
- telnet
 - graceful-shutdown *boolean*
 - inbound-max-sessions *number*
 - outbound-max-sessions *number*
 - ttl-security *number*
- management-interface
 - apply-groups *reference*
 - apply-groups-exclude *reference*
 - cli
 - apply-groups *reference*
 - apply-groups-exclude *reference*
 - classic-cli
 - allow-immediate *boolean*
 - rollback
 - apply-groups *reference*
 - apply-groups-exclude *reference*
 - local-checkpoints *number*
 - location *string*
 - remote-checkpoints *number*
 - rescue
 - location *string*
 - cli-engine *keyword*
 - md-cli
 - apply-groups *reference*
 - apply-groups-exclude *reference*
 - auto-config-save *boolean*
 - environment
 - command-alias

configure system management-interface cli md-cli environment command-alias alias

- **alias** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cli-command** *string*
 - **description** *string*
 - **mount-point** (*keyword* | *string*)
 - **python-script** *reference*
- **command-completion**
 - **enter** *boolean*
 - **space** *boolean*
 - **tab** *boolean*
- **console**
 - **length** *number*
 - **width** *number*
- **info-output**
 - **always-display**
 - **admin-state** *boolean*
- **message-severity-level**
 - **cli** *keyword*
- **more** *boolean*
- **progress-indicator**
 - **admin-state** *keyword*
 - **delay** *number*
 - **type** *keyword*
- **prompt**
 - **context** *boolean*
 - **newline** *boolean*
 - **timestamp** *boolean*
 - **uncommitted-changes-indicator** *boolean*
- **python**
 - **memory-reservation** *number*
 - **minimum-available-memory** *number*
 - **timeout** *number*
 - **time-display** *keyword*
 - **time-format** *keyword*
- **commit-history** *number*
- **configuration-mode** *keyword*
- **configuration-save**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **configuration-backups** *number*
 - **incremental-saves** *boolean*
- **netconf**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-config-save** *boolean*
 - **capabilities**
 - **candidate** *boolean*
 - **writable-running** *boolean*
 - **port** *number*
- **operations**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **global-timeouts**
 - **asynchronous-execution** (*number* | *keyword*)
 - **asynchronous-retention** (*number* | *keyword*)
 - **synchronous-execution** (*number* | *keyword*)
- **remote-management**
 - **admin-state** *keyword*
 - **allow-unsecure-connection**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure system management-interface remote-management client-tls-profile

```

- client-tls-profile reference
- connection-timeout number
- device-label string
- device-name string
- hello-interval number
- manager string
  - admin-state keyword
  - allow-unsecure-connection
  - apply-groups reference
  - apply-groups-exclude reference
  - client-tls-profile reference
  - connection-timeout number
  - description string
  - device-label string
  - device-name string
  - manager-address (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)
  - manager-port number
  - router-instance string
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-port (number | keyword)
- router-instance string
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-port (number | keyword)
- schema-path string
- snmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - engine-id string
  - general-port number
  - packet-size number
  - streaming
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
- yang-modules
  - apply-groups reference
  - apply-groups-exclude reference
  - base-r13-modules boolean
  - nmda
    - nmda-support boolean
  - nokia-combined-modules boolean
  - nokia-submodules boolean
  - openconfig-modules boolean
- name string
- network-element-discovery
  - apply-groups reference
  - apply-groups-exclude reference
  - generate-traps boolean
  - profile string
    - apply-groups reference
    - apply-groups-exclude reference
  - neid string
  - neip
    - apply-groups reference
    - apply-groups-exclude reference
    - auto-generate
      - ipv4
        - vendor-id-value number
      - ipv6
        - vendor-id-value number
    - ipv4 string
    - ipv6 string

```

configure system network-element-discovery profile platform-type

- **platform-type** *string*
- **system-mac** *string*
- **vendor-id** *string*
- **ospf-dynamic-hostnames** *boolean*
- **persistence**
 - **ancp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
 - **application-assurance**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **dhcp-server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
- **nat-port-forwarding**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
- **options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcp-lease-time-threshold** *number*
- **python-policy-cache**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
- **subscriber-mgmt**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
- **power-management power-zone** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mode** *keyword*
 - **power-safety-alert** *number*
 - **power-safety-level** *number*
- **ptp**
 - **admin-state** *keyword*
 - **alternate-profile** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **domain** *number*
 - **log-announce-interval** *number*
 - **profile** *keyword*
 - **announce-receipt-timeout** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clock-type** *keyword*
 - **domain** *number*
 - **local-priority** *number*
 - **log-announce-interval** *number*
 - **network-type** *keyword*

configure system ptp port

- **port** *reference*
 - **address** *string*
 - **admin-state** *keyword*
 - **alternate-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-priority** *number*
 - **log-delay-interval** *number*
 - **log-sync-interval** *number*
 - **master-only** *boolean*
- **priority1** *number*
- **priority2** *number*
- **profile** *keyword*
- **ptsf**
 - **monitor-ptsf-unusable**
 - **admin-state** *keyword*
- **router** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-priority** *number*
 - **log-sync-interval** *number*
 - **peer-limit** *number*
 - **tx-while-sync-uncertain** *boolean*
- **script-control**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **script** *string* **owner** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *string*
 - **script-policy** *string* **owner** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **expire-time** (*number* | *keyword*)
 - **lifetime** (*number* | *keyword*)
 - **lock-override** *boolean*
 - **max-completed** *number*
 - **python-lifetime** *number*
 - **python-script**
 - **name** *reference*
 - **results** *string*
 - **script**
 - **name** *string*
 - **owner** *string*
- **security**
 - **aaa**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cli-session-group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **combined-max-sessions** *number*
 - **description** *string*
 - **ssh-max-sessions** *number*
 - **telnet-max-sessions** *number*
 - **health-check** (*number* | *keyword*)

configure system security aaa local-profiles

- **local-profiles**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cli-session-group** *reference*
 - **combined-max-sessions** *number*
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match** *string*
 - **grpc**
 - **rpc-authorization**
 - **gnmi-capabilities** *keyword*
 - **gnmi-get** *keyword*
 - **gnmi-set** *keyword*
 - **gnmi-subscribe** *keyword*
 - **gnoi-cert-mgmt-cangenerate** *keyword*
 - **gnoi-cert-mgmt-getcert** *keyword*
 - **gnoi-cert-mgmt-install** *keyword*
 - **gnoi-cert-mgmt-revoke** *keyword*
 - **gnoi-cert-mgmt-rotate** *keyword*
 - **gnoi-file-get** *keyword*
 - **gnoi-file-put** *keyword*
 - **gnoi-file-remove** *keyword*
 - **gnoi-file-stat** *keyword*
 - **gnoi-file-transfertoreMOTE** *keyword*
 - **gnoi-system-cancelreboot** *keyword*
 - **gnoi-system-ping** *keyword*
 - **gnoi-system-reboot** *keyword*
 - **gnoi-system-rebootstatus** *keyword*
 - **gnoi-system-setpackage** *keyword*
 - **gnoi-system-switchcontrolprocessor** *keyword*
 - **gnoi-system-time** *keyword*
 - **gnoi-system-traceroute** *keyword*
 - **md-cli-session** *keyword*
 - **rib-api-getversion** *keyword*
 - **rib-api-modify** *keyword*
 - **li** *boolean*
 - **netconf**
 - **base-op-authorization**
 - **action** *boolean*
 - **cancel-commit** *boolean*
 - **close-session** *boolean*
 - **commit** *boolean*
 - **copy-config** *boolean*
 - **create-subscription** *boolean*
 - **delete-config** *boolean*
 - **discard-changes** *boolean*
 - **edit-config** *boolean*
 - **get** *boolean*
 - **get-config** *boolean*
 - **get-data** *boolean*
 - **get-schema** *boolean*
 - **kill-session** *boolean*
 - **lock** *boolean*
 - **validate** *boolean*
 - **ssh-max-sessions** *number*
 - **telnet-max-sessions** *number*
- **management-interface**

configure system security aaa management-interface apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **md-cli**
 - **command-accounting-during-load** *boolean*
- **output-authorization**
 - **md-interfaces** *boolean*
 - **telemetry-data** *boolean*
- **remote-servers**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ldap**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **public-key-authentication** *boolean*
 - **route-preference** *keyword*
 - **server** *number*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **port** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bind-authentication**
 - **password** *string*
 - **root-dn** *string*
 - **search**
 - **base-dn** *string*
 - **server-name** *string*
 - **tls-profile** *reference*
 - **server-retry** *number*
 - **server-timeout** *number*
 - **use-default-template** *boolean*
 - **radius**
 - **access-algorithm** *keyword*
 - **accounting** *boolean*
 - **accounting-port** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authorization** *boolean*
 - **interactive-authentication** *boolean*
 - **port** *number*
 - **route-preference** *keyword*
 - **server** *number*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authenticator** *keyword*
 - **secret** *string*
 - **tls-client-profile** *reference*
 - **server-retry** *number*
 - **server-timeout** *number*
 - **use-default-template** *boolean*
 - **tacplus**
 - **accounting**
 - **record-type** *keyword*
 - **admin-control**
 - **tacplus-map-to-priv-lvl** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authorization**

configure system security aaa remote-servers tacplus authorization request-format

- **request-format**
 - **access-operation-cmd** *keyword*
 - **use-priv-lvl** *boolean*
- **interactive-authentication** *boolean*
- **priv-lvl-map**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **priv-lvl** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **user-profile-name** *reference*
- **route-preference** *keyword*
- **server** *number*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **port** *number*
 - **secret** *string*
 - **server-timeout** *number*
 - **use-default-template** *boolean*
- **vprn-server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inband** *reference*
 - **outband** *reference*
 - **vprn** *reference*
- **user-template** *keyword*
 - **access**
 - **console** *boolean*
 - **ftp** *boolean*
 - **grpc** *boolean*
 - **li** *boolean*
 - **netconf** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **console**
 - **login-exec** *string*
 - **home-directory** (*sat-url* | *cflash-without-slot-url*)
 - **profile** *string*
 - **restricted-to-home** *boolean*
 - **save-when-restricted** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **cli-script**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **authorization**
 - **cron**
 - **cli-user** *reference*
 - **event-handler**
 - **cli-user** *reference*
 - **vsd**
 - **cli-user** *reference*
- **cpm-filter**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **ip-filter**
 - **admin-state** *keyword*
 - **entry** *number*
 - **action**
 - **accept**
 - **default**
 - **drop**

configure system security cpm-filter ip-filter entry action queue

- **queue** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **log** *reference*
- **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)
 - **ip-prefix-list** *reference*
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **mask** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **fragment** *keyword*
 - **icmp**
 - **code** *number*
 - **type** *number*
 - **ip-option**
 - **mask** *number*
 - **type** *number*
 - **multiple-option** *boolean*
 - **option-present** *boolean*
 - **port**
 - **eq** *number*
 - **mask** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **protocol** (*number* | *keyword*)
 - **router-instance** *string*
 - **src-ip**
 - **address** (*ipv4-address* | *ipv4-prefix-with-host-bits*)
 - **ip-prefix-list** *reference*
 - **mask** *string*
 - **src-port**
 - **eq** *number*
 - **mask** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **tcp-flags**
 - **ack** *boolean*
 - **syn** *boolean*
- **ipv6-filter**
 - **admin-state** *keyword*
 - **entry** *number*
 - **action**
 - **accept**
 - **default**
 - **drop**
 - **queue** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **log** *reference*
 - **match**
 - **dscp** *keyword*

configure system security cpm-filter ipv6-filter entry match dst-ip

- **dst-ip**
 - **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
- **dst-port**
 - **eq** *number*
 - **mask** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **extension-header**
 - **hop-by-hop** *boolean*
- **flow-label** *number*
- **fragment** *keyword*
- **icmp**
 - **code** *number*
 - **type** *number*
- **next-header** (*number* | *keyword*)
- **port**
 - **eq** *number*
 - **mask** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **router-instance** *string*
- **src-ip**
 - **address** (*ipv6-address* | *ipv6-prefix-with-host-bits*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
- **src-port**
 - **eq** *number*
 - **mask** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **tcp-flags**
 - **ack** *boolean*
 - **syn** *boolean*
- **mac-filter**
 - **admin-state** *keyword*
 - **entry** *number*
 - **action**
 - **accept**
 - **default**
 - **drop**
 - **queue** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **log** *reference*
 - **match**
 - **cfm-opcode**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
 - **dst-mac**
 - **address** *string*
 - **mask** *string*

configure system security cpm-filter mac-filter entry match etype

- **etype** *string*
- **frame-type** *keyword*
- **llc-dsap**
 - **dsap** *number*
 - **mask** *number*
- **llc-ssap**
 - **mask** *number*
 - **ssap** *number*
- **service** *reference*
- **src-mac**
 - **address** *string*
 - **mask** *string*
- **cpm-queue**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **queue** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** *number*
 - **mbs** *number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **cpu-protection**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-src-monitoring**
 - **included-protocols**
 - **dhcp** *boolean*
 - **gtp** *boolean*
 - **icmp** *boolean*
 - **igmp** *boolean*
 - **link-specific-rate** (*number* | *keyword*)
 - **policy** *number*
 - **alarm** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **eth-cfm**
 - **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level start** *number end* *number*
 - **opcode start** *number end* *number*
 - **pir** (*number* | *keyword*)
 - **out-profile-rate**
 - **log-events** *boolean*
 - **pir** (*number* | *keyword*)
 - **overall-rate** (*number* | *keyword*)
 - **per-source-parameters**
 - **ip-src-monitoring**
 - **limit-dhcp-ci-addr-zero** *boolean*
 - **per-source-rate** (*number* | *keyword*)
 - **port-overall-rate**
 - **action-low-priority** *boolean*
 - **pir** (*number* | *keyword*)
 - **protocol-protection**
 - **allow-sham-links** *boolean*
 - **block-pim-tunneled** *boolean*
 - **dist-cpu-protection**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** *string*
 - **apply-groups** *reference*

configure system security dist-cpu-protection policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **local-monitoring-policer** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **exceed-action** *keyword*
 - **log-events** *keyword*
 - **rate**
 - **kbps**
 - **limit** (*keyword | number*)
 - **mbs** *number*
 - **packets**
 - **initial-delay** *number*
 - **limit** (*keyword | number*)
 - **within** *number*
- **protocol** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dynamic-parameters**
 - **detection-time** *number*
 - **exceed-action**
 - **action** *keyword*
 - **hold-down** (*keyword | number*)
 - **log-events** *keyword*
 - **rate**
 - **kbps**
 - **limit** (*keyword | number*)
 - **mbs** *number*
 - **packets**
 - **initial-delay** *number*
 - **limit** (*keyword | number*)
 - **within** *number*
 - **enforcement**
 - **dynamic**
 - **mon-policer-name** *reference*
 - **dynamic-local-mon-bypass**
 - **static**
 - **policer-name** *reference*
 - **static-policer** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **detection-time** *number*
 - **exceed-action**
 - **action** *keyword*
 - **hold-down** (*keyword | number*)
 - **log-events** *keyword*
 - **rate**
 - **kbps**
 - **limit** (*keyword | number*)
 - **mbs** *number*
 - **packets**
 - **initial-delay** *number*
 - **limit** (*keyword | number*)
 - **within** *number*
 - **type** *keyword*
 - **dot1x**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **radius-policy** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure system security dot1x radius-policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **retry** *number*
- **server** *number*
 - **accounting-port** *number*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-port** *number*
 - **secret** *string*
 - **type** *keyword*
- **source-address** *string*
- **timeout** *number*
- **ftp-server** *boolean*
- **hash-control**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **management-interface**
 - **classic-cli**
 - **read-algorithm** *keyword*
 - **write-algorithm** *keyword*
 - **grpc**
 - **hash-algorithm** *keyword*
 - **md-cli**
 - **hash-algorithm** *keyword*
 - **netconf**
 - **hash-algorithm** *keyword*
- **keychains**
 - **keychain** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bidirectional**
 - **entry** *number*
 - **admin-state** *keyword*
 - **algorithm** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **begin-time** *string*
 - **option** *keyword*
 - **tolerance** (*number* | *keyword*)
 - **description** *string*
 - **receive**
 - **entry** *number*
 - **admin-state** *keyword*
 - **algorithm** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **begin-time** *string*
 - **end-time** *string*
 - **tolerance** (*number* | *keyword*)
 - **send**
 - **entry** *number*
 - **admin-state** *keyword*
 - **algorithm** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **begin-time** *string*
 - **tcp-option-number**
 - **receive** *keyword*
 - **send** *keyword*
- **management**

configure system security management allow-ftp

- **allow-ftp** *boolean*
- **allow-grpc** *boolean*
- **allow-netconf** *boolean*
- **allow-ssh** *boolean*
- **allow-telnet** *boolean*
- **allow-telnet6** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **management-access-filter**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **ip-filter**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **log-events** *boolean*
 - **match**
 - **dst-port**
 - **mask** *number*
 - **port** *number*
 - **mgmt-port**
 - **cpm**
 - **lag** *string*
 - **port-id** *string*
 - **protocol** (*number* | *keyword*)
 - **router-instance** *string*
 - **src-ip**
 - **address** (*ipv4-prefix* | *ipv4-address*)
 - **ip-prefix-list** *reference*
 - **mask** *string*
 - **src-port**
 - **mask** *number*
 - **port** *number*
- **ipv6-filter**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **log-events** *boolean*
 - **match**
 - **dst-port**
 - **mask** *number*
 - **port** *number*
 - **flow-label** *number*
 - **mgmt-port**
 - **cpm**
 - **lag** *string*
 - **port-id** *string*
 - **next-header** (*number* | *keyword*)
 - **router-instance** *string*
 - **src-ip**
 - **address** (*ipv6-prefix* | *ipv6-address*)
 - **ipv6-prefix-list** *reference*

configure system security management-access-filter ipv6-filter entry match src-ip mask

```

    - mask string
    - src-port
      - mask number
      - port number
- mac-filter
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - default-action keyword
  - entry number
    - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - log-events boolean
    - match
      - cfm-opcode
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - dot1p
        - mask number
        - priority number
      - dst-mac
        - address string
        - mask string
      - etype string
      - frame-type keyword
      - llc-dsap
        - dsap number
        - mask number
      - llc-ssap
        - mask number
        - ssap number
      - service string
      - snap-oui keyword
      - snap-pid number
      - src-mac
        - address string
        - mask string
- per-peer-queuing boolean
- pki
  - apply-groups reference
  - apply-groups-exclude reference
  - ca-profile string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - auto-crl-update
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - url-urls
    - url-entry number
      - apply-groups reference
      - apply-groups-exclude reference
      - transmission-profile reference
      - url http-url-path-loose
  - periodic-update-interval number
  - pre-update-time number
  - retry-interval number

```

configure system security pki ca-profile auto-crl-update schedule-type

- **schedule-type** *keyword*
- **cert-file** *string*
- **cmpv2**
 - **accept-unprotected-message**
 - **error-message** *boolean*
 - **pkiconf-message** *boolean*
 - **always-set-sender-for-ir** *boolean*
 - **http**
 - **response-timeout** *number*
 - **version** *keyword*
 - **key-list**
 - **key** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **password** *string*
 - **recipient-subject** *string*
 - **response-signing-cert** *string*
 - **response-signing-use-extracert**
 - **same-recipient-nonce-for-poll-request** *boolean*
 - **url**
 - **service-name** *string*
 - **url-string** *http-optional-url-loose*
 - **use-ca-subject**
- **crl-file** *string*
- **description** *string*
- **ocsp**
 - **responder-url** *http-optional-url-loose*
 - **service-name** *string*
 - **transmission-profile** *reference*
- **revocation-check** *keyword*
- **certificate-auto-update** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **key-file-name** *string*
 - **profile** *reference*
- **certificate-display-format** *keyword*
- **certificate-expiration-warning**
 - **hours** *number*
 - **repeat-hours** *number*
- **certificate-update-profile** *string*
 - **after-issue** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **before-expiry** *number*
- **cmpv2**
 - **ca-profile** *reference*
- **dsa**
 - **key-size** *number*
- **ecdsa**
 - **curve** *keyword*
- **est**
 - **est-profile** *reference*
- **hash-algorithm** *keyword*
- **retry-interval** *number*
- **rsa**
 - **key-size** *number*
- **same-as-existing-key**
- **common-name-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **common-name** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **cn-type** *keyword*

configure system security pki common-name-list common-name cn-value

- **cn-value** *string*
- **crl-expiration-warning**
 - **hours** *number*
 - **repeat-hours** *number*
- **est-profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **check-id-kp-cmra-only** *boolean*
 - **client-tls-profile** *string*
 - **http-authentication**
 - **password** *string*
 - **username** *string*
 - **server**
 - **fqdn** *string*
 - **ipv4** *string*
 - **ipv6** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **port** *number*
 - **transmission-profile** *string*
- **imported-format** *keyword*
- **maximum-cert-chain-depth** *number*
- **python-script**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authorization**
 - **cron**
 - **cli-user** *reference*
 - **event-handler**
 - **cli-user** *reference*
- **snmp**
 - **access** *string* **context** *string* **security-model** *keyword* **security-level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **notify** *string*
 - **prefix-match** *keyword*
 - **read** *string*
 - **write** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **attempts**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **count** *number*
 - **lockout** *number*
 - **time** *number*
 - **community** *string*
 - **access-permissions** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source-access-list** *reference*
 - **version** *keyword*
 - **source-access-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source-host** *string*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **usm-community** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group** *string*
 - **source-access-list** *reference*
 - **view** *string* **subtree** *string*
 - **apply-groups** *reference*

configure system security snmp view apply-groups-exclude

- **apply-groups-exclude** *reference*
- **mask** *string*
- **type** *keyword*
- **source-address**
 - **ipv4** *keyword*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-name** *string*
 - **ipv6** *keyword*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **ssh**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **client-cipher-list-v2**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **client-kex-list-v2**
 - **kex** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **client-mac-list-v2**
 - **mac** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **key-re-exchange**
 - **client**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mbytes** (*number* | *keyword*)
 - **minutes** (*number* | *keyword*)
 - **server**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mbytes** (*number* | *keyword*)
 - **minutes** (*number* | *keyword*)
 - **permit-empty-passwords** *boolean*
 - **preserve-key** *boolean*
 - **server-admin-state** *keyword*
 - **server-cipher-list-v2**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **server-kex-list-v2**
 - **kex** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **server-mac-list-v2**
 - **mac** *number*
 - **apply-groups** *reference*

configure system security ssh server-mac-list-v2 mac apply-groups-exclude

- **apply-groups-exclude** *reference*
 - **name** *keyword*
- **system-passwords**
 - **admin-password** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **vsd-password** *string*
- **tech-support**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ts-location** (*ts-sat-url* | *cflash-url* | *string*)
- **telnet-server** *boolean*
- **telnet6-server** *boolean*
- **tls**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cert-profile** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **certificate-file** *string*
 - **key-file** *string*
 - **send-chain**
 - **ca-profile** *reference*
 - **client-cipher-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls12-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **tls13-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **client-group-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls13-group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **client-signature-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls13-signature** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **client-tls-profile** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cert-profile** *reference*
 - **cipher-list** *reference*
 - **group-list** *reference*
 - **protocol-version** *keyword*
 - **signature-list** *reference*
 - **trust-anchor-profile** *reference*
 - **server-cipher-list** *string*
 - **apply-groups** *reference*

configure system security tls server-cipher-list apply-groups-exclude

- **apply-groups-exclude** *reference*
- **tls12-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **tls13-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-group-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls13-group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-signature-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls13-signature** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-tls-profile** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authenticate-client**
 - **common-name-list** *reference*
 - **trust-anchor-profile** *reference*
 - **cert-profile** *reference*
 - **cipher-list** *reference*
 - **group-list** *reference*
 - **protocol-version** *keyword*
 - **signature-list** *reference*
 - **tls-re-negotiate-timer** *number*
- **trust-anchor-profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **trust-anchor** *reference*
- **user-params**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **attempts**
 - **count** *number*
 - **lockout** *number*
 - **time** *number*
 - **authentication-order**
 - **exit-on-reject** *boolean*
 - **order** *keyword*
 - **local-user**
 - **password**
 - **aging** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **complexity-rules**
 - **allow-user-name** *boolean*
 - **credits**
 - **lowercase** *number*
 - **numeric** *number*
 - **special-character** *number*
 - **uppercase** *number*
 - **minimum-classes** *number*
 - **minimum-length** *number*

configure system security user-params local-user password complexity-rules repeated-characters

```

    - repeated-characters number
    - required
      - lowercase number
      - numeric number
      - special-character number
      - uppercase number
    - hashing keyword
    - history-size number
    - minimum-age number
    - minimum-change number
  - user string
    - access
      - console boolean
      - ftp boolean
      - grpc boolean
      - li boolean
      - netconf boolean
      - snmp boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - cli-engine keyword
    - console
      - cannot-change-password boolean
      - login-exec (sat-url | cflash-url | ftp-tftp-url | filename)
      - member reference
      - new-password-at-login boolean
    - home-directory (sat-url | cflash-without-slot-url)
    - password string
    - public-keys
      - ecdsa
        - ecdsa-key number
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - key-value string
      - rsa
        - rsa-key number
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - key-value string
    - restricted-to-home boolean
    - save-when-restricted boolean
    - snmp
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication
        - authentication-key string
        - authentication-protocol keyword
      - privacy
        - privacy-key string
        - privacy-protocol keyword
      - group string
  - vprn-network-exceptions
    - count number
    - window number
  - selective-fib boolean
  - software-repository string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - primary-location string
    - secondary-location string
    - tertiary-location string

```

configure system switch-fabric

```

- switch-fabric
  - apply-groups reference
  - apply-groups-exclude reference
  - failure-recovery
    - admin-state keyword
  - sfm-loss-threshold number
- telemetry
  - apply-groups reference
  - apply-groups-exclude reference
  - destination-group string
    - allow-unsecure-connection
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name) port number
    - apply-groups reference
    - apply-groups-exclude reference
    - router-instance string
  - tcp-keepalive
    - admin-state keyword
    - idle-time number
    - interval number
    - retries number
  - tls-client-profile reference
- notification-bundling
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - max-msg-count number
  - max-time-granularity number
- persistent-subscriptions
  - subscription string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - destination-group reference
    - encoding keyword
    - local-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - mode keyword
    - originated-qos-marking keyword
    - sample-interval number
    - sensor-group reference
- sensor-groups
  - sensor-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - path string
- thresholds
  - cflash-cap-alarm-percent string
    - apply-groups reference
    - apply-groups-exclude reference
    - falling-threshold number
    - interval number
    - rising-threshold number
    - rmon-event-type keyword
    - startup-alarm keyword
  - cflash-cap-warn-percent string
    - apply-groups reference
    - apply-groups-exclude reference
    - falling-threshold number
    - interval number

```

configure system thresholds cflash-cap-warn-percent rising-threshold

- **rising-threshold** *number*
- **rmon-event-type** *keyword*
- **startup-alarm** *keyword*
- **kb-memory-use-alarm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-threshold** *number*
 - **interval** *number*
 - **rising-threshold** *number*
 - **rmon-event-type** *keyword*
 - **startup-alarm** *keyword*
- **kb-memory-use-warn**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-threshold** *number*
 - **interval** *number*
 - **rising-threshold** *number*
 - **rmon-event-type** *keyword*
 - **startup-alarm** *keyword*
- **rmon**
 - **alarm** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-event** *number*
 - **falling-threshold** *number*
 - **interval** *number*
 - **owner** *string*
 - **rising-event** *number*
 - **rising-threshold** *number*
 - **sample-type** *keyword*
 - **startup-alarm** *keyword*
 - **variable-oid** *string*
 - **event** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **event-type** *keyword*
 - **owner** *string*
- **time**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dst-zone** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end**
 - **day** *keyword*
 - **hours-minutes** *string*
 - **month** *keyword*
 - **week** *keyword*
 - **offset** *number*
 - **start**
 - **day** *keyword*
 - **hours-minutes** *string*
 - **month** *keyword*
 - **week** *keyword*
- **ntp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-check** *boolean*
 - **authentication-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **key** *string*

configure system time ntp authentication-key type

```

- type keyword
- broadcast reference interface-name string
- apply-groups reference
- apply-groups-exclude reference
- key-id reference
- ttl number
- version number
- broadcast-client string interface-name string
- apply-groups reference
- apply-groups-exclude reference
- authenticate boolean
- multicast
- apply-groups reference
- apply-groups-exclude reference
- key-id reference
- version number
- multicast-client
- apply-groups reference
- apply-groups-exclude reference
- authenticate boolean
- ntp-server
- authenticate boolean
- peer (ipv4-address-no-zone | ipv6-address-no-zone) router-instance string
- apply-groups reference
- apply-groups-exclude reference
- key-id reference
- prefer boolean
- version number
- server (ipv4-address-no-zone | ipv6-address-no-zone | keyword) router-
instance string
- apply-groups reference
- apply-groups-exclude reference
- key-id reference
- prefer boolean
- version number
- prefer-local-time boolean
- sntp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- server (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- interval number
- prefer boolean
- version number
- sntp-state keyword
- zone
- non-standard
- name string
- offset string
- standard
- name keyword
- transmission-profile string
- apply-groups reference
- apply-groups-exclude reference
- ipv4-source-address string
- ipv6-source-address string
- redirection number
- retry number
- router-instance string
- timeout number
- usb keyword
- admin-state keyword

```

configure system usb apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*

3.46.1 system command descriptions

system

Synopsis	Enter the system context
Context	configure system
Tree	system
Description	Commands in this context enable configuring of general system level functions and router management protocols.
Introduced	16.0.R1
Platforms	All

alarm-contact-in-power *boolean*

Synopsis	Power the output pin on the CPM alarm interface port
Context	configure system alarm-contact-in-power <i>boolean</i>
Tree	alarm-contact-in-power
Default	false
Introduced	16.0.R1
Platforms	7750 SR-a

alarm-contact-input [[input-pin-number](#)] *number*

Synopsis	Enter the alarm-contact-input list instance
Context	configure system alarm-contact-input <i>number</i>
Tree	alarm-contact-input
Introduced	16.0.R1
Platforms	7750 SR-a

[[input-pin-number](#)] *number*

Synopsis	Alarm contact input pin
Context	configure system alarm-contact-input <i>number</i>
Tree	alarm-contact-input
Range	1 to 4

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-a

admin-state *keyword*

Synopsis	Administrative state of the alarm contact input
Context	configure system alarm-contact-input <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR-a

clear-message *string*

Synopsis	Text message sent in the log event when an alarm clears
Context	configure system alarm-contact-input <i>number</i> clear-message <i>string</i>
Tree	clear-message
Description	<p>This command configures a text message to be included in the log event that is sent when the system clears an alarm.</p> <p>The system generates the default "Alarm Input Cleared" message if no message is configured. The clear-message string is included in the log event when the pin changes to the normal state.</p>
String Length	1 to 80
Default	Alarm Input Cleared
Introduced	16.0.R1
Platforms	7750 SR-a

description *string*

Synopsis	Text description
Context	configure system alarm-contact-input <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 160
Introduced	16.0.R1

Platforms 7750 SR-a

normal-state *keyword*

Synopsis Normal state associated with the alarm contact input

Context **configure** [system](#) [alarm-contact-input](#) *number* [normal-state](#) *keyword*

Tree [normal-state](#)

Default open

Options open, closed

Introduced 16.0.R1

Platforms 7750 SR-a

trigger-message *string*

Synopsis Text message sent in the log event when input changes

Context **configure** [system](#) [alarm-contact-input](#) *number* [trigger-message](#) *string*

Tree [trigger-message](#)

Description This command configures a text message to be included in the log event that is sent when the system generates an alarm.

The system generates the default message "Alarm Input Triggered" if no message is configured. This command's message string is included in the log event when the pin changes from the normal state.

String Length 1 to 80

Default Alarm Input Triggered

Introduced 16.0.R1

Platforms 7750 SR-a

alarms

Synopsis Enter the **alarms** context

Context **configure** [system](#) [alarms](#)

Tree [alarms](#)

Introduced 16.0.R4

Platforms All

admin-state *keyword*

Synopsis	Administrative state of the system alarm
Context	configure system alarms admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

max-cleared *number*

Synopsis	Maximum number of cleared alarms
Context	configure system alarms max-cleared <i>number</i>
Tree	max-cleared
Range	0 to 500
Default	500
Introduced	16.0.R4
Platforms	All

allow-boot-license-violations *boolean*

Synopsis	Allow boot license violations in boot-up configuration
Context	configure system allow-boot-license-violations <i>boolean</i>
Tree	allow-boot-license-violations
Default	true
Introduced	16.0.R4
Platforms	All

bluetooth

Synopsis	Enter the bluetooth context
Context	configure system bluetooth
Tree	bluetooth
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

admin-state *keyword*

Synopsis	Administrative state of the Bluetooth module
Context	configure system bluetooth admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.2.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

advertising-timeout *number*

Synopsis	Bluetooth advertising timeout
Context	configure system bluetooth advertising-timeout <i>number</i>
Tree	advertising-timeout
Range	30 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

device [[mac-address](#)] *string*

Synopsis	Enter the device list instance
Context	configure system bluetooth device <i>string</i>
Tree	device
Max. Instances	5
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

[[mac-address](#)] *string*

Synopsis	Bluetooth client device MAC address
Context	configure system bluetooth device <i>string</i>
Tree	device

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

description *string*

Synopsis	Text description
Context	configure system bluetooth device <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

module [[cpm-slot](#)] *string*

Synopsis	Enter the module list instance
Context	configure system bluetooth module <i>string</i>
Tree	module
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

[cpm-slot] *string*

Synopsis	CPM slot on which the module resides
Context	configure system bluetooth module <i>string</i>
Tree	module
String Length	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

provisioned-identifier *string*

Synopsis	Bluetooth module ID
Context	configure system bluetooth module <i>string</i> provisioned-identifier <i>string</i>

Tree [provisioned-identifier](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

pairing-button *boolean*

Synopsis Enable the pairing button
Context **configure** [system bluetooth pairing-button](#) *boolean*
Tree [pairing-button](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

passkey *string*

Synopsis Bluetooth passkey
Context **configure** [system bluetooth passkey](#) *string*
Tree [passkey](#)
String Length 6
Default 123456
Introduced 16.0.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

power-mode *keyword*

Synopsis Bluetooth module power mode
Context **configure** [system bluetooth power-mode](#) *keyword*
Tree [power-mode](#)
Default automatic
Options manual, automatic
Introduced 20.2.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

boot-bad-exec *string*

Synopsis	CLI script file to execute following a failed boot-up
Context	configure system boot-bad-exec <i>string</i>
Tree	boot-bad-exec
Description	This command configures the name of the CLI script file to be run following the failure of a boot-up configuration. Note: This command has no effect in model-driven mode.
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

boot-good-exec *string*

Synopsis	CLI script file to execute following successful boot-up
Context	configure system boot-good-exec <i>string</i>
Tree	boot-good-exec
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

central-frequency-clock

Synopsis	Enter the central-frequency-clock context
Context	configure system central-frequency-clock
Tree	central-frequency-clock
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bits

Synopsis	Enter the bits context
Context	configure system central-frequency-clock bits
Tree	bits
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

input

Synopsis	Enter the input context
Context	configure system central-frequency-clock bits input
Tree	input
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the BITS input timing reference
Context	configure system central-frequency-clock bits input admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-type *keyword*

Synopsis	Interface type of the BITS timing reference
Context	configure system central-frequency-clock bits interface-type <i>keyword</i>
Tree	interface-type
Default	ds1-esf
Options	ds1-esf, ds1-sf, e1-pcm30crc, e1-pcm31crc, g703-2048khz
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

output

Synopsis	Enter the output context
Context	configure system central-frequency-clock bits output
Tree	output
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of BITS output timing reference
Context	configure system central-frequency-clock bits output admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

line-length *keyword*

Synopsis	Line length for the BITS output timing reference
Context	configure system central-frequency-clock bits output line-length <i>keyword</i>
Tree	line-length
Options	length-not-applicable, 110, 220, 330, 440, 550, 660
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-minimum *keyword*

Synopsis	Minimum signal quality level for BITSout port
Context	configure system central-frequency-clock bits output ql-minimum <i>keyword</i>
Tree	ql-minimum
Default	unused
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source *keyword*

Synopsis	Source of the BITS output timing reference
Context	configure system central-frequency-clock bits output source <i>keyword</i>
Tree	source
Default	line-ref
Options	line-ref, internal-clock

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch *boolean*

Synopsis Squelch the signal of the BITS output timing reference
Context **configure** [system](#) [central-frequency-clock](#) [bits](#) [output](#) [squelch](#) *boolean*
Tree [squelch](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis Override for the quality level of the timing reference
Context **configure** [system](#) [central-frequency-clock](#) [bits](#) [ql-override](#) *keyword*
Tree [ql-override](#)
Default unused
Options unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ssm-bit *number*

Synopsis Sa bit to convey SSM information
Context **configure** [system](#) [central-frequency-clock](#) [bits](#) [ssm-bit](#) *number*
Tree [ssm-bit](#)
Range 4 to 8
Default 8
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

gnss

Synopsis Enter the **gnss** context

Context	configure system central-frequency-clock gnss
Tree	gnss
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

admin-state *keyword*

Synopsis	Administrative state of the gnss timing reference
Context	configure system central-frequency-clock gnss admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

ql-override *keyword*

Synopsis	Quality level override for a timing reference
Context	configure system central-frequency-clock gnss ql-override <i>keyword</i>
Tree	ql-override
Default	unused
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

ptp

Synopsis	Enter the ptp context
Context	configure system central-frequency-clock ptp
Tree	ptp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PTP timing reference
Context	configure system central-frequency-clock ptp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis	Quality level of a timing reference that overrides any value provided by the reference's SSM process
Context	configure system central-frequency-clock ptp ql-override <i>keyword</i>
Tree	ql-override
Default	unused
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-minimum *keyword*

Synopsis	Minimum signal quality level for system timing module
Context	configure system central-frequency-clock ql-minimum <i>keyword</i>
Tree	ql-minimum
Default	unused
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-selection *boolean*

Synopsis	Consider quality level in system and BITS output timing
Context	configure system central-frequency-clock ql-selection <i>boolean</i>

Tree	ql-selection
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ref-order

Synopsis	Enter the ref-order context
Context	configure system central-frequency-clock ref-order
Tree	ref-order
Description	<p>Commands in this context specify the priority order of the synchronous equipment timing subsystem.</p> <p>If a reference source is disabled, this command defines the next reference source for the clock. If all reference sources are disabled, clocking is derived from a local oscillator.</p> <p>If a timing reference is linked to a source port that is operationally down, the port is no longer a qualified, valid reference.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fifth keyword

Synopsis	Fifth preferred timing reference source
Context	configure system central-frequency-clock ref-order fifth <i>keyword</i>
Tree	fifth
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

first keyword

Synopsis	First preferred timing reference source
Context	configure system central-frequency-clock ref-order first <i>keyword</i>
Tree	first
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fourth keyword

Synopsis	Fourth preferred timing reference source
Context	configure system central-frequency-clock ref-order fourth keyword
Tree	fourth
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

second keyword

Synopsis	Second preferred timing reference source
Context	configure system central-frequency-clock ref-order second keyword
Tree	second
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sixth keyword

Synopsis	Sixth preferred timing reference source
Context	configure system central-frequency-clock ref-order sixth keyword
Tree	sixth
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

third keyword

Synopsis	Third preferred timing reference source
Context	configure system central-frequency-clock ref-order third keyword
Tree	third
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ref1

Synopsis Enter the **ref1** context
Context **configure system central-frequency-clock ref1**
Tree [ref1](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the first timing reference
Context **configure system central-frequency-clock ref1 admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis Quality level override of a timing reference
Context **configure system central-frequency-clock ref1 ql-override** *keyword*
Tree [ql-override](#)
Default unused
Options unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-port *string*

Synopsis Source port for the first timing reference
Context **configure system central-frequency-clock ref1 source-port** *string*
Tree [source-port](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ref2

Synopsis Enter the **ref2** context
Context **configure** [system central-frequency-clock ref2](#)
Tree [ref2](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the second timing reference
Context **configure** [system central-frequency-clock ref2 admin-state keyword](#)
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis Quality level override of a timing reference
Context **configure** [system central-frequency-clock ref2 ql-override keyword](#)
Tree [ql-override](#)
Default unused
Options unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-port *string*

Synopsis Source port for the second timing reference
Context **configure** [system central-frequency-clock ref2 source-port string](#)

Tree [source-port](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

revert *boolean*

Synopsis Revert to higher-priority reference source
Context **configure** [system](#) [central-frequency-clock](#) **revert** *boolean*
Tree [revert](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sync

Synopsis Enter the **sync** context
Context **configure** [system](#) [central-frequency-clock](#) **sync**
Tree [sync](#)
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the SyncE timing reference
Context **configure** [system](#) [central-frequency-clock](#) **sync** **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis Override the quality level of a timing reference
Context **configure** [system](#) [central-frequency-clock](#) **sync** **ql-override** *keyword*

Tree	ql-override
Default	unused
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-to-restore *number*

Synopsis	Time to re-validate a previously failed input reference
Context	configure system central-frequency-clock wait-to-restore <i>number</i>
Tree	wait-to-restore
Range	1 to 12
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cli-code *string*

Synopsis	CLLI code value for the system
Context	configure system cli-code <i>string</i>
Tree	cli-code
String Length	11
Introduced	16.0.R1
Platforms	All

congestion-management *boolean*

Synopsis	Enable Virtual Service Router congestion management
Context	configure system congestion-management <i>boolean</i>
Tree	congestion-management
Default	false
Introduced	16.0.R1
Platforms	VSR

contact *string*

Synopsis	Contact information for the managed node
Context	configure system contact <i>string</i>
Tree	contact
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

coordinates *string*

Synopsis	GPS coordinates for the system location
Context	configure system coordinates <i>string</i>
Tree	coordinates
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

cpm-http-redirect

Synopsis	Enter the cpm-http-redirect context
Context	configure system cpm-http-redirect
Tree	cpm-http-redirect
Introduced	16.0.R4
Platforms	All

optimized-mode *boolean*

Synopsis	Enable optimized mode for CPM HTTP redirect messages
Context	configure system cpm-http-redirect optimized-mode <i>boolean</i>
Tree	optimized-mode
Default	true
Introduced	16.0.R4
Platforms	All

cron

Synopsis	Enter the cron context
Context	configure system cron
Tree	cron
Introduced	16.0.R1
Platforms	All

schedule [**schedule-name**] *string owner string*

Synopsis	Enter the schedule list instance
Context	configure system cron schedule string owner string
Tree	schedule
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[schedule-name] *string*

Synopsis	Schedule name
Context	configure system cron schedule string owner string
Tree	schedule
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

owner *string*

Synopsis	Schedule owner
Context	configure system cron schedule string owner string
Tree	schedule
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the CRON schedule
 Context **configure** [system cron schedule](#) *string* [owner](#) *string* **admin-state** *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

count *number*

Synopsis Number of times to repeat a periodic schedule run
 Context **configure** [system cron schedule](#) *string* [owner](#) *string* **count** *number*
 Tree [count](#)
 Range 1 to 65535
 Introduced 16.0.R1
 Platforms All

day-of-month *number*

Synopsis Days in a month when a schedule runs
 Context **configure** [system cron schedule](#) *string* [owner](#) *string* **day-of-month** *number*
 Tree [day-of-month](#)
 Range -31 to -1 | 1 to 31
 Max. 62
 Instances
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [system cron schedule](#) *string* [owner](#) *string* **description** *string*

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

end-time

Synopsis	Enter the end-time context
Context	configure system cron schedule <i>string</i> owner <i>string</i> end-time
Tree	end-time
Introduced	16.0.R1
Platforms	All

date-and-time *string*

Synopsis	Date and time to stop triggering the schedule
Context	configure system cron schedule <i>string</i> owner <i>string</i> end-time date-and-time <i>string</i>
Tree	date-and-time
Notes	The following elements are part of a choice: date-and-time or (day and time).
Introduced	16.0.R1
Platforms	All

day *keyword*

Synopsis	Day to stop triggering the schedule
Context	configure system cron schedule <i>string</i> owner <i>string</i> end-time day <i>keyword</i>
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	The following elements are part of a choice: date-and-time or (day and time).
Introduced	16.0.R1
Platforms	All

time *string*

Synopsis	Time to stop triggering the schedule
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Context	configure system cron schedule <i>string owner string end-time time string</i>
Tree	time
String Length	5
Notes	The following elements are part of a choice: date-and-time or (day and time).
Introduced	16.0.R1
Platforms	All

hour *number*

Synopsis	Hours within a day when the schedule runs
Context	configure system cron schedule <i>string owner string hour number</i>
Tree	hour
Range	0 to 23
Max.	24
Instances	
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time between each periodic schedule run
Context	configure system cron schedule <i>string owner string interval number</i>
Tree	interval
Range	30 to 42949672
Units	seconds
Introduced	16.0.R1
Platforms	All

minute *number*

Synopsis	Minutes in an hour when the schedule runs
Context	configure system cron schedule <i>string owner string minute number</i>
Tree	minute
Range	0 to 59

Max. Instances	60
Introduced	16.0.R1
Platforms	All

month (*keyword* | *number*)

Synopsis	Months when the schedule runs
Context	configure system cron schedule <i>string</i> owner <i>string</i> month (<i>keyword</i> <i>number</i>)
Tree	month
Range	1 to 12
Options	january, february, march, april, may, june, july, august, september, october, november, december
Max. Instances	12
Introduced	16.0.R1
Platforms	All

script-policy

Synopsis	Enter the script-policy context
Context	configure system cron schedule <i>string</i> owner <i>string</i> script-policy
Tree	script-policy
Introduced	16.0.R1
Platforms	All

name *string*

Synopsis	CLI script policy name
Context	configure system cron schedule <i>string</i> owner <i>string</i> script-policy name <i>string</i>
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

owner string

Synopsis	Script policy owner
Context	configure system cron schedule string owner string script-policy owner string
Tree	owner
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Schedule type
Context	configure system cron schedule string owner string type keyword
Tree	type
Default	periodic
Options	periodic, calendar, oneshot
Introduced	16.0.R1
Platforms	All

weekday (keyword | number)

Synopsis	Weekdays when the schedule runs
Context	configure system cron schedule string owner string weekday (keyword number)
Tree	weekday
Range	1 to 7
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	7
Introduced	16.0.R1
Platforms	All

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure system dhcp6
Tree	dhcp6

Introduced 16.0.R4
Platforms All

adv-noaddrs-global *keyword*

Synopsis Applications to send NoAddrsAvail in Advertise messages
Context **configure** [system dhcp6 adv-noaddrs-global](#) *keyword*
Tree [adv-noaddrs-global](#)
Options esm-relay, server
Max. Instances 2
Introduced 16.0.R4
Platforms All

dns

Synopsis Enter the **dns** context
Context **configure** [system dns](#)
Tree [dns](#)
Introduced 16.0.R1
Platforms All

address-pref *keyword*

Synopsis Preference in DNS address resolving order
Context **configure** [system dns address-pref](#) *keyword*
Tree [address-pref](#)
Options ipv4-only, ipv6-first
Introduced 16.0.R1
Platforms All

dnssec

Synopsis Enter the **dnssec** context
Context **configure** [system dns dnssec](#)
Tree [dnssec](#)

Introduced 16.0.R1
Platforms All

ad-validation *keyword*

Synopsis Validation of AD-bit presence in DNS server responses
Context **configure** [system dns dnssec ad-validation](#) *keyword*
Tree [ad-validation](#)
Options fall-through, drop
Introduced 16.0.R1
Platforms All

efm-oam

Synopsis Enter the **efm-oam** context
Context **configure** [system efm-oam](#)
Tree [efm-oam](#)
Introduced 16.0.R1
Platforms All

dying-gasp-tx-on-reset *boolean*

Synopsis Generate Information OAM PDU on soft reset notification
Context **configure** [system efm-oam dying-gasp-tx-on-reset](#) *boolean*
Tree [dying-gasp-tx-on-reset](#)
Default false
Introduced 16.0.R1
Platforms All

grace-tx *boolean*

Synopsis Send Grace TLVs for soft reset graceful recovery events
Context **configure** [system efm-oam grace-tx](#) *boolean*
Tree [grace-tx](#)

Description	<p>When configured to true, the system sends the Nokia Vendor specific Grace TLV in the information PDU after an ISSU or a soft reset. The Grace TLV informs a remote peer to ignore the negotiated interval and multiplier and instead use the new timeout interval.</p> <p>By default, the command is disabled at the system level and enabled at the port level. Both the system and port level must be enabled to support grace on a specific port. When configured to true, the EFM-OAM protocol does not enter a non-operational state when both nodes acknowledge the grace function. This feature minimizes service interruption by giving the restarting router time to become operationally and administratively up within the grace period.</p> <p>The peer receiving the Grace TLV must be able to parse and process the vendor-specific messaging. Do not configure grace if the Nokia Vendor Specific Grace TLV is not supported on the remote peer.</p> <p>When configured to false, the Nokia Vendor Specific Grace TLV is not sent.</p>
Default	false
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure system eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace *boolean*

Synopsis	Allow system level capability of grace messaging
Context	configure system eth-cfm grace <i>boolean</i>
Tree	grace
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-auto-id

Synopsis	Enter the md-auto-id context
Context	configure system eth-cfm md-auto-id

Tree [md-auto-id](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-index-range

Synopsis Enable the **ma-index-range** context
Context **configure** [system eth-cfm md-auto-id ma-index-range](#)
Tree [ma-index-range](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Upper bound of the range
Context **configure** [system eth-cfm md-auto-id ma-index-range end number](#)
Tree [end](#)
Range 1 to 4294967295
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Lower bound of the range
Context **configure** [system eth-cfm md-auto-id ma-index-range start number](#)
Tree [start](#)
Range 1 to 4294967295

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-index-range

Synopsis	Enable the md-index-range context
Context	configure system eth-cfm md-auto-id md-index-range
Tree	md-index-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the range
Context	configure system eth-cfm md-auto-id md-index-range end number
Tree	end
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the range
Context	configure system eth-cfm md-auto-id md-index-range start number
Tree	start
Range	1 to 4294967295

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

redundancy

Synopsis	Enter the redundancy context
Context	configure system eth-cfm redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mc-lag

Synopsis	Enter the mc-lag context
Context	configure system eth-cfm redundancy mc-lag
Tree	mc-lag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

propagate-hold-time (*number* | *keyword*)

Synopsis	Delay timer value for the fault propagation
Context	configure system eth-cfm redundancy mc-lag propagate-hold-time (<i>number</i> <i>keyword</i>)
Tree	propagate-hold-time
Range	1 to 60
Default	1
Units	seconds
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

standby-mep *boolean*

Synopsis	Allow standby MC-LAG MEPs to act administratively down
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Context **configure system eth-cfm redundancy mc-lag standby-mep** *boolean*
Tree [standby-mep](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sender-id

Synopsis Enter the **sender-id** context
Context **configure system eth-cfm sender-id**
Tree [sender-id](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

local-name *string*

Synopsis Local name used in CFM PDUs
Context **configure system eth-cfm sender-id local-name** *string*
Tree [local-name](#)
String Length 1 to 45
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

Synopsis ETH-CFM sender ID to be used in CFM PDUs
Context **configure system eth-cfm sender-id type** *keyword*
Tree [type](#)
Default system
Options system, local
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

slm

Synopsis	Enter the slm context
Context	configure system eth-cfm slm
Tree	slm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

inactivity-timer *number*

Synopsis	SLR inactivity timer to maintain the stale test data
Context	configure system eth-cfm slm inactivity-timer <i>number</i>
Tree	inactivity-timer
Range	10 to 100
Default	100
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grpc

Synopsis	Enter the grpc context
Context	configure system grpc
Tree	grpc
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the gRPC server
Context	configure system grpc admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

allow-unsecure-connection

Synopsis	Allow connection without secured transport protocol
Context	configure system grpc allow-unsecure-connection
Tree	allow-unsecure-connection
Description	When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.
Notes	The following elements are part of a choice: allow-unsecure-connection or tls-server-profile .
Introduced	16.0.R1
Platforms	All

gnmi

Synopsis	Enter the gnmi context
Context	configure system grpc gnmi
Tree	gnmi
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the gNMI service
Context	configure system grpc gnmi admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

auto-config-save *boolean*

Synopsis	Automatically save configuration as part of commit
Context	configure system grpc gnmi auto-config-save <i>boolean</i>
Tree	auto-config-save

Description	When configured to true , the system automatically writes the running configuration to the save configuration file as part of a successful commit operation.
Default	false
Introduced	16.0.R1
Platforms	All

gnoi

Synopsis	Enter the gnoi context
Context	configure system grpc gnoi
Tree	gnoi
Introduced	19.10.R1
Platforms	All

cert-mgmt

Synopsis	Enter the cert-mgmt context
Context	configure system grpc gnoi cert-mgmt
Tree	cert-mgmt
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of gNOI CertificateManagement
Context	configure system grpc gnoi cert-mgmt admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

file

Synopsis	Enter the file context
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Context	configure system grpc gnoi file
Tree	file
Introduced	21.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the gNOI File service
Context	configure system grpc gnoi file admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.2.R1
Platforms	All

system

Synopsis	Enter the system context
Context	configure system grpc gnoi system
Tree	system
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the gNOI System service
Context	configure system grpc gnoi system admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.5.R1
Platforms	All

max-msg-size *number*

Synopsis	Maximum size of received message
Context	configure system grpc max-msg-size <i>number</i>
Tree	max-msg-size
Range	1 to 1024
Default	512
Units	megabytes
Introduced	16.0.R1
Platforms	All

md-cli

Synopsis	Enter the md-cli context
Context	configure system grpc md-cli
Tree	md-cli
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MD-CLI service
Context	configure system grpc md-cli admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.5.R1
Platforms	All

rib-api

Synopsis	Enter the rib-api context
Context	configure system grpc rib-api
Tree	rib-api
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIB API service
Context	configure system grpc rib-api admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

purge-timeout *number*

Synopsis	Time until stale entries are purged
Context	configure system grpc rib-api purge-timeout <i>number</i>
Tree	purge-timeout
Range	1 to 100000
Units	seconds
Introduced	16.0.R4
Platforms	All

tcp-keepalive

Synopsis	Enter the tcp-keepalive context
Context	configure system grpc tcp-keepalive
Tree	tcp-keepalive
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the TCP keepalive algorithm
Context	configure system grpc tcp-keepalive admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R4
Platforms All

idle-time *number*

Synopsis Time until the first TCP keepalive probe is sent
Context **configure** [system grpc tcp-keepalive idle-time](#) *number*
Tree [idle-time](#)
Description This command configures the amount of time the connection must be idle before TCP keepalives are sent.
Range 1 to 100000
Default 600
Units seconds
Introduced 16.0.R4
Platforms All

interval *number*

Synopsis Time between TCP keep-alive probes
Context **configure** [system grpc tcp-keepalive interval](#) *number*
Tree [interval](#)
Range 1 to 100000
Default 15
Units seconds
Introduced 16.0.R4
Platforms All

retries *number*

Synopsis Number of probe retries before closing the connection
Context **configure** [system grpc tcp-keepalive retries](#) *number*
Tree [retries](#)
Description This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range 3 to 100

Default	4
Introduced	16.0.R4
Platforms	All

tls-server-profile *reference*

Synopsis	Preferred TLS server profile
Context	configure system grpc tls-server-profile <i>reference</i>
Tree	tls-server-profile
Reference	configure system security tls server-tls-profile <i>string</i>
Notes	The following elements are part of a choice: allow-unsecure-connection or tls-server-profile .
Introduced	16.0.R1
Platforms	All

grpc-tunnel

Synopsis	Enter the grpc-tunnel context
Context	configure system grpc-tunnel
Tree	grpc-tunnel
Introduced	22.2.R1
Platforms	All

destination-group [[name](#)] *string*

Synopsis	Enter the destination-group list instance
Context	configure system grpc-tunnel destination-group <i>string</i>
Tree	destination-group
Description	Commands in this context configure parameters for destination groups.
Max. Instances	4
Introduced	22.2.R1
Platforms	All

[name] *string*

Synopsis	Destination group name
Context	configure system grpc-tunnel destination-group <i>string</i>
Tree	destination-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

allow-unsecure-connection

Synopsis	Allow unsecured operation of gRPC connections
Context	configure system grpc-tunnel destination-group <i>string</i> allow-unsecure-connection
Tree	allow-unsecure-connection
Description	This command allows a gRPC tunnel to run without a secured transport protocol. Data is transferred in unencrypted form.
Notes	The following elements are part of a choice: allow-unsecure-connection or tls-client-profile .
Introduced	22.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system grpc-tunnel destination-group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

destination [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) *port number*

Synopsis	Enter the destination list instance
Context	configure system grpc-tunnel destination-group <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) <i>port number</i>

Tree	destination
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	22.2.R1
Platforms	All

[address] (*ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name*)

Synopsis	Address of the destination within the destination group
Context	configure system grpc-tunnel destination-group <i>string</i> destination (<i>ipv4-address-no-zone ipv6-address-no-zone fully-qualified-domain-name</i>) port <i>number</i>
Tree	destination
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

port number

Synopsis	TCP port number for the destination
Context	configure system grpc-tunnel destination-group <i>string</i> destination (<i>ipv4-address-no-zone ipv6-address-no-zone fully-qualified-domain-name</i>) port <i>number</i>
Tree	destination
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

local-source-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Local IP address of packets sent from the source
Context	configure system grpc-tunnel destination-group <i>string</i> destination (<i>ipv4-address-no-zone ipv6-address-no-zone fully-qualified-domain-name</i>) port <i>number</i> local-source-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	local-source-address

Introduced 22.2.R1
Platforms All

originated-qos-marking *keyword*

Synopsis QoS marking used for gRPC tunnel packets
Context **configure** **system** **grpc-tunnel** **destination-group** *string* **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) **port** *number* **originated-qos-marking** *keyword*
Tree **originated-qos-marking**
Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced 22.2.R1
Platforms All

router-instance *string*

Synopsis Router instance for the destination group
Context **configure** **system** **grpc-tunnel** **destination-group** *string* **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) **port** *number* **router-instance** *string*
Tree **router-instance**
Introduced 22.2.R1
Platforms All

tcp-keepalive

Synopsis Enter the **tcp-keepalive** context
Context **configure** **system** **grpc-tunnel** **destination-group** *string* **tcp-keepalive**
Tree **tcp-keepalive**
Introduced 22.2.R1
Platforms All

admin-state *keyword*

Synopsis	Administrative state of the TCP keepalive algorithm
Context	configure system grpc-tunnel destination-group <i>string</i> tcp-keepalive admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.2.R1
Platforms	All

idle-time *number*

Synopsis	Time until the first TCP keepalive probe is sent
Context	configure system grpc-tunnel destination-group <i>string</i> tcp-keepalive idle-time <i>number</i>
Tree	idle-time
Description	This command configures the amount of time the connection must be idle before TCP keepalives are sent.
Range	1 to 100000
Default	600
Units	seconds
Introduced	22.2.R1
Platforms	All

interval *number*

Synopsis	Time between TCP keep-alive probes
Context	configure system grpc-tunnel destination-group <i>string</i> tcp-keepalive interval <i>number</i>
Tree	interval
Range	1 to 100000
Default	15
Units	seconds
Introduced	22.2.R1
Platforms	All

retries *number*

Synopsis	Number of probe retries before closing the connection
Context	configure system grpc-tunnel destination-group <i>string</i> tcp-keepalive retries <i>number</i>
Tree	retries
Description	This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range	3 to 100
Default	4
Introduced	22.2.R1
Platforms	All

tls-client-profile *reference*

Synopsis	TLS client profile assigned to the destination group
Context	configure system grpc-tunnel destination-group <i>string</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Reference	configure system security tls client-tls-profile <i>string</i>
Notes	The following elements are part of a choice: allow-unsecure-connection or tls-client-profile .
Introduced	22.2.R1
Platforms	All

tunnel [[name](#)] *string*

Synopsis	Enter the tunnel list instance
Context	configure system grpc-tunnel tunnel <i>string</i>
Tree	tunnel
Description	Commands in this context configure gRPC-tunnel-related parameters.
Max. Instances	4
Introduced	22.2.R1
Platforms	All

[name] *string*

Synopsis	Tunnel name
Context	configure system grpc-tunnel tunnel <i>string</i>
Tree	tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the tunnel
Context	configure system grpc-tunnel tunnel <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system grpc-tunnel tunnel <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

destination-group *reference*

Synopsis	Destination group used in the tunnel
Context	configure system grpc-tunnel tunnel <i>string</i> destination-group <i>reference</i>
Tree	destination-group
Reference	configure system grpc-tunnel destination-group <i>string</i>
Introduced	22.2.R1

Platforms All

handler [*name*] *string*

Synopsis Enter the **handler** list instance

Context **configure system grpc-tunnel tunnel** *string handler string*

Tree [handler](#)

Description Commands in this context configure handler parameters for this instance. Multiple handlers can be created for any tunnel.

Max. Instances 8

Introduced 22.2.R1

Platforms All

[name] *string*

Synopsis Handler name

Context **configure system grpc-tunnel tunnel** *string handler string*

Tree [handler](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.2.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the handler

Context **configure system grpc-tunnel tunnel** *string handler string admin-state keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 22.2.R1

Platforms All

port number

Synopsis	TCP port number the handler listens to internally
Context	configure system grpc-tunnel tunnel <i>string</i> handler <i>string</i> port <i>number</i>
Tree	port
Range	1 to 65535
Introduced	22.2.R1
Platforms	All

target-type

Synopsis	Enter the target-type context
Context	configure system grpc-tunnel tunnel <i>string</i> handler <i>string</i> target-type
Tree	target-type
Introduced	22.2.R1
Platforms	All

custom-type *string*

Synopsis	Custom string for target type
Context	configure system grpc-tunnel tunnel <i>string</i> handler <i>string</i> target-type custom-type <i>string</i>
Tree	custom-type
Description	This command configures a custom string for the target type. This string can correspond to specific values used by the gRPC tunnel protocol, such as GNMI_GNOI or SSH. If a custom string is defined, the gRPC tunnel client must specify the string to request a session for that handler. The string must be unique within a tunnel.
String Length	1 to 64
Notes	The following elements are part of a choice: custom-type , grpc-server , or ssh-server .
Introduced	22.2.R1
Platforms	All

grpc-server

Synopsis	Target type set to GNMI_GNOI
Context	configure system grpc-tunnel tunnel <i>string</i> handler <i>string</i> target-type grpc-server
Tree	grpc-server

Description	When configured, this command assigns the gRPC server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of GNMI_GNOI.
Notes	The following elements are part of a choice: custom-type , grpc-server , or ssh-server .
Introduced	22.2.R1
Platforms	All

ssh-server

Synopsis	Target type is SSH
Context	configure system grpc-tunnel tunnel <i>string</i> handler <i>string</i> target-type ssh-server
Tree	ssh-server
Description	When configured, this command assigns the SSH server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of SSH.
Notes	The following elements are part of a choice: custom-type , grpc-server , or ssh-server .
Introduced	22.2.R1
Platforms	All

target-name

Synopsis	Enter the target-name context
Context	configure system grpc-tunnel tunnel <i>string</i> target-name
Tree	target-name
Introduced	22.2.R1
Platforms	All

custom-string *string*

Synopsis	Custom target name
Context	configure system grpc-tunnel tunnel <i>string</i> target-name custom-string <i>string</i>
Tree	custom-string
String Length	1 to 64
Notes	The following elements are part of a choice: custom-string , node-name , or user-agent .
Introduced	22.2.R1
Platforms	All

node-name

Synopsis	Set the node name as target name
Context	configure system grpc-tunnel tunnel <i>string</i> target-name node-name
Tree	node-name
Description	When configured, this command uses the node name as the target name. The node name is configured by the configure system name command.
Notes	The following elements are part of a choice: custom-string , node-name , or user-agent .
Introduced	22.2.R1
Platforms	All

user-agent

Synopsis	Set the user agent as the target name
Context	configure system grpc-tunnel tunnel <i>string</i> target-name user-agent
Tree	user-agent
Description	When configured, this command uses the user agent as the target name. The agent is a string consisting of <i>node-name:vendor:model:software-version</i> .
Notes	The following elements are part of a choice: custom-string , node-name , or user-agent .
Introduced	22.2.R1
Platforms	All

icmp-vse *boolean*

Synopsis	Enable vendor-specific extensions to ICMP
Context	configure system icmp-vse <i>boolean</i>
Tree	icmp-vse
Default	false
Introduced	16.0.R1
Platforms	All

ip

Synopsis	Enter the ip context
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Context	configure system ip
Tree	ip
Introduced	16.0.R1
Platforms	All

allow-qinq-network-interface *boolean*

Synopsis	Allow QinQ encapsulation for network interfaces
Context	configure system ip allow-qinq-network-interface <i>boolean</i>
Tree	allow-qinq-network-interface
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

enforce-unique-if-index *boolean*

Synopsis	Force creation of globally unique IP interface indexes
Context	configure system ip enforce-unique-if-index <i>boolean</i>
Tree	enforce-unique-if-index
Default	false
Introduced	16.0.R1
Platforms	All

forward-6in4 *boolean*

Synopsis	Allow forwarding of IPv6 over IPv4 sent to the system IP address
Context	configure system ip forward-6in4 <i>boolean</i>
Tree	forward-6in4
Default	false
Introduced	19.10.R1
Platforms	All

forward-ip-over-gre *boolean*

Synopsis	Allow forwarding of IP over GRE sent to the system IP address
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Context	configure system ip forward-ip-over-gre <i>boolean</i>
Tree	forward-ip-over-gre
Default	false
Introduced	19.10.R1
Platforms	All

ipv6-eh *keyword*

Synopsis	Limit the number of IPv6 extension headers processed ingress/egress.
Context	configure system ip ipv6-eh <i>keyword</i>
Tree	ipv6-eh
Default	max
Options	max, limited
Introduced	20.5.R1
Platforms	All

mpls

Synopsis	Enter the mpls context
Context	configure system ip mpls
Tree	mpls
Introduced	19.10.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

label-stack-statistics-count *number*

Synopsis	Collect traffic statistics on labels of the MPLS stack
Context	configure system ip mpls label-stack-statistics-count <i>number</i>
Tree	label-stack-statistics-count
Range	1 to 2
Default	1
Introduced	19.10.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

l2tp

Synopsis	Enter the l2tp context
Context	configure system l2tp
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

non-multi-chassis-tunnel-id-range

Synopsis	Enter the non-multi-chassis-tunnel-id-range context
Context	configure system l2tp non-multi-chassis-tunnel-id-range
Tree	non-multi-chassis-tunnel-id-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the range
Context	configure system l2tp non-multi-chassis-tunnel-id-range end number
Tree	end
Range	0 to 16383
Default	16383
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the range
Context	configure system l2tp non-multi-chassis-tunnel-id-range start number
Tree	start
Range	0 to 16383
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lACP

Synopsis	Enter the lACP context
Context	configure system lACP
Tree	lACP
Introduced	16.0.R1
Platforms	All

system-priority *number*

Synopsis	LACP system priority on aggregated Ethernet interfaces
Context	configure system lACP system-priority <i>number</i>
Tree	system-priority
Range	1 to 65535
Default	32768
Introduced	16.0.R1
Platforms	All

lldp

Synopsis	Enter the lldp context
Context	configure system lldp
Tree	lldp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of LLDP
Context	configure system lldp admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

message-fast-tx *number*

Synopsis	Interval at which LLDP frames are transmitted
Context	configure system lldp message-fast-tx <i>number</i>
Tree	message-fast-tx
Description	This command configures the interval at which LLDP frames are transmitted on behalf of the LLDP during a fast transmission period.
Range	1 to 3600
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

message-fast-tx-init *number*

Synopsis	PDU's to transmit during the fast transmission period
Context	configure system lldp message-fast-tx-init <i>number</i>
Tree	message-fast-tx-init
Range	1 to 8
Default	4
Introduced	16.0.R1
Platforms	All

notification-interval *number*

Synopsis	Minimum interval between change notifications
Context	configure system lldp notification-interval <i>number</i>
Tree	notification-interval
Range	5 to 3600
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

reinit-delay *number*

Synopsis	Time required before re-initializing LLDP on a port
Context	configure system lldp reinit-delay <i>number</i>
Tree	reinit-delay
Range	1 to 10
Default	2
Units	seconds
Introduced	16.0.R1
Platforms	All

tx-credit-max *number*

Synopsis	Maximum consecutive LLDPDUs that can be transmitted
Context	configure system lldp tx-credit-max <i>number</i>
Tree	tx-credit-max
Range	1 to 100
Default	5
Introduced	16.0.R1
Platforms	All

tx-hold-multiplier *number*

Synopsis	Transmit interval multiplier
Context	configure system lldp tx-hold-multiplier <i>number</i>
Tree	tx-hold-multiplier
Range	2 to 10
Default	4
Introduced	16.0.R1
Platforms	All

tx-interval *number*

Synopsis	LLDP transmit interval
Context	configure system lldp tx-interval <i>number</i>
Tree	tx-interval

Range	5 to 32768
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

load-balancing

Synopsis	Enter the load-balancing context
Context	configure system load-balancing
Tree	load-balancing
Introduced	16.0.R1
Platforms	All

l2tp-load-balancing *boolean*

Synopsis	Include L2TP header information for load balancing
Context	configure system load-balancing l2tp-load-balancing <i>boolean</i>
Tree	l2tp-load-balancing
Default	false
Introduced	16.0.R4
Platforms	All

l4-load-balancing *boolean*

Synopsis	Use load balancing based on Layer 4 fields
Context	configure system load-balancing l4-load-balancing <i>boolean</i>
Tree	l4-load-balancing
Introduced	16.0.R1
Platforms	All

lsr-load-balancing *keyword*

Synopsis	Algorithm for system-wide LSR load balancing
Context	configure system load-balancing lsr-load-balancing <i>keyword</i>

Tree	l3r-load-balancing
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid, lbl-ip-or-teid
Introduced	16.0.R1
Platforms	All

mc-enh-load-balancing *boolean*

Synopsis	Enable enhanced egress multicast load balancing
Context	configure system load-balancing mc-enh-load-balancing <i>boolean</i>
Tree	mc-enh-load-balancing
Default	false
Introduced	16.0.R1
Platforms	All

service-id-lag-hashing *boolean*

Synopsis	Enable enhanced VLL LAG service ID hashing
Context	configure system load-balancing service-id-lag-hashing <i>boolean</i>
Tree	service-id-lag-hashing
Default	false
Introduced	16.0.R1
Platforms	All

system-ip-load-balancing *boolean*

Synopsis	Use system IP address for ECMP and LAG load balancing
Context	configure system load-balancing system-ip-load-balancing <i>boolean</i>
Tree	system-ip-load-balancing
Introduced	16.0.R1
Platforms	All

location *string*

Synopsis	Site location of the system
Context	configure system location <i>string</i>

Tree	location
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

login-control

Synopsis	Enter the login-control context
Context	configure system login-control
Tree	login-control
Introduced	16.0.R1
Platforms	All

exponential-backoff *boolean*

Synopsis	Enable exponential-backoff of the login prompt
Context	configure system login-control exponential-backoff <i>boolean</i>
Tree	exponential-backoff
Default	false
Introduced	16.0.R1
Platforms	All

ftp

Synopsis	Enter the ftp context
Context	configure system login-control ftp
Tree	ftp
Introduced	16.0.R1
Platforms	All

inbound-max-sessions *number*

Synopsis	Maximum number of concurrent inbound FTP sessions
Context	configure system login-control ftp inbound-max-sessions <i>number</i>
Tree	inbound-max-sessions

Range	0 to 5
Default	3
Introduced	16.0.R1
Platforms	All

idle-timeout (*keyword* | *number*)

Synopsis	Idle timeout for FTP, console, or Telnet sessions
Context	configure system login-control idle-timeout (<i>keyword</i> <i>number</i>)
Tree	idle-timeout
Range	1 to 1440
Default	30
Units	minutes
Options	none
Introduced	16.0.R1
Platforms	All

login-banner *boolean*

Synopsis	Display login banner
Context	configure system login-control login-banner <i>boolean</i>
Tree	login-banner
Default	false
Introduced	16.0.R1
Platforms	All

login-scripts

Synopsis	Enter the login-scripts context
Context	configure system login-control login-scripts
Tree	login-scripts
Introduced	16.0.R1
Platforms	All

global-script *string*

Synopsis	URL of the global CLI login script
Context	configure system login-control login-scripts global-script <i>string</i>
Tree	global-script
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

per-user-script

Synopsis	Enter the per-user-script context
Context	configure system login-control login-scripts per-user-script
Tree	per-user-script
Introduced	16.0.R1
Platforms	All

file-name *string*

Synopsis	File name of the per-user login script
Context	configure system login-control login-scripts per-user-script file-name <i>string</i>
Tree	file-name
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

user-directory *string*

Synopsis	Directory name of user-defined login script
Context	configure system login-control login-scripts per-user-script user-directory <i>string</i>
Tree	user-directory
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

motd

Synopsis	Enter the motd context
Context	configure system login-control motd
Tree	motd
Introduced	16.0.R1
Platforms	All

text *string*

Synopsis	Message of the day displayed after console login
Context	configure system login-control motd text <i>string</i>
Tree	text
String Length	1 to 900
Notes	The following elements are part of a choice: text or url .
Introduced	16.0.R1
Platforms	All

url *string*

Synopsis	URL of the location of message of the day
Context	configure system login-control motd url <i>string</i>
Tree	url
String Length	1 to 180
Notes	The following elements are part of a choice: text or url .
Introduced	16.0.R1
Platforms	All

pre-login-message

Synopsis	Enter the pre-login-message context
Context	configure system login-control pre-login-message
Tree	pre-login-message
Introduced	16.0.R1
Platforms	All

message *string*

Synopsis	Message displayed prior to the login prompt
Context	configure system login-control pre-login-message message <i>string</i>
Tree	message
String Length	1 to 900
Introduced	16.0.R1
Platforms	All

name *boolean*

Synopsis	Display the system name before the pre-login message
Context	configure system login-control pre-login-message name <i>boolean</i>
Tree	name
Default	false
Introduced	16.0.R1
Platforms	All

ssh

Synopsis	Enter the ssh context
Context	configure system login-control ssh
Tree	ssh
Introduced	16.0.R1
Platforms	All

graceful-shutdown *boolean*

Synopsis	Allow graceful shutdown of SSH sessions
Context	configure system login-control ssh graceful-shutdown <i>boolean</i>
Tree	graceful-shutdown
Default	true
Introduced	16.0.R1
Platforms	All

inbound-max-sessions *number*

Synopsis	Maximum number of concurrent inbound sessions
Context	configure system login-control ssh inbound-max-sessions <i>number</i>
Tree	inbound-max-sessions
Range	0 to 50
Default	5
Introduced	16.0.R1
Platforms	All

outbound-max-sessions *number*

Synopsis	Maximum number of concurrent outbound sessions
Context	configure system login-control ssh outbound-max-sessions <i>number</i>
Tree	outbound-max-sessions
Range	0 to 15
Default	5
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for incoming packets
Context	configure system login-control ssh ttl-security <i>number</i>
Tree	ttl-security
Range	1 to 255
Introduced	16.0.R1
Platforms	All

telnet

Synopsis	Enter the telnet context
Context	configure system login-control telnet
Tree	telnet
Introduced	16.0.R1

Platforms All

graceful-shutdown *boolean*

Synopsis Allow graceful shutdown of Telnet sessions
Context **configure** [system login-control telnet graceful-shutdown](#) *boolean*
Tree [graceful-shutdown](#)
Default false
Introduced 16.0.R1
Platforms All

inbound-max-sessions *number*

Synopsis Maximum number of concurrent inbound sessions
Context **configure** [system login-control telnet inbound-max-sessions](#) *number*
Tree [inbound-max-sessions](#)
Range 0 to 50
Default 5
Introduced 16.0.R1
Platforms All

outbound-max-sessions *number*

Synopsis Maximum number of concurrent outbound sessions
Context **configure** [system login-control telnet outbound-max-sessions](#) *number*
Tree [outbound-max-sessions](#)
Range 0 to 15
Default 5
Introduced 16.0.R1
Platforms All

ttl-security *number*

Synopsis Minimum TTL value for incoming packets
Context **configure** [system login-control telnet ttl-security](#) *number*

Tree	ttl-security
Range	1 to 255
Introduced	16.0.R1
Platforms	All

management-interface

Synopsis	Enter the management-interface context
Context	configure system management-interface
Tree	management-interface
Description	Commands in this context configure the capabilities of router management interfaces such as CLI and NETCONF.
Introduced	16.0.R1
Platforms	All

cli

Synopsis	Enter the cli context
Context	configure system management-interface cli
Tree	cli
Description	Commands in this context configure the CLI management interfaces.
Introduced	16.0.R1
Platforms	All

classic-cli

Synopsis	Enter the classic-cli context
Context	configure system management-interface cli classic-cli
Tree	classic-cli
Description	Commands in this context configure the classic CLI management interface.
Introduced	16.0.R1
Platforms	All

allow-immediate *boolean*

Synopsis	Allow writable access in classic CLI configure branch
Context	configure system management-interface cli classic-cli allow-immediate <i>boolean</i>
Tree	allow-immediate
Description	<p>When configured to true, this command enables write access in the classic CLI configuration branch without having to use the classic CLI candidate edit functionality.</p> <p>When configured to false, this command blocks write access and configuration changes in the classic CLI configuration branch, and the classic CLI configuration branch is read-only. This enforces using the classic CLI candidate edit functionality, including candidate commit, to modify the router configuration, instead of allowing immediate line-by-line configuration changes.</p>
Default	true
Introduced	16.0.R1
Platforms	All

rollback

Synopsis	Enter the rollback context
Context	configure system management-interface cli classic-cli rollback
Tree	rollback
Description	Commands in this context control classic CLI configuration rollback functionality, such as the maximum number of rollback checkpoints the system maintains. Configuration rollback allows the operator to revert to previous router configuration states while minimizing impacts to services.
Introduced	16.0.R1
Platforms	All

local-checkpoints *number*

Synopsis	Maximum number of rollback files on local storage
Context	configure system management-interface cli classic-cli rollback local-checkpoints <i>number</i>
Tree	local-checkpoints
Range	1 to 50
Default	10
Introduced	16.0.R1
Platforms	All

location string

Synopsis	Path and filename prefix for rollback checkpoint files
Context	configure system management-interface cli classic-cli rollback location string
Tree	location
Description	This command configures the local (for example, compact flash) or remote location and name of the classic CLI rollback checkpoint files. The filename must not contain a suffix. The suffixes for rollback checkpoint files are, for example, .rb, .rb.1, .rb.2, and so on. The suffixes are automatically appended to rollback checkpoint files.
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

remote-checkpoints number

Synopsis	Maximum rollback files saved at a remote location
Context	configure system management-interface cli classic-cli rollback remote-checkpoints number
Tree	remote-checkpoints
Range	1 to 200
Default	10
Introduced	16.0.R1
Platforms	All

rescue

Synopsis	Enter the rescue context
Context	configure system management-interface cli classic-cli rollback rescue
Tree	rescue
Introduced	16.0.R1
Platforms	All

location string

Synopsis	Location of the rescue configuration file
Context	configure system management-interface cli classic-cli rollback rescue location string

Tree	location
Description	This command configures the local or remote location and filename of the classic CLI rescue configuration file. The suffix (.rc) is automatically appended to the filename when a rescue configuration file is saved. Trivial FTP (TFTP) is not supported for remote locations.
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

cli-engine *keyword*

Synopsis	System-wide CLI engine access
Context	configure system management-interface cli cli-engine <i>keyword</i>
Tree	cli-engine
Description	This command configures the system-wide CLI engine. The operator can configure one or both engines. For the configuration to take effect, exit the running CLI session and start a new session after committing the new value.
Default	md-cli
Options	classic-cli, md-cli
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

md-cli

Synopsis	Enter the md-cli context
Context	configure system management-interface cli md-cli
Tree	md-cli
Description	Commands in this context configure the MD-CLI management interface.
Introduced	16.0.R1
Platforms	All

auto-config-save *boolean*

Synopsis	Automatically save configuration as part of commit
Context	configure system management-interface cli md-cli auto-config-save <i>boolean</i>
Tree	auto-config-save
Description	When configured to true , the system automatically writes the running configuration to the save configuration file as part of a successful commit operation.
Default	false
Introduced	16.0.R1
Platforms	All

environment

Synopsis	Enter the environment context
Context	configure system management-interface cli md-cli environment
Tree	environment
Introduced	16.0.R1
Platforms	All

command-alias

Synopsis	Enter the command-alias context
Context	configure system management-interface cli md-cli environment command-alias
Tree	command-alias
Introduced	21.7.R1
Platforms	All

alias [*alias-name*] *string*

Synopsis	Enter the alias list instance
Context	configure system management-interface cli md-cli environment command-alias alias <i>string</i>
Tree	alias
Description	Commands in this context create aliases to existing MD-CLI commands or to Python applications. Aliases may be mounted for use globally or for selected context paths. Arguments and output modifiers may be provided to aliases at configuration or run time.

Introduced 21.7.R1
Platforms All

[alias-name] *string*

Synopsis Alias name
Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)
string
Tree [alias](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 21.7.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the alias
Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)
string [admin-state](#) *keyword*
Tree [admin-state](#)
Description This command controls the administrative state of the MD-CLI alias.
MD-CLI aliases that are administratively disabled cannot be executed, are not displayed in command completion, and do not appear in ? help.
Default disable
Options enable, disable
Introduced 21.10.R1
Platforms All

cli-command *string*

Synopsis CLI command to run when executing the alias
Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)
string [cli-command](#) *string*
Tree [cli-command](#)
String Length 1 to 255
Notes The following elements are part of a mandatory choice: **cli-command** or **python-script**.

Introduced 21.7.R1
Platforms All

description *string*

Synopsis Alias description
Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)
string [description](#) *string*
Tree [description](#)
String Length 1 to 110
Introduced 21.7.R1
Platforms All

mount-point [[path](#)] (*keyword* | *string*)

Synopsis Add a list entry for **mount-point**
Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)
string [mount-point](#) (*keyword* | *string*)
Tree [mount-point](#)
Min. 1
Instances
Introduced 21.7.R1
Platforms All

[path] (*keyword* | *string*)

Synopsis Mount point where the alias is available
Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)
string [mount-point](#) (*keyword* | *string*)
Tree [mount-point](#)
String Length 1 to 255
Options global
Notes This element is part of a list key.
Introduced 21.7.R1
Platforms All

python-script *reference*

Synopsis	Python script to run when executing the alias
Context	configure system management-interface cli md-cli environment command-alias alias string python-script reference
Tree	python-script
Reference	configure python python-script string
Notes	The following elements are part of a mandatory choice: cli-command or python-script .
Introduced	21.7.R1
Platforms	All

command-completion

Synopsis	Enter the command-completion context
Context	configure system management-interface cli md-cli environment command-completion
Tree	command-completion
Introduced	16.0.R1
Platforms	All

enter *boolean*

Synopsis	Complete the command when the Enter key is pressed
Context	configure system management-interface cli md-cli environment command-completion enter boolean
Tree	enter
Default	true
Introduced	16.0.R1
Platforms	All

space *boolean*

Synopsis	Complete the command when the Space key is pressed
Context	configure system management-interface cli md-cli environment command-completion space boolean
Tree	space
Default	true
Introduced	16.0.R1

Platforms All

tab *boolean*

Synopsis Complete the command when the Tab key is pressed

Context **configure** [system management-interface cli md-cli environment command-completion](#) *tab boolean*

Tree [tab](#)

Default true

Introduced 16.0.R1

Platforms All

console

Synopsis Enter the **console** context

Context **configure** [system management-interface cli md-cli environment console](#)

Tree [console](#)

Introduced 16.0.R1

Platforms All

length *number*

Synopsis Number of lines displayed on the console

Context **configure** [system management-interface cli md-cli environment console length](#) *number*

Tree [length](#)

Range 24 to 512

Default 24

Introduced 16.0.R1

Platforms All

width *number*

Synopsis Number of columns displayed on the console

Context **configure** [system management-interface cli md-cli environment console width](#) *number*

Tree [width](#)

Range 80 to 512

Default	80
Introduced	16.0.R1
Platforms	All

info-output

Synopsis	Enter the info-output context
Context	configure system management-interface cli md-cli environment info-output
Tree	info-output
Introduced	22.2.R1
Platforms	All

always-display

Synopsis	Enter the always-display context
Context	configure system management-interface cli md-cli environment info-output always-display
Tree	always-display
Description	Commands in this context specify elements that are always displayed in the info output, regardless of whether the detail option is used.
Introduced	22.2.R1
Platforms	All

admin-state *boolean*

Synopsis	Always display admin-state elements
Context	configure system management-interface cli md-cli environment info-output always-display admin-state <i>boolean</i>
Tree	admin-state
Description	When configured to true , the values of the admin-state elements in info output (without the detail option) are always displayed, even if they are the default values.
Default	false
Introduced	22.2.R1
Platforms	All

message-severity-level

Synopsis	Enter the message-severity-level context
Context	configure system management-interface cli md-cli environment message-severity-level
Tree	message-severity-level
Introduced	16.0.R1
Platforms	All

cli keyword

Synopsis	Message severity threshold for CLI messages
Context	configure system management-interface cli md-cli environment message-severity-level cli <i>keyword</i>
Tree	cli
Default	info
Options	warning, info
Introduced	16.0.R1
Platforms	All

more boolean

Synopsis	Activate the pager when output is longer than a screen
Context	configure system management-interface cli md-cli environment more <i>boolean</i>
Tree	more
Default	true
Introduced	16.0.R1
Platforms	All

progress-indicator

Synopsis	Enter the progress-indicator context
Context	configure system management-interface cli md-cli environment progress-indicator
Tree	progress-indicator
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the progress indicator
Context	configure system management-interface cli md-cli environment progress-indicator admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

delay *number*

Synopsis	Delay before the progress indicator is displayed
Context	configure system management-interface cli md-cli environment progress-indicator delay <i>number</i>
Tree	delay
Range	0 to 10000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Progress indicator output style
Context	configure system management-interface cli md-cli environment progress-indicator type <i>keyword</i>
Tree	type
Default	dots
Options	dots
Introduced	16.0.R1
Platforms	All

prompt

Synopsis	Enter the prompt context
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Context	configure system management-interface cli md-cli environment prompt
Tree	prompt
Introduced	16.0.R1
Platforms	All

context *boolean*

Synopsis	Show the current command context in the prompt
Context	configure system management-interface cli md-cli environment prompt context <i>boolean</i>
Tree	context
Default	true
Introduced	16.0.R1
Platforms	All

newline *boolean*

Synopsis	Add a new line before every prompt line
Context	configure system management-interface cli md-cli environment prompt newline <i>boolean</i>
Tree	newline
Default	true
Introduced	16.0.R1
Platforms	All

timestamp *boolean*

Synopsis	Show the timestamp before the first prompt line
Context	configure system management-interface cli md-cli environment prompt timestamp <i>boolean</i>
Tree	timestamp
Default	false
Introduced	16.0.R1
Platforms	All

uncommitted-changes-indicator *boolean*

Synopsis	Show an asterisk (*) when uncommitted changes exist
----------	---

Context	configure system management-interface cli md-cli environment prompt uncommitted-changes-indicator <i>boolean</i>
Tree	uncommitted-changes-indicator
Default	true
Introduced	16.0.R1
Platforms	All

python

Synopsis	Enter the python context
Context	configure system management-interface cli md-cli environment python
Tree	python
Description	Commands in this context customize Python settings used with the Python 3 interpreter in MD-CLI applications such as pyexec, command aliases, EHS, and CRON.
Introduced	21.10.R1
Platforms	All

memory-reservation *number*

Synopsis	Memory reserved per Python interpreter
Context	configure system management-interface cli md-cli environment python memory-reservation <i>number</i>
Tree	memory-reservation
Range	1 to 500
Units	megabytes
Introduced	21.10.R1
Platforms	All

minimum-available-memory *number*

Synopsis	Minimum memory requirement to run a Python interpreter
Context	configure system management-interface cli md-cli environment python minimum-available-memory <i>number</i>
Tree	minimum-available-memory
Range	5 to 50
Units	percent

Introduced	21.10.R1
Platforms	All

timeout *number*

Synopsis	Maximum run time before a Python application is stopped
Context	configure system management-interface cli md-cli environment python timeout number
Tree	timeout
Range	30 to 86400
Default	3600
Units	seconds
Introduced	21.10.R1
Platforms	All

time-display *keyword*

Synopsis	Time zone to display time
Context	configure system management-interface cli md-cli environment time-display keyword
Tree	time-display
Description	<p>This command configures the time zone for a timestamp displayed in outputs, such as event logs and show commands for the current CLI session.</p> <p>In event logs, the selected time is used to control the timestamps in the CLI output of show log log-id and in YANG state in the /state/log/log-id branch (for logs such as session, cli, memory, SNMP, and NETCONF).</p> <p>Also see the configure log log-id time-format command.</p>
Default	local
Options	local, utc
Introduced	16.0.R1
Platforms	All

time-format *keyword*

Synopsis	Format to display the date and time
Context	configure system management-interface cli md-cli environment time-format keyword
Tree	time-format

Description	This command specifies the format of the time display in configuration, state, and certain show command output in the current CLI session.
Default	rfc-3339
Options	iso-8601, rfc-1123, rfc-3339
Introduced	20.5.R1
Platforms	All

commit-history *number*

Synopsis	Number of commit history IDs to store
Context	configure system management-interface commit-history <i>number</i>
Tree	commit-history
Description	This command sets the number of IDs to store in the commit history. Setting the value to 0 disables the commit history.
Range	0 to 200
Default	50
Introduced	21.10.R1
Platforms	All

configuration-mode *keyword*

Synopsis	Management interfaces allowed to edit the configuration
Context	configure system management-interface configuration-mode <i>keyword</i>
Tree	configuration-mode
Description	This command controls which of the classic or model-driven management interfaces can modify the configuration of the router. Any management interface can be used in any configuration mode (to gather state information or perform operations, for example), but only specific management interfaces (CLI, NETCONF, and so on) are allowed to edit the configuration of the router in different modes. For example, only classic CLI and SNMP can be used to edit the configuration when in classic mode.
Default	classic
Options	classic, model-driven, mixed
Introduced	16.0.R1
Platforms	All

configuration-save

Synopsis	Enter the configuration-save context
Context	configure system management-interface configuration-save
Tree	configuration-save
Description	Commands in this context configure the attributes for saved configuration files.
Introduced	16.0.R1
Platforms	All

configuration-backups *number*

Synopsis	Maximum number of configuration versions maintained
Context	configure system management-interface configuration-save configuration-backups <i>number</i>
Tree	configuration-backups
Description	<p>This command configures the maximum number of saved configuration file versions the router maintains.</p> <p>When the configuration is saved, configuration file names are appended with a numeric extension. Each subsequent configuration save creates a new configuration file version with an incremented numeric extension until the maximum count is reached, after which the next configuration save overwrites the oldest file version.</p> <p>Each persistent index file is updated at the same time as the associated configuration file. The system synchronizes the active and standby CPM for all configurations and their associated persistent index files.</p>
Range	1 to 200
Default	5
Introduced	16.0.R1
Platforms	All

incremental-saves *boolean*

Synopsis	Use incremental saved configuration files
Context	configure system management-interface configuration-save incremental-saves <i>boolean</i>
Tree	incremental-saves
Description	When configured to true , the system saves each commit to the configure configuration region in a separate incremental saved configuration file, which allows for faster commits, instead of saving a complete saved configuration file each time.
Default	false

Introduced 22.7.R1
Platforms All

netconf

Synopsis Enter the **netconf** context
Context **configure** [system management-interface netconf](#)
Tree [netconf](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of NETCONF
Context **configure** [system management-interface netconf admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

auto-config-save *boolean*

Synopsis Automatically save configuration as part of commit
Context **configure** [system management-interface netconf auto-config-save](#) *boolean*
Tree [auto-config-save](#)
Description When configured to **true**, the system automatically writes the running configuration to the save configuration file as part of a successful commit operation.
Default false
Introduced 16.0.R1
Platforms All

capabilities

Synopsis Enter the **capabilities** context

Context	configure system management-interface netconf capabilities
Tree	capabilities
Description	Commands in this context configure explicit capabilities for the NETCONF server.
Introduced	16.0.R1
Platforms	All

candidate *boolean*

Synopsis	Allow the NETCONF server to access candidate datastore
Context	configure system management-interface netconf capabilities candidate <i>boolean</i>
Tree	candidate
Description	<p>When configured to true, this command allows the SR OS NETCONF server to access the candidate configuration datastore. Configuring this command to true also enables using commit and discard-changes.</p> <p>When configure system management-interface configuration-mode is set to classic, the candidate capability is disabled, even if this command is configured to true.</p> <p>When configured to false, this command disables the SR OS NETCONF server from accessing the candidate datastore. If the candidate is disabled, requests that reference the candidate datastore return an error, and when a NETCONF client establishes a new session, the candidate capability is not advertised in the SR OS NETCONF Hello message.</p>
Default	true
Introduced	16.0.R1
Platforms	All

writable-running *boolean*

Synopsis	Allow NETCONF server to access the running datastore
Context	configure system management-interface netconf capabilities writable-running <i>boolean</i>
Tree	writable-running
Description	<p>When configured to true, this command allows the SR OS NETCONF server to access the running configuration datastore.</p> <p>When configure system management-interface configuration-mode is set to model-driven, the writable-running capability is disabled, even if this command is configured to true.</p> <p>When configured to false, this command disables the SR OS NETCONF server from accessing the running datastore. Requests that reference the running datastore as a</p>

target return an error. When a NETCONF client establishes a new session, the writable-running capability is not advertised in the SR OS NETCONF Hello message.

Default	false
Introduced	16.0.R1
Platforms	All

port number

Synopsis	Port on which NETCONF server listens for connections
Context	configure system management-interface netconf port number
Tree	port
Description	<p>This command specifies the port on which the SR OS NETCONF server listens for new connections. One port can be configured for NETCONF management.</p> <p>The configured port applies to both non-VPRN and VPRN management. New NETCONF connections are able to use the configured port.</p> <p>For NETCONF connections not using VPRN management, active NETCONF connections are not disconnected if the connection port changes. For NETCONF connections using VPRN management, active NETCONF connections are disconnected if the connection port changes.</p>
Range	22 830
Default	830
Introduced	19.10.R1
Platforms	All

operations

Synopsis	Enter the operations context
Context	configure system management-interface operations
Tree	operations
Description	Commands in this context configure parameters associated with operational commands in model-driven interfaces.
Introduced	21.5.R1
Platforms	All

global-timeouts

Synopsis	Enter the global-timeouts context
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Context	configure system management-interface operations global-timeouts
Tree	global-timeouts
Description	Commands in this context configure system timeout parameters for operational commands. Timeout parameters provide default system-level control for various types of operational commands in model-driven interfaces. The timeout values are used when specific execution and retention timeouts are not requested for a specific operation.
Introduced	21.5.R1
Platforms	All

asynchronous-execution (*number* | *keyword*)

Synopsis	Timeout for asynchronous operation execution
Context	configure system management-interface operations global-timeouts asynchronous-execution (<i>number</i> <i>keyword</i>)
Tree	asynchronous-execution
Description	This command configures the period of time that operations launched as “asynchronous” are allowed to execute before being automatically stopped by the SR OS. An asynchronous operation is not deleted from the system when it is stopped. See the asynchronous-retention command. If a specific execution timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies. Note: This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the ping operation also has its own timeout parameter).
Range	1 to 604800
Default	3600
Units	seconds
Options	never
Introduced	21.5.R1
Platforms	All

asynchronous-retention (*number* | *keyword*)

Synopsis	Timeout for asynchronous operation data retention
Context	configure system management-interface operations global-timeouts asynchronous-retention (<i>number</i> <i>keyword</i>)

Tree	asynchronous-retention
Description	<p>This command configures the period of time that data related to operations launched as “asynchronous” is retained in the system. After the retention timeout expires, all information related to the operation is deleted, including any status information and result data.</p> <p>If a specific retention timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies.</p>
Range	1 to 604800
Default	86400
Units	seconds
Options	never
Introduced	21.5.R1
Platforms	All

synchronous-execution (*number* | *keyword*)

Synopsis	Timeout for synchronous operation execution
Context	configure system management-interface operations global-timeouts synchronous-execution (<i>number</i> <i>keyword</i>)
Tree	synchronous-execution
Description	<p>This command configures the period of time that operations launched as “synchronous” (the default method for all operations) are allowed to execute before they are automatically stopped, and their associated data is deleted.</p> <p>If a specific execution timeout is not included in the request for a particular synchronous operation, this system-level timeout applies.</p> <p>Note: This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the ping operation also has its own timeout parameter).</p> <p>Caution: If this command is set with a specific time value, MD-CLI operations are subject to the timeout and are interrupted if they execute longer than the time value. This situation can arise because the timeout also applies to operations requested in the MD-CLI interface (for example, ping, file dir, and so on).</p>
Range	1 to 604800
Default	never
Units	seconds
Options	never
Introduced	21.5.R1
Platforms	All

remote-management

Synopsis	Enter the remote-management context
Context	configure system management-interface remote-management
Tree	remote-management
Description	Commands in this context configure the SR OS node to use the remote management service. Configuring remote management enables the SR OS node to report itself to a remote manager service running on a remote server, so that it is included in the dynamic list of available nodes. The manager service streamlines the management of multiple SR OS nodes running different SR OS versions using the same client application providing a similar shell to the MD-CLI.
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of remote management registration
Context	configure system management-interface remote-management admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.5.R1
Platforms	All

allow-unsecure-connection

Synopsis	Allow connection without secured transport protocol
Context	configure system management-interface remote-management allow-unsecure-connection
Tree	allow-unsecure-connection
Description	When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.
Notes	The following elements are part of a choice: allow-unsecure-connection or client-tls-profile .
Introduced	20.5.R1
Platforms	All

client-tls-profile *reference*

Synopsis	TLS client profile name
Context	configure system management-interface remote-management client-tls-profile <i>reference</i>
Tree	client-tls-profile
Description	This command specifies the client TLS profile to all remote managers.
Reference	configure system security tls client-tls-profile <i>string</i>
Notes	The following elements are part of a choice: allow-unsecure-connection or client-tls-profile .
Introduced	20.5.R1
Platforms	All

connection-timeout *number*

Synopsis	Time without a response before manager declared down
Context	configure system management-interface remote-management connection-timeout <i>number</i>
Tree	connection-timeout
Range	1 to 3600
Default	60
Units	seconds
Introduced	20.5.R1
Platforms	All

device-label *string*

Synopsis	Device label supplied to the remote manager
Context	configure system management-interface remote-management device-label <i>string</i>
Tree	device-label
Description	This command specifies a metadata label that is supplied to the manager. This label is used to group devices or network nodes with a common purpose or goal.
String Length	1 to 64
Introduced	20.5.R1
Platforms	All

device-name *string*

Synopsis	Device name supplied to the remote manager
Context	configure system management-interface remote-management device-name <i>string</i>
Tree	device-name
Description	This command specifies a device name that is supplied to the manager. The name identifies a specific SR OS node in the network. When unconfigured, the default system name is used.
String Length	1 to 64
Introduced	20.5.R1
Platforms	All

hello-interval *number*

Synopsis	Time between hello messages from SR OS node to manager
Context	configure system management-interface remote-management hello-interval <i>number</i>
Tree	hello-interval
Range	10 to 216000
Default	600
Units	seconds
Introduced	20.5.R1
Platforms	All

manager [[manager-name](#)] *string*

Synopsis	Enter the manager list instance
Context	configure system management-interface remote-management manager <i>string</i>
Tree	manager
Description	Commands in this context configure options for a specific manager. Commands configured in this context take precedence over command values specified directly in the configure management-interface remote-management context. If a command is not configured in this context, the command setting is inherited from the higher level context.
Max. Instances	2
Introduced	20.5.R1

Platforms All

[manager-name] *string*

Synopsis Remote management manager name
Context **configure** [system](#) [management-interface](#) [remote-management](#) [manager](#) *string*
Tree [manager](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 20.5.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of remote management registration
Context **configure** [system](#) [management-interface](#) [remote-management](#) [manager](#) *string* [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 20.5.R1
Platforms All

allow-unsecure-connection

Synopsis Allow connection without secured transport protocol
Context **configure** [system](#) [management-interface](#) [remote-management](#) [manager](#) *string* [allow-unsecure-connection](#)
Tree [allow-unsecure-connection](#)
Description When configured, this command allows an unsecured connection to the remote managers; the TCP connection is not encrypted. This includes username and password information.
Notes The following elements are part of a choice: **allow-unsecure-connection** or **client-tls-profile**.
Introduced 20.5.R1
Platforms All

client-tls-profile *reference*

Synopsis	TLS client profile name
Context	configure system management-interface remote-management manager <i>string</i> client-tls-profile <i>reference</i>
Tree	client-tls-profile
Description	This command assigns a TLS profile name to a remote manager.
Reference	configure system security tls client-tls-profile <i>string</i>
Notes	The following elements are part of a choice: allow-unsecure-connection or client-tls-profile .
Introduced	20.5.R1
Platforms	All

connection-timeout *number*

Synopsis	Time without response before manager is declared down
Context	configure system management-interface remote-management manager <i>string</i> connection-timeout <i>number</i>
Tree	connection-timeout
Range	1 to 3600
Units	seconds
Introduced	20.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system management-interface remote-management manager <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

device-label *string*

Synopsis	Device label supplied to the remote manager
Context	configure system management-interface remote-management manager <i>string</i> device-label <i>string</i>
Tree	device-label
Description	This command specifies a metadata label that is supplied to the manager. This label is used to group devices or network nodes with a common purpose or goal.
String Length	1 to 64
Introduced	20.5.R1
Platforms	All

device-name *string*

Synopsis	Device name supplied to the remote manager
Context	configure system management-interface remote-management manager <i>string</i> device-name <i>string</i>
Tree	device-name
Description	This command specifies a device name that is supplied to the manager. The name identifies a specific SR OS node in the network. When unconfigured, the default system name is used.
String Length	1 to 64
Introduced	20.5.R1
Platforms	All

manager-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

Synopsis	Destination IP address of the manager
Context	configure system management-interface remote-management manager <i>string</i> manager-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>)
Tree	manager-address
String Length	1 to 255
Introduced	20.5.R1
Platforms	All

manager-port *number*

Synopsis	Destination TCP port for gRPC connections to manager
Context	configure system management-interface remote-management manager <i>string</i> manager-port <i>number</i>
Tree	manager-port
Range	1 to 65535
Default	57400
Introduced	20.5.R1
Platforms	All

router-instance *string*

Synopsis	Reference to a router or VPRN service name
Context	configure system management-interface remote-management manager <i>string</i> router-instance <i>string</i>
Tree	router-instance
Introduced	20.5.R1
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address for connection to the manager
Context	configure system management-interface remote-management manager <i>string</i> source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	20.5.R1
Platforms	All

source-port (*number* | *keyword*)

Synopsis	Source TCP destination port number
Context	configure system management-interface remote-management manager <i>string</i> source-port (<i>number</i> <i>keyword</i>)
Tree	source-port
Range	1 to 65535
Options	grpc-default

Introduced 20.5.R1
Platforms All

router-instance *string*

Synopsis Router name or VPRN service name
Context **configure** [system](#) [management-interface](#) [remote-management](#) [router-instance](#) *string*
Tree [router-instance](#)
Default management
Introduced 20.5.R1
Platforms All

source-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Source IP address for connection to the manager
Context **configure** [system](#) [management-interface](#) [remote-management](#) [source-address](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)
Tree [source-address](#)
Introduced 20.5.R1
Platforms All

source-port (*number | keyword*)

Synopsis Source TCP port number to connection to the manager
Context **configure** [system](#) [management-interface](#) [remote-management](#) [source-port](#) (*number | keyword*)
Tree [source-port](#)
Range 1 to 65535
Default grpc-default
Options grpc-default
Introduced 20.5.R1
Platforms All

schema-path *string*

Synopsis Schema path URL

Context	configure system management-interface schema-path <i>string</i>
Tree	schema-path
Description	<p>This command specifies the schema path where the SR OS YANG modules can be placed by the user before using a <get-schema> request. Nokia recommends that the URL string not exceed 135 characters for the <get-schema> request to work correctly with all schema files.</p> <p>If this command is not configured, the software upgrade process manages the YANG schema files to ensure the schema files are synchronized with the software image on both the primary and standby CPM.</p>
String Length	1 to 180
Introduced	16.0.R4
Platforms	All

snmp

Synopsis	Enter the snmp context
Context	configure system management-interface snmp
Tree	snmp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SNMP agent
Context	configure system management-interface snmp admin-state <i>keyword</i>
Tree	admin-state
Description	<p>This command administratively enables or disables SNMP agent operations. Disabling SNMP does not prevent the agent from sending SNMP notifications to configured SNMP trap destinations.</p> <p>In classic and mixed configuration mode, the agent is administratively disabled in the event of a reboot when the processing of the configuration file fails to complete or when an SNMP persistent index file fails while the bof system persistent-indices command is set to true. This prevents an SNMP-based management system from accessing and possibly synchronizing with a partially booted or incomplete network element. This auto-disable behavior is not applicable to model-driven configuration mode.</p>
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

engine-id *string*

Synopsis SNMP engine ID that identifies the SNMPv3 node

Context **configure** **system management-interface snmp engine-id** *string*

Tree **engine-id**

Description This command sets the SNMP engine ID that uniquely identifies the SNMPv3 node.
If unconfigured, the system uses an engine ID based on the information from the system backplane.
If the SNMP engine ID is changed, the current configuration must be saved and a reboot must be executed. Otherwise, the previously configured SNMP communities and logger trap-target notify communities will not be valid for the new engine ID.
Note: Changing the SNMP engine ID invalidates all SNMPv3 MD5 and SHA security digest keys, which may render the node unmanageable.
When replacing a chassis, configure the new router to use the same engine ID as the previous router. This preserves SNMPv3 security keys and allows management stations to use their existing authentication keys for the new router.
Ensure that the engine ID of each router is unique. A management domain can only maintain one instance of a specific engine ID.

String Length 10 to 64

Introduced 16.0.R1

Platforms All

general-port *number*

Synopsis Port number used to send general SNMP messages

Context **configure** **system management-interface snmp general-port** *number*

Tree **general-port**

Description This command configures the port number used to receive SNMP request messages and send replies.
For the port used for SNMP notifications, configure the **configure log snmp-trap-group trap-target port** command.

Range 0 | 1 to 65535

Default 161

Introduced 16.0.R1

Platforms All

packet-size *number*

Synopsis	Maximum SNMP packet size generated by the node
Context	configure system management-interface snmp packet-size <i>number</i>
Tree	packet-size
Range	484 to 9216
Default	1500
Introduced	16.0.R1
Platforms	All

streaming

Synopsis	Enter the streaming context
Context	configure system management-interface snmp streaming
Tree	streaming
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of SNMP streaming
Context	configure system management-interface snmp streaming admin-state <i>keyword</i>
Tree	admin-state
Description	This command enables or disables the proprietary SNMP request and response bundling as well as the TCP-based transport mechanism for optimizing network management of the router nodes. In higher latency networks, synchronizing router MIBs from network management using streaming takes less time than synchronizing using classic SNMP UDP requests. Streaming operates on TCP port 1491 and runs over IPv4 or IPv6.
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

yang-modules

Synopsis	Enter the yang-modules context
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Context	configure system management-interface yang-modules
Tree	yang-modules
Description	<p>Commands in this context determine the system support of the Nokia YANG models.</p> <p>The settings affect the data sent in a NETCONF <hello>, data populated in the RFC 6022 /netconf-state/schemas list, data returned in a <get-schema> request, and data populated in the RFC 8525 /yang-library.</p> <p>See "NETCONF monitoring" and "YANG library" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR System Management Guide</i> for more information.</p>
Introduced	16.0.R1
Platforms	All

base-r13-modules boolean

Synopsis	Support Base-R13 YANG models
Context	configure system management-interface yang-modules base-r13-modules boolean
Tree	base-r13-modules
Description	<p>When configured to true, this command enables support of the Base-R13 YANG modules in the SR OS NETCONF server.</p> <p>When the configure system management-interface configuration-mode command is set to model-driven, the configuration cannot be modified using Base-R13 modules in NETCONF, even if the base-r13-modules command is configured to true.</p> <p>When configured to false, this command disables Base-R13 YANG modules, and any NETCONF request that references the Base-R13 modules results in an error.</p>
Default	false
Introduced	16.0.R1
Platforms	All

nmda

Synopsis	Enter the nmda context
Context	configure system management-interface yang-modules nmda
Tree	nmda
Description	Commands in this context configure the attributes for the Network Management Datastores Architecture (NMDA).
Introduced	21.7.R1
Platforms	All

nmda-support *boolean*

Synopsis	Advertise NMDA support over NETCONF
Context	configure system management-interface yang-modules nmda nmda-support <i>boolean</i>
Tree	nmda-support
Description	<p>When configured to true, this command enables the advertisement of NMDA support over NETCONF through the use of YANG library 1.1.</p> <p>When configured to false, this command disables NMDA advertisement over NETCONF and YANG library 1.0 is used.</p>
Default	false
Introduced	21.7.R1
Platforms	All

nokia-combined-modules *boolean*

Synopsis	Support access to combined Nokia YANG models
Context	configure system management-interface yang-modules nokia-combined-modules <i>boolean</i>
Tree	nokia-combined-modules
Description	<p>When configured to true, the system supports the combined Nokia YANG files for both configuration and state data in the NETCONF server.</p> <p>When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to true.</p> <p>When configured to false, access to the combined Nokia YANG files is not supported.</p> <p>This command and the nokia-submodules command cannot both be set to true at the same time.</p>
Introduced	16.0.R4
Platforms	All

nokia-submodules *boolean*

Synopsis	Support submodule-based packaging of Nokia YANG models
Context	configure system management-interface yang-modules nokia-submodules <i>boolean</i>
Tree	nokia-submodules
Description	When configured to true , the system supports the alternative submodule-based packaging of the Nokia YANG files for both configuration and state data in the NETCONF server.

When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to **true**.

When configured to **false**, access to the submodule-based packaging of the Nokia YANG files is not supported.

This command and the **nokia-combined-modules** command cannot both be set to **true** at the same time.

Introduced 21.2.R1
Platforms All

openconfig-modules *boolean*

Synopsis Support access to OpenConfig YANG models
Context **configure** [system](#) [management-interface](#) [yang-modules](#) [openconfig-modules](#) *boolean*
Tree [openconfig-modules](#)
Description When configured to **true**, this command allows access to OpenConfig YANG models in all model-driven interfaces.
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name *string*

Synopsis Administrative name assigned to the system
Context **configure** [system](#) [name](#) *string*
Tree [name](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms All

network-element-discovery

Synopsis Enter the **network-element-discovery** context
Context **configure** [system](#) [network-element-discovery](#)
Tree [network-element-discovery](#)
Introduced 19.5.R1
Platforms All

generate-traps *boolean*

Synopsis	Generate NE discovery traps
Context	configure system network-element-discovery generate-traps <i>boolean</i>
Tree	generate-traps
Default	false
Introduced	19.5.R1
Platforms	All

profile [[name](#)] *string*

Synopsis	Enter the profile list instance
Context	configure system network-element-discovery profile <i>string</i>
Tree	profile
Max. Instances	1
Introduced	19.5.R1
Platforms	All

[name] *string*

Synopsis	Profile name
Context	configure system network-element-discovery profile <i>string</i>
Tree	profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

neid *string*

Synopsis	Network element ID of the advertised node
Context	configure system network-element-discovery profile <i>string</i> neid <i>string</i>
Tree	neid
String Length	7 to 8

Introduced 19.5.R1
Platforms All

neip

Synopsis Enter the **neip** context
Context **configure** [system network-element-discovery profile](#) *string* **neip**
Tree [neip](#)
Introduced 19.5.R1
Platforms All

auto-generate

Synopsis Enter the **auto-generate** context
Context **configure** [system network-element-discovery profile](#) *string* **neip auto-generate**
Tree [auto-generate](#)
Introduced 21.2.R1
Platforms All

ipv4

Synopsis Enable the **ipv4** context
Context **configure** [system network-element-discovery profile](#) *string* **neip auto-generate ipv4**
Tree [ipv4](#)
Introduced 21.2.R1
Platforms All

vendor-id-value *number*

Synopsis Most significant byte if the NE IPv4 address
Context **configure** [system network-element-discovery profile](#) *string* **neip auto-generate ipv4**
[vendor-id-value](#) *number*
Tree [vendor-id-value](#)
Range 1 to 255
Default 140
Introduced 21.2.R1

Platforms All

ipv6

Synopsis Enable the **ipv6** context
Context **configure** [system network-element-discovery profile](#) *string* [neip auto-generate ipv6](#)
Tree [ipv6](#)
Introduced 21.2.R1
Platforms All

vendor-id-value *number*

Synopsis Most significant byte of the NE IPv6 address
Context **configure** [system network-element-discovery profile](#) *string* [neip auto-generate ipv6](#)
[vendor-id-value](#) *number*
Tree [vendor-id-value](#)
Range 1 to 255
Default 140
Introduced 21.2.R1
Platforms All

ipv4 *string*

Synopsis NEIP IPv4 address
Context **configure** [system network-element-discovery profile](#) *string* [neip ipv4](#) *string*
Tree [ipv4](#)
Introduced 19.5.R1
Platforms All

ipv6 *string*

Synopsis NEIP IPv6 address
Context **configure** [system network-element-discovery profile](#) *string* [neip ipv6](#) *string*
Tree [ipv6](#)
Introduced 19.5.R1

Platforms All

platform-type *string*

Synopsis Platform name and chassis type to be advertised
Context **configure** [system](#) [network-element-discovery profile](#) *string* [platform-type](#) *string*
Tree [platform-type](#)
String Length 1 to 255
Introduced 19.5.R1
Platforms All

system-mac *string*

Synopsis MAC address of the advertised node
Context **configure** [system](#) [network-element-discovery profile](#) *string* [system-mac](#) *string*
Tree [system-mac](#)
Introduced 19.5.R1
Platforms All

vendor-id *string*

Synopsis Vendor ID to be advertised
Context **configure** [system](#) [network-element-discovery profile](#) *string* [vendor-id](#) *string*
Tree [vendor-id](#)
String Length 1 to 255
Default Nokia
Introduced 19.5.R1
Platforms All

ospf-dynamic-hostnames *boolean*

Synopsis Process received OSPF dynamic hostname information
Context **configure** [system](#) [ospf-dynamic-hostnames](#) *boolean*
Tree [ospf-dynamic-hostnames](#)

Description	When configured to true , OSPF dynamic hostnames are enabled. The router receiving the new dynamic hostname within the OSPF Router Information (RI) LSA is instructed to process the received dynamic hostname information. When configured to false , dynamic hostname information is not processed.
Default	false
Introduced	20.2.R1
Platforms	All

persistence

Synopsis	Enter the persistence context
Context	configure system persistence
Tree	persistence
Description	Commands in this context configure persistence on the system. The persistence feature enables the system to retain state information learned through DHCP snooping across reboots. This information includes data such as the IP address and MAC binding information, lease-length information, and ingress SAP information (required for VPLS snooping to identify the ingress interface). If persistence is enabled when there are no DHCP relay or snooping commands enabled, the system creates an empty file.
Introduced	16.0.R1
Platforms	All

ancp

Synopsis	Enter the ancp context
Context	configure system persistence ancp
Tree	ancp
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure system persistence ancp description string
Tree	description
String Length	1 to 80

Introduced 16.0.R1
Platforms All

location *keyword*

Synopsis CPM flash card where the information is stored
Context **configure** [system persistence ancp location keyword](#)
Tree [location](#)
Options cf1, cf2, cf3
Introduced 16.0.R1
Platforms All

application-assurance

Synopsis Enter the **application-assurance** context
Context **configure** [system persistence application-assurance](#)
Tree [application-assurance](#)
Description Commands in this context configure AA persistence on the system.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [system persistence application-assurance description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

location *keyword*

Synopsis CPM flash card where the information is stored
Context **configure** [system persistence application-assurance location keyword](#)
Tree [location](#)

Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-server

Synopsis	Enter the dhcp-server context
Context	configure system persistence dhcp-server
Tree	dhcp-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure system persistence dhcp-server description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

location *keyword*

Synopsis	CPM flash card where the information is stored
Context	configure system persistence dhcp-server location <i>keyword</i>
Tree	location
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-port-forwarding

Synopsis	Enter the nat-port-forwarding context
Context	configure system persistence nat-port-forwarding
Tree	nat-port-forwarding

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [system persistence nat-port-forwarding description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

location *keyword*

Synopsis CPM flash card where the information is stored
Context **configure** [system persistence nat-port-forwarding location](#) *keyword*
Tree [location](#)
Options cf1, cf2, cf3
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis Enter the **options** context
Context **configure** [system persistence options](#)
Tree [options](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-lease-time-threshold *number*

Synopsis DHCP lease time limit to be eligible for persistence
Context **configure** [system persistence options dhcp-lease-time-threshold](#) *number*
Tree [dhcp-lease-time-threshold](#)
Range 1 to 631152000

Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy-cache

Synopsis	Enter the python-policy-cache context
Context	configure system persistence python-policy-cache
Tree	python-policy-cache
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system persistence python-policy-cache description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

location *keyword*

Synopsis	CPM flash card where the information is stored
Context	configure system persistence python-policy-cache location <i>keyword</i>
Tree	location
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	All

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure system persistence subscriber-mgmt
Tree	subscriber-mgmt

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [system persistence subscriber-mgmt description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

location *keyword*

Synopsis CPM flash card where the information is stored
Context **configure** [system persistence subscriber-mgmt location](#) *keyword*
Tree [location](#)
Options cf1, cf2, cf3
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

power-management [power-zone](#) *number*

Synopsis Enter the **power-management** list instance
Context **configure** [system power-management power-zone](#) *number*
Tree [power-management](#)
Introduced 16.0.R1
Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

power-zone *number*

Synopsis Power zone
Context **configure** [system power-management power-zone](#) *number*
Tree [power-management](#)
Range 1 to 2

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mode *keyword*

Synopsis	Power capacity mode algorithm
Context	configure system power-management power-zone <i>number</i> mode <i>keyword</i>
Tree	mode
Default	basic
Options	none, basic, advanced
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

power-safety-alert *number*

Synopsis	Power capacity to trigger a safety alert event
Context	configure system power-management power-zone <i>number</i> power-safety-alert <i>number</i>
Tree	power-safety-alert
Range	0 to 120000
Default	0
Units	watts
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

power-safety-level *number*

Synopsis	Minimum threshold to power off devices
Context	configure system power-management power-zone <i>number</i> power-safety-level <i>number</i>
Tree	power-safety-level
Range	0 to 100
Default	100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ptp

Synopsis	Enter the ptp context
Context	configure system ptp
Tree	ptp
Description	<p>Commands in this context configure Precision Time Control (PTP) parameters based on <i>IEEE 1588-2008, Precision Time Protocol</i>.</p> <p>The context is only supported on control assemblies that support 1588.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of PTP
Context	configure system ptp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alternate-profile [[name](#)] *string*

Synopsis	Enter the alternate-profile list instance
Context	configure system ptp alternate-profile <i>string</i>
Tree	alternate-profile
Description	<p>Commands in this context create an alternate profile configuration for use in PTP messaging.</p> <p>The alternate profile can be used at the edge of a network to provide PTP time or frequency distribution outward to external PTP clocks.</p> <p>The alternate profile cannot be deleted if it is configured as the profile under a PTP port.</p>
Max. Instances	6
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[name] *string*

Synopsis	Alternate profile name
Context	configure system ptp alternate-profile <i>string</i>
Tree	alternate-profile
Description	This command configures an alternate profile name. The strings "Primary" and "primary" cannot be used for the alternate-profile name.
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the alternate PTP profile
Context	configure system ptp alternate-profile <i>string admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

domain *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Alternate profile PTP domain number
Context	configure system ptp alternate-profile <i>string domain</i> <i>number</i>
Tree	domain
Description	This command configures the domain number of the alternate profile. This value can only be changed when the alternate profile is admin-state disable .
Range	0 to 255
Default	24
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log-announce-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis PTP announce message interval in log form

Context **configure system ptp alternate-profile** *string* log-announce-interval *number*

Tree log-announce-interval

Description This command configures the announce message interval used for multicast messages within the alternate profile.

For multicast messages used on PTP Ethernet ports, this command configures the message interval used for announce messages transmitted by the local node.

This value has no impact on the interval used for the BMCA, which is controlled by the value defined for the primary profile.

This value can only be changed when the alternate profile is **admin-state disable**.

Range -3 to 4

Default -3

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Standard based profile used within an alternate profile

Context **configure system ptp alternate-profile** *string* profile *keyword*

Tree profile

Description This command specifies the standard based profile that is used as the basis for the alternate profile.

This setting controls the contents of PTP messages sent on ports and peers using this alternate profile.

This value can only be changed when the alternate profile is **admin-state disable**.

Default g8275dot1-2014

Options	g8265dot1-2010, ieee1588-2008, g8275dot1-2014, g8275dot2-2016
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

announce-receipt-timeout *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Expired intervals count before timeout event declared
Context	configure system ptp announce-receipt-timeout <i>number</i>
Tree	announce-receipt-timeout
Description	This command configures the number of Announce message intervals that must expire with no received Announce messages before declaring an ANNOUNCE_RECEIPT_TIMEOUT event.
Range	2 to 10
Default	3
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clock-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Clock type
Context	configure system ptp clock-type <i>keyword</i>
Tree	clock-type
Options	slave-only, master-only, boundary
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

domain *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PTP domain
Context	configure system ptp domain <i>number</i>
Tree	domain
Description	<p>This command configures the PTP domain. The default and valid range of the domain depend on the configured PTP profile.</p> <ul style="list-style-type: none"> • IEEE 1588-2008 - domain range of 0 to 255 (default 0) • G.8265.1 - domain range of 0 to 255 (default 4) • G.8275.1 - domain range of 24 to 43 (default 24) • G.8275.2 - domain range of 0 to 255 (default 44)
Range	0 to 255
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

local-priority *number*

Synopsis	PTP clock local priority
Context	configure system ptp local-priority <i>number</i>
Tree	local-priority
Description	<p>This command configures the local priority used to choose between PTP masters in the best master clock algorithm (BMCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile.</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the local clock (ptp context). See G.8275.1 or G.8275.2 for detailed information.</p>
Range	1 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log-announce-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Announce message interval in log form
Context	configure system ptp log-announce-interval <i>number</i>
Tree	log-announce-interval
Description	<p>This command configures the Announce message interval used for both unicast and multicast messages.</p> <p>For unicast messages, the Announce message interval is requested during unicast negotiation to any peer. This controls the Announce message rate sent from remote peers to the local node. It does not affect the announce message rate that may be sent from the local node to remote peers. Remote peers may request an Announce message rate within the acceptable grant range.</p> <p>For multicast messages used on PTP Ethernet ports, this command specifies the message interval used for Announce messages transmitted by the local node.</p> <p>This value also defines the interval between executions of the BMCA within the node.</p> <p>To minimize BMCA driven reconfigurations, IEEE recommends that the announce interval should be consistent across the entire 1588 network.</p>
Range	-3 to 4
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

network-type *keyword*

Synopsis	PTP network type
Context	configure system ptp network-type <i>keyword</i>
Tree	network-type
Description	<p>This command configures the codeset to be used for the encoding of QL values into PTP clockClass values and vice versa when the profile is configured for G.8265.1 or G.8275.2.</p> <p>This setting only applies to the range of values observed in the clockClass values transmitted out of the node in Announce messages. The router supports the reception of any valid value in Table 1/G.8265.1 and Table 2/G.8275.2.</p>
Default	sdh
Options	sonet, sdh
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port [**port-id**] *reference*

Synopsis	Enter the port list instance
Context	configure system ptp port <i>reference</i>
Tree	port
Description	<p>Commands in this context configure PTP over Ethernet on the physical port. The PTP process transmits and receives PTP messages through the port using Ethernet encapsulation (as opposed to UDP/IPv4 encapsulation).</p> <p>Frames are transmitted with no VLAN tags, even if the port is configured for dot1q or qinq modes for encap-type. The received frames from the external PTP clock must also be untagged.</p> <p>Two reserved multicast addresses are allocated for PTP messages (see Annex F IEEE Std 1588-2008). Either address can be configured for the PTP messages sent through the port.</p> <p>A PTP port cannot be created if the PTP profile is configured for G.8265.1.</p> <p>If the port supports 1588 port-based timestamping, Synchronous Ethernet must be enabled on the MDA when PTP over Ethernet is enabled.</p> <p>De-provisioning of the card or MDA containing the specified port is not permitted while the port is configured within PTP.</p> <p>Changing the encapsulation or the port type of the Ethernet port is not permitted when PTP Ethernet Multicast operation is configured on the port.</p> <p>To allocate an Ethernet satellite client port as a PTP port, the Ethernet satellite must first be enabled for the transparent clock function. For more information, see the configure satellite ethernet-satellite ptp-tc command.</p> <p>The SyncE/1588 ports of the CPM and CCMs can be specified as PTP ports. These use the 'A/3' and 'B/3' designation and both must be specified as two PTP ports if both are used. The active CPM sends and receives messages on both ports if they are specified and enabled.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[port-id] *reference*

Synopsis	Ethernet PTP port ID
Context	configure system ptp port <i>reference</i>
Tree	port
Reference	configure port <i>string</i>
Notes	This element is part of a list key.
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address string

Synopsis Destination MAC address of the transmitted PTP messages

Context **configure system ptp port reference address string**

Tree [address](#)

Description This command specifies the destination MAC address of the transmitted PTP messages. IEEE Std 1588-2008 Annex F defines two reserved addresses for 1588 messages, which include:

- **01-1B-19-00-00-00** — all except the peer delay mechanism messages
- **01-80-C2-00-00-0E** — peer delay mechanism messages

Both addresses are supported for reception, independent of the address configured by this command.

Default 01:1B:19:00:00:00

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state keyword

Synopsis Administrative state of the PTP port

Context **configure system ptp port reference admin-state keyword**

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alternate-profile reference

Synopsis Alternate profile for the PTP port

Context **configure system ptp port reference alternate-profile reference**

Tree [alternate-profile](#)

Description This command creates the alternate profile that is used in communications with the port or peer. If no alternate profile is specified, the primary profile is used.

Reference **configure system ptp alternate-profile string**

Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

local-priority *number*

Synopsis	PTP port local priority
Context	configure system ptp port <i>reference local-priority number</i>
Tree	local-priority
Description	<p>This command configures the local priority used to choose between PTP masters in the best master clock algorithm (BMCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile.</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (ptp port context). See G.8275.1 or G.8275.2 for detailed information.</p>
Range	1 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log-delay-interval *number*

Synopsis	Minimum interval for Delay_Req messages in log form
Context	configure system ptp port <i>reference log-delay-interval number</i>
Tree	log-delay-interval
Description	<p>This command configures the minimum interval used for multicast Delay_Req messages for the port. For ports in a slave state, the interval is used, unless the parent port indicates a longer interval. For a port in master state, the interval is advertised to external slave ports as the minimum acceptable interval for Delay_Req messages from the slave ports.</p> <p>The router supports the 1588 standard requirement for a port in slave state to check the logMessageInterval field of received multicast Delay_Resp messages. If the value of the logMessageInterval field of the messages is greater than the value configured locally for the generation of Delay_Req messages, the slave must use the longer interval for the generation of Delay_Req messages.</p> <p>The interval value is specified as the logarithm to the base 2.</p>
Range	-6 to 0
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log-sync-interval *number*

Synopsis	Interval for transmission of Sync messages in log form
Context	configure system ptp port <i>reference</i> log-sync-interval <i>number</i>
Tree	log-sync-interval
Description	This command configures the interval used for Sync messages transmitted by the local node when the port is in master state. The interval value is specified as the logarithm to the base 2.
Range	-6 to 0
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

master-only *boolean*

Synopsis	Restrict the local port to master state
Context	configure system ptp port <i>reference</i> master-only <i>boolean</i>
Tree	master-only
Description	When configured to true , the local port is restricted to master state only, ensuring that the system does not obtain synchronization from attached external devices. This command is supported only when the PTP profile is set for G.8275.1 or G.8275.2.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority1 *number*

Synopsis	Priority1 of the local clock
Context	configure system ptp priority1 <i>number</i>
Tree	priority1
Description	This command configures the priority1 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008. This value is used by the Best Master Clock Algorithm to determine which clock should provide timing for the network and is advertised in Announce messages.
Range	0 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority2 *number*

Synopsis	Priority2 of the local clock
Context	configure system ptp priority2 <i>number</i>
Tree	priority2
Description	<p>This command configures the priority2 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008, G.8275.1, or G.8275.2.</p> <p>This value is used by the Best Master Clock algorithm to determine which clock should provide timing for the network and is advertised in Announce messages.</p>
Range	0 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PTP profile
Context	configure system ptp profile <i>keyword</i>
Tree	profile
Description	<p>This command configures the profile to be used for the internal PTP clock. It defines the Best Master Clock Algorithm (BMCA) behavior.</p> <p>Profile changes may affect the settings of other configuration elements, such as the clock type and default settings for the delay interval, announce interval, and the Sync interval.</p> <p>The following clock types are supported for the indicated profiles:</p> <ul style="list-style-type: none"> • G.8265.1: slave only, master only • IEEE 1588 2008: slave only, master only, boundary • G.8275.1: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver) • G.8275.2: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver)

Options	g8265dot1-2010, ieee1588-2008, g8275dot1-2014, g8275dot2-2016
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ptsf

Synopsis	Enter the ptsf context
Context	configure system ptp ptsf
Tree	ptsf
Description	Commands in this context configure the attributes of Packet Timing Signal Fail (PTSF).
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

monitor-ptsf-unusable

Synopsis	Enter the monitor-ptsf-unusable context
Context	configure system ptp ptsf monitor-ptsf-unusable
Tree	monitor-ptsf-unusable
Description	<p>Commands in this context configure monitoring of neighbor clocks for the PTSF-unusable state (condition) when the profile is set to g8275dot1-2014.</p> <p>When administratively enabled, the local clock monitors the noise level of PTP event messages between external neighbor PTP ports and the local clock. If it detects a high variation in the network path between the external neighbor port and the local port, it considers the neighbor port unusable. Announce messages from the neighbor are discarded and excluded from the BMCA and the port cannot be selected as the parent clock. The unusable condition must be manually cleared.</p> <p>When administratively disabled, the monitor PTSF function of the PTP clock clears PTSF-unusable states from all neighbor PTP ports. If no PTP messages are received from a neighbor for 15 minutes, the neighbor information is purged and the PTSF-unusable state is cleared.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of PTSF unusable monitoring
Context	configure system ptp ptsf monitor-ptsf-unusable admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

router [[router-instance](#)] *string*

Synopsis	Enter the router list instance
Context	configure system ptp router <i>string</i>
Tree	router
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[router-instance] *string*

Synopsis	Router name or VPRN service name
Context	configure system ptp router <i>string</i>
Tree	router
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of PTP on the router instance
Context	configure system ptp router <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

peer [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
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Context	configure system ptp router string peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	peer
Description	Commands in this context configure a remote PTP peer. In the current release, the system supports PTP using IPv4 only.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the remote PTP peer
Context	configure system ptp router string peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	peer
Description	This command specifies the IP address of the remote PTP peer. In the current release, the system supports PTP using IPv4 only.
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PTP peer
Context	configure system ptp router string peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

local-priority *number*

Synopsis	PTP peer local priority
Context	configure system ptp router string peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) local-priority <i>number</i>
Tree	local-priority

Description	<p>This command configures the local priority for the peer, which is used to choose between PTP masters in the best master clock algorithm (BMCA). This setting applies when the PTP profile is configured for G.8265.1, G.8275.1, or G.8275.2 and is ignored for any other profile.</p> <p>For G.8265.1, this command configures the priority used to choose between master clocks with the same quality (see G.8265.1 for more details).</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (ptp router peer context). See G.8275.1 or G.8275.2 for detailed information.</p>
Range	1 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log-sync-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PTP peer interval for Sync messages in log form
Context	configure system ptp router <i>string peer (ipv4-address-no-zone ipv6-address-no-zone) log-sync-interval number</i>
Tree	log-sync-interval
Description	<p>This command configures the message interval used for Sync and Delay_Resp messages that are requested during unicast negotiation to the peer. The setting controls messages sent from remote peers to the local node but the packet rate from the local node to remote peers is not affected. Remote peers may request a packet rate within the acceptable range.</p> <p>The interval value is specified as the logarithm to the base 2.</p>
Range	-6 to 0
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

peer-limit *number*

Synopsis	Number of discovered peers allowed for routing instance
Context	configure system ptp router <i>string peer-limit number</i>
Tree	peer-limit

Description	This command specifies the maximum number of discovered peers permitted within the routing instance. This ensures that a routing instance does not consume all the possible discovered peers and prevents the routing instance from blocking discovered peers in other routing instances. The sum of all peer limit values for all routing instances cannot exceed the maximum number of discovered peers supported by the system.
Range	0 to 512
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-while-sync-uncertain *boolean*

Synopsis	Send Announce messages while clock is unsynchronized
Context	configure system ptp tx-while-sync-uncertain <i>boolean</i>
Tree	tx-while-sync-uncertain
Description	When configured to true , the local PTP clock transmits Announce messages to downstream clocks to indicate it has not yet stabilized on the recovered synchronization source (upstream clocks or GM clock). While the PTP clock is unsynchronized, the Sync Uncertain state is true. When configured to false , the local PTP clock does not send Announce messages to downstream clocks to indicate it is not synchronized to a valid timing source. If the Sync Uncertain state of the clock is true while this command is configured to false , unicast negotiation grant requests are not granted and current grants are canceled.
Default	true
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

script-control

Synopsis	Enter the script-control context
Context	configure system script-control
Tree	script-control
Introduced	16.0.R1
Platforms	All

script [[script-name](#)] *string* **owner** *string*

Synopsis	Enter the script list instance
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Context	configure system script-control script string owner string
Tree	script
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

[script-name] *string*

Synopsis	Script name
Context	configure system script-control script string owner string
Tree	script
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

owner *string*

Synopsis	Script owner
Context	configure system script-control script string owner string
Tree	script
Description	<p>This command configures the owner to be associated with the script. The owner is optional and "TiMOS CLI" is used if an owner is not specified.</p> <p>The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The configure system security cli-script authorization x cli-user command determines the user context against which commands in the scripts are authorized.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the script
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Context	configure system script-control script <i>string</i> owner <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system script-control script <i>string</i> owner <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

location *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script location
Context	configure system script-control script <i>string</i> owner <i>string</i> location <i>string</i>
Tree	location
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

script-policy [*policy-name*] *string* **owner** *string*

Synopsis	Enter the script-policy list instance
Context	configure system script-control script-policy <i>string</i> owner <i>string</i>
Tree	script-policy
Max. Instances	1500

Introduced 16.0.R1
Platforms All

[policy-name] *string*

Synopsis Script policy name
Context **configure** [system](#) [script-control](#) [script-policy](#) *string* *owner* *string*
Tree [script-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

owner *string*

Synopsis Script policy owner
Context **configure** [system](#) [script-control](#) [script-policy](#) *string* *owner* *string*
Tree [script-policy](#)
Description This command configures the owner to be associated with the script policy. The owner is optional and "TiMOS CLI" is used if an owner is not specified.

The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The **configure system security cli-script authorization x cli-user** command determines the user context against which commands in the scripts are authorized.

String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the script policy
Context **configure** [system](#) [script-control](#) [script-policy](#) *string* *owner* *string* *admin-state* *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable

Introduced 16.0.R1
Platforms All

expire-time (*number* | *keyword*)

Synopsis Maximum amount of time to keep a run history status
Context **configure** [system](#) [script-control](#) [script-policy](#) *string* **owner** *string* [expire-time](#) (*number* | *keyword*)
Tree [expire-time](#)
Range 0 to 21474836
Default 3600
Units seconds
Options forever
Introduced 16.0.R1
Platforms All

lifetime (*number* | *keyword*)

Synopsis Maximum amount of time the script may run
Context **configure** [system](#) [script-control](#) [script-policy](#) *string* **owner** *string* [lifetime](#) (*number* | *keyword*)
Tree [lifetime](#)
Range 0 to 21474836
Default 3600
Units seconds
Options forever
Notes The following elements are part of a choice: (**lifetime** and **script**) or (**python-lifetime** and **python-script**).
Introduced 16.0.R1
Platforms All

lock-override *boolean*

Synopsis Allow EHS/CRON script to break database explicit lock
Context **configure** [system](#) [script-control](#) [script-policy](#) *string* **owner** *string* [lock-override](#) *boolean*
Tree [lock-override](#)

Default	false
Introduced	19.10.R1
Platforms	All

max-completed *number*

Synopsis	Maximum number of script history status entries kept
Context	configure system script-control script-policy <i>string</i> owner <i>string</i> max-completed <i>number</i>
Tree	max-completed
Range	1 to 1500
Default	1
Introduced	16.0.R1
Platforms	All

python-lifetime *number*

Synopsis	Maximum time the Python application can run
Context	configure system script-control script-policy <i>string</i> owner <i>string</i> python-lifetime <i>number</i>
Tree	python-lifetime
Range	30 to 86400
Units	seconds
Notes	The following elements are part of a choice: (lifetime and script) or (python-lifetime and python-script).
Introduced	21.10.R1
Platforms	All

python-script

Synopsis	Enter the python-script context
Context	configure system script-control script-policy <i>string</i> owner <i>string</i> python-script
Tree	python-script
Notes	The following elements are part of a choice: (lifetime and script) or (python-lifetime and python-script).
Introduced	21.10.R1
Platforms	All

name *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Python application name
Context	configure system script-control script-policy <i>string</i> owner <i>string</i> python-script <i>name reference</i>
Tree	name
Reference	configure python python-script <i>string</i>
Introduced	21.10.R1
Platforms	All

results *string*

Synopsis	Location to receive CLI output of a script run
Context	configure system script-control script-policy <i>string</i> owner <i>string</i> results <i>string</i>
Tree	results
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

script

Synopsis	Enter the script context
Context	configure system script-control script-policy <i>string</i> owner <i>string</i> script
Tree	script
Notes	The following elements are part of a choice: (lifetime and script) or (python-lifetime and python-script).
Introduced	16.0.R1
Platforms	All

name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script name
Context	configure system script-control script-policy <i>string</i> owner <i>string</i> script name <i>string</i>
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

owner *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script owner
Context	configure system script-control script-policy <i>string</i> owner <i>string</i> script owner <i>string</i>
Tree	owner
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

security

Synopsis	Enter the security context
Context	configure system security
Tree	security
Description	<p>Commands in this context configure central security settings such as DDoS protection, users, authorization profiles, and certificates.</p> <p>Access to these commands should be restricted to highly trusted users and device administrators.</p>
Introduced	16.0.R1
Platforms	All

aaa

Synopsis	Enter the aaa context
Context	configure system security aaa
Tree	aaa
Introduced	16.0.R1
Platforms	All

cli-session-group [[cli-session-group-name](#)] *string*

Synopsis	Enter the cli-session-group list instance
Context	configure system security aaa cli-session-group <i>string</i>
Tree	cli-session-group
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[\[cli-session-group-name\]](#) *string*

Synopsis	CLI session group name
Context	configure system security aaa cli-session-group <i>string</i>
Tree	cli-session-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

combined-max-sessions *number*

Synopsis	Maximum number of concurrent SSH and Telnet sessions
Context	configure system security aaa cli-session-group <i>string</i> combined-max-sessions <i>number</i>
Tree	combined-max-sessions
Range	0 to 50
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description
Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

ssh-max-sessions *number*

Synopsis Maximum number of concurrent SSH sessions
Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [ssh-max-sessions](#) *number*
Tree [ssh-max-sessions](#)
Range 0 to 50
Introduced 16.0.R1
Platforms All

telnet-max-sessions *number*

Synopsis Maximum number of concurrent Telnet sessions
Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [telnet-max-sessions](#) *number*
Tree [telnet-max-sessions](#)
Range 0 to 50
Introduced 16.0.R1
Platforms All

health-check (*number* | *keyword*)

Synopsis Polling interval of RADIUS, TACACS+, and LDAP servers
Context **configure** [system](#) [security](#) [aaa](#) [health-check](#) (*number* | *keyword*)
Tree [health-check](#)
Range 6 to 1500

Default	30
Units	seconds
Options	none
Introduced	16.0.R1
Platforms	All

local-profiles

Synopsis	Enter the local-profiles context
Context	configure system security aaa local-profiles
Tree	local-profiles
Introduced	16.0.R1
Platforms	All

profile [[user-profile-name](#)] *string*

Synopsis	Enter the profile list instance
Context	configure system security aaa local-profiles profile <i>string</i>
Tree	profile
Max. Instances	128
Introduced	16.0.R1
Platforms	All

[\[user-profile-name\]](#) *string*

Synopsis	User profile name
Context	configure system security aaa local-profiles profile <i>string</i>
Tree	profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

cli-session-group *reference*

Synopsis	CLI session group to which the profile belongs
Context	configure system security aaa local-profiles profile <i>string</i> cli-session-group <i>reference</i>
Tree	cli-session-group
Reference	configure system security aaa cli-session-group <i>string</i>
Introduced	16.0.R1
Platforms	All

combined-max-sessions *number*

Synopsis	Maximum number of concurrent SSH and Telnet sessions
Context	configure system security aaa local-profiles profile <i>string</i> combined-max-sessions <i>number</i>
Tree	combined-max-sessions
Range	0 to 50
Introduced	16.0.R1
Platforms	All

default-action *keyword*

Synopsis	Action for non-matching entry
Context	configure system security aaa local-profiles profile <i>string</i> default-action <i>keyword</i>
Tree	default-action
Default	none
Options	deny-all, permit-all, none, read-only-all
Introduced	16.0.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security aaa local-profiles profile <i>string</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	User profile entry ID
Context	configure system security aaa local-profiles profile <i>string</i> <i>entry</i> <i>number</i>
Tree	entry
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action when a user command matches the entry
Context	configure system security aaa local-profiles profile <i>string</i> <i>entry</i> <i>number</i> action <i>keyword</i>
Tree	action
Default	none
Options	deny, permit, none, read-only
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system security aaa local-profiles profile <i>string</i> <i>entry</i> <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match *string*

Synopsis	Command to match the entry
Context	configure system security aaa local-profiles profile <i>string</i> <i>entry</i> <i>number</i> match <i>string</i>
Tree	match

String Length 1 to 255
Introduced 16.0.R1
Platforms All

grpc

Synopsis Enter the **grpc** context
Context **configure** [system security aaa local-profiles profile string grpc](#)
Tree [grpc](#)
Introduced 16.0.R1
Platforms All

rpc-authorization

Synopsis Enter the **rpc-authorization** context
Context **configure** [system security aaa local-profiles profile string grpc rpc-authorization](#)
Tree [rpc-authorization](#)
Description Commands in this context control the authorization of each RPC in gRPC interfaces.
Introduced 16.0.R1
Platforms All

gnmi-capabilities *keyword*

Synopsis gNMI Capabilities RPC authorization
Context **configure** [system security aaa local-profiles profile string grpc rpc-authorization gnmi-capabilities keyword](#)
Tree [gnmi-capabilities](#)
Default permit
Options permit, deny
Introduced 16.0.R1
Platforms All

gnmi-get *keyword*

Synopsis gNMI Get RPC authorization

Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnmi-get <i>keyword</i>
Tree	gnmi-get
Default	permit
Options	permit, deny
Introduced	16.0.R1
Platforms	All

gnmi-set *keyword*

Synopsis	gNMI Set RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnmi-set <i>keyword</i>
Tree	gnmi-set
Default	permit
Options	permit, deny
Introduced	16.0.R1
Platforms	All

gnmi-subscribe *keyword*

Synopsis	gNMI Subscribe RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnmi-subscribe <i>keyword</i>
Tree	gnmi-subscribe
Default	permit
Options	permit, deny
Introduced	16.0.R1
Platforms	All

gnoi-cert-mgmt-cangenerate *keyword*

Synopsis	gNOI CanGenerateCSR RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-cert-mgmt-cangenerate <i>keyword</i>
Tree	gnoi-cert-mgmt-cangenerate

Default	deny
Options	permit, deny
Introduced	19.10.R1
Platforms	All

gnoi-cert-mgmt-getcert *keyword*

Synopsis	gNOI GetCertificates RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-cert-mgmt-getcert <i>keyword</i>
Tree	gnoi-cert-mgmt-getcert
Default	deny
Options	permit, deny
Introduced	19.10.R1
Platforms	All

gnoi-cert-mgmt-install *keyword*

Synopsis	gNOI Install RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-cert-mgmt-install <i>keyword</i>
Tree	gnoi-cert-mgmt-install
Default	deny
Options	permit, deny
Introduced	19.10.R1
Platforms	All

gnoi-cert-mgmt-revoke *keyword*

Synopsis	gNOI RevokeCertificates RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-cert-mgmt-revoke <i>keyword</i>
Tree	gnoi-cert-mgmt-revoke
Default	deny
Options	permit, deny
Introduced	20.2.R1

Platforms All

gnoi-cert-mgmt-rotate *keyword*

Synopsis gNOI Rotate RPC authorization
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-cert-mgmt-rotate](#) *keyword*
Tree [gnoi-cert-mgmt-rotate](#)
Default deny
Options permit, deny
Introduced 19.10.R1
Platforms All

gnoi-file-get *keyword*

Synopsis gNOI File Get RPC authorization
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-file-get](#) *keyword*
Tree [gnoi-file-get](#)
Default permit
Options permit, deny
Introduced 21.2.R1
Platforms All

gnoi-file-put *keyword*

Synopsis gNOI File Put RPC authorization
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-file-put](#) *keyword*
Tree [gnoi-file-put](#)
Default permit
Options permit, deny
Introduced 21.2.R1
Platforms All

gnoi-file-remove *keyword*

Synopsis	gNOI File Remove RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-file-remove <i>keyword</i>
Tree	gnoi-file-remove
Default	permit
Options	permit, deny
Introduced	21.2.R1
Platforms	All

gnoi-file-stat *keyword*

Synopsis	gNOI File Stat RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-file-stat <i>keyword</i>
Tree	gnoi-file-stat
Default	permit
Options	permit, deny
Introduced	21.2.R1
Platforms	All

gnoi-file-transfertoremove *keyword*

Synopsis	gNOI File TransferToRemote RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-file-transfertoremove <i>keyword</i>
Tree	gnoi-file-transfertoremove
Default	permit
Options	permit, deny
Introduced	21.7.R1
Platforms	All

gnoi-system-cancelreboot *keyword*

Synopsis	gNOI System CancelReboot RPC authorization
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Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-cancelreboot <i>keyword</i>
Tree	gnoi-system-cancelreboot
Default	deny
Options	permit, deny
Introduced	20.5.R1
Platforms	All

gnoi-system-ping *keyword*

Synopsis	gNOI System Ping RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-ping <i>keyword</i>
Tree	gnoi-system-ping
Default	permit
Options	permit, deny
Introduced	21.7.R1
Platforms	All

gnoi-system-reboot *keyword*

Synopsis	gNOI System Reboot RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-reboot <i>keyword</i>
Tree	gnoi-system-reboot
Default	deny
Options	permit, deny
Introduced	20.5.R1
Platforms	All

gnoi-system-rebootstatus *keyword*

Synopsis	gNOI System RebootStatus RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-rebootstatus <i>keyword</i>
Tree	gnoi-system-rebootstatus

Default	deny
Options	permit, deny
Introduced	20.5.R1
Platforms	All

gnoi-system-setpackage *keyword*

Synopsis	gNOI System SetPackage RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-setpackage <i>keyword</i>
Tree	gnoi-system-setpackage
Default	deny
Options	permit, deny
Introduced	20.5.R1
Platforms	All

gnoi-system-switchcontrolprocessor *keyword*

Synopsis	gNOI System SwitchControlProcessor RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-switchcontrolprocessor <i>keyword</i>
Tree	gnoi-system-switchcontrolprocessor
Default	deny
Options	permit, deny
Introduced	20.5.R1
Platforms	All

gnoi-system-time *keyword*

Synopsis	gNOI System Time RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-time <i>keyword</i>
Tree	gnoi-system-time
Default	permit
Options	permit, deny
Introduced	21.7.R1

Platforms All

gnoi-system-traceroute *keyword*

Synopsis gNOI System Traceroute RPC authorization
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-system-traceroute](#) *keyword*
Tree [gnoi-system-traceroute](#)
Default permit
Options permit, deny
Introduced 21.7.R1
Platforms All

md-cli-session *keyword*

Synopsis gNOI MdCli Session RPC authorization
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [md-cli-session](#) *keyword*
Tree [md-cli-session](#)
Default permit
Options permit, deny
Introduced 20.5.R1
Platforms All

rib-api-getversion *keyword*

Synopsis RibApi GetVersion RPC authorization
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [rib-api-getversion](#) *keyword*
Tree [rib-api-getversion](#)
Default permit
Options permit, deny
Introduced 16.0.R4
Platforms All

rib-api-modify *keyword*

Synopsis	RibApi Modify RPC authorization
Context	configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization rib-api-modify <i>keyword</i>
Tree	rib-api-modify
Default	permit
Options	permit, deny
Introduced	16.0.R4
Platforms	All

li *boolean*

Synopsis	Allow lawful intercept profile ID
Context	configure system security aaa local-profiles profile <i>string</i> li <i>boolean</i>
Tree	li
Default	false
Introduced	19.10.R1
Platforms	All

netconf

Synopsis	Enter the netconf context
Context	configure system security aaa local-profiles profile <i>string</i> netconf
Tree	netconf
Introduced	16.0.R1
Platforms	All

base-op-authorization

Synopsis	Enter the base-op-authorization context
Context	configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization
Tree	base-op-authorization
Description	Commands in this context configure the permission to use NETCONF operations at the base operation level for the specified profile. The NETCONF operations are authorized by default in the built-in system-generated administrative profile.

Introduced 16.0.R1
Platforms All

action *boolean*

Synopsis Allow NETCONF action operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)
[action](#) *boolean*
Tree [action](#)
Default false
Introduced 21.7.R1
Platforms All

cancel-commit *boolean*

Synopsis Allow NETCONF cancel-commit operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)
[cancel-commit](#) *boolean*
Tree [cancel-commit](#)
Default false
Introduced 21.7.R1
Platforms All

close-session *boolean*

Synopsis Allow NETCONF close-session operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)
[close-session](#) *boolean*
Tree [close-session](#)
Default false
Introduced 21.7.R1
Platforms All

commit *boolean*

Synopsis Allow NETCONF commit operation

Context	configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization commit <i>boolean</i>
Tree	commit
Default	false
Introduced	21.7.R1
Platforms	All

copy-config *boolean*

Synopsis	Allow NETCONF copy-config operation
Context	configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization copy-config <i>boolean</i>
Tree	copy-config
Default	false
Introduced	21.7.R1
Platforms	All

create-subscription *boolean*

Synopsis	Allow NETCONF create-subscription operation
Context	configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization create-subscription <i>boolean</i>
Tree	create-subscription
Description	<p>When configured to true, this command enables the NETCONF create-subscription operation in the default profile.</p> <p>The base-op-authorization create-subscription configuration is not pre-emptive, which means that it is checked only at the time of the initial subscription. Configuration changes to base-op-authorization do not cancel any in-progress subscriptions and operators who successfully subscribed continue to receive messages.</p> <p>When configured to false, this command disables the NETCONF create-subscription operation in the default profile.</p> <p>The operation is enabled by default in the built-in system-generated administrative profile.</p>
Default	false
Introduced	21.7.R1
Platforms	All

delete-config *boolean*

Synopsis	Allow NETCONF delete-config operation
Context	configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization delete-config <i>boolean</i>
Tree	delete-config
Default	false
Introduced	21.7.R1
Platforms	All

discard-changes *boolean*

Synopsis	Allow NETCONF discard-changes operation
Context	configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization discard-changes <i>boolean</i>
Tree	discard-changes
Default	false
Introduced	21.7.R1
Platforms	All

edit-config *boolean*

Synopsis	Allow NETCONF edit-config operation
Context	configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization edit-config <i>boolean</i>
Tree	edit-config
Default	false
Introduced	21.7.R1
Platforms	All

get *boolean*

Synopsis	Allow NETCONF get operation
Context	configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization get <i>boolean</i>
Tree	get
Default	false

Introduced 21.7.R1
Platforms All

get-config *boolean*

Synopsis Allow NETCONF get-config operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)
[get-config](#) *boolean*
Tree [get-config](#)
Default false
Introduced 21.7.R1
Platforms All

get-data *boolean*

Synopsis Allow NETCONF get-data operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)
[get-data](#) *boolean*
Tree [get-data](#)
Default false
Introduced 21.7.R1
Platforms All

get-schema *boolean*

Synopsis Allow NETCONF get-schema operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)
[get-schema](#) *boolean*
Tree [get-schema](#)
Default false
Introduced 21.7.R1
Platforms All

kill-session *boolean*

Synopsis Allow NETCONF kill-session operation

Context	configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization kill-session <i>boolean</i>
Tree	kill-session
Default	false
Introduced	16.0.R1
Platforms	All

lock *boolean*

Synopsis	Allow NETCONF lock and unlock operations
Context	configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization lock <i>boolean</i>
Tree	lock
Default	false
Introduced	16.0.R1
Platforms	All

validate *boolean*

Synopsis	Allow NETCONF validate operation
Context	configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization validate <i>boolean</i>
Tree	validate
Default	false
Introduced	21.7.R1
Platforms	All

ssh-max-sessions *number*

Synopsis	Maximum number of concurrent SSH sessions
Context	configure system security aaa local-profiles profile <i>string</i> ssh-max-sessions <i>number</i>
Tree	ssh-max-sessions
Range	0 to 50
Introduced	16.0.R1
Platforms	All

telnet-max-sessions *number*

Synopsis	Maximum number of concurrent Telnet sessions
Context	configure system security aaa local-profiles profile <i>string</i> telnet-max-sessions <i>number</i>
Tree	telnet-max-sessions
Range	0 to 50
Introduced	16.0.R1
Platforms	All

management-interface

Synopsis	Enter the management-interface context
Context	configure system security aaa management-interface
Tree	management-interface
Introduced	20.10.R1
Platforms	All

md-cli

Synopsis	Enter the md-cli context
Context	configure system security aaa management-interface md-cli
Tree	md-cli
Introduced	20.10.R1
Platforms	All

command-accounting-during-load *boolean*

Synopsis	Perform remote command accounting during a load or rollback operation
Context	configure system security aaa management-interface md-cli command-accounting-during-load <i>boolean</i>
Tree	command-accounting-during-load
Default	true
Introduced	20.10.R1
Platforms	All

output-authorization

Synopsis	Enter the output-authorization context
Context	configure system security aaa management-interface output-authorization
Tree	output-authorization
Description	<p>Commands in this context configure output authorization for model-driven interfaces and telemetry.</p> <p>When output authorization is performed, commands that display configuration or state output must authorize every element in the output. If a remote AAA server is configured, there may be delays in displaying output while the output is authorized. The remote AAA server may receive a large volume of authorization requests when substantial output displays are needed, such as for system configuration details.</p> <p>Input to edit the configuration is always authorized, and is not affected by commands in this context.</p>
Introduced	20.10.R1
Platforms	All

md-interfaces *boolean*

Synopsis	Authorize output in model-driven interfaces
Context	configure system security aaa management-interface output-authorization md-interfaces <i>boolean</i>
Tree	md-interfaces
Description	<p>When configured to true, output is authorized for the following:</p> <ul style="list-style-type: none">• MD-CLI info and compare commands• command completion of list key values• NETCONF <get> and <get-config> RPCs, and gRPC/gNMI Get RPCs
Default	true
Introduced	20.10.R1
Platforms	All

telemetry-data *boolean*

Synopsis	Authorize telemetry data in gNMI Subscribe RPC response
Context	configure system security aaa management-interface output-authorization telemetry-data <i>boolean</i>
Tree	telemetry-data
Default	false

Introduced 20.10.R1
Platforms All

remote-servers

Synopsis Enter the **remote-servers** context
Context **configure** [system security aaa remote-servers](#)
Tree [remote-servers](#)
Introduced 16.0.R1
Platforms All

ldap

Synopsis Enter the **ldap** context
Context **configure** [system security aaa remote-servers ldap](#)
Tree [ldap](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the LDAP operation protocol
Context **configure** [system security aaa remote-servers ldap admin-state](#) *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

public-key-authentication *boolean*

Synopsis Allow SSH public key authentication from LDAP server
Context **configure** [system security aaa remote-servers ldap public-key-authentication](#) *boolean*
Tree [public-key-authentication](#)
Default false

Introduced	16.0.R1
Platforms	All

route-preference *keyword*

Synopsis	Route preference to reach the AAA server
Context	configure system security aaa remote-servers ldap route-preference <i>keyword</i>
Tree	route-preference
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Default	both
Options	both, inband, outband
Introduced	21.5.R1
Platforms	All

server [[index](#)] *number*

Synopsis	Enter the server list instance
Context	configure system security aaa remote-servers ldap server <i>number</i>
Tree	server
Max. Instances	5
Introduced	16.0.R1
Platforms	All

[index] *number*

Synopsis	LDAP server ID
Context	configure system security aaa remote-servers ldap server <i>number</i>
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the address list instance
Context	configure system security aaa remote-servers ldap server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	LDAP server address
Context	configure system security aaa remote-servers ldap server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

port number

Synopsis	Port number on which to contact the LDAP server
Context	configure system security aaa remote-servers ldap server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	port
Range	1 to 65535
Default	389
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDAP server
Context	configure system security aaa remote-servers ldap server <i>number</i> admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bind-authentication

Synopsis	Enter the bind-authentication context
Context	configure system security aaa remote-servers ldap server <i>number</i> bind-authentication
Tree	bind-authentication
Introduced	16.0.R1
Platforms	All

password *string*

Synopsis	Password used for authentication with the LDAP server
Context	configure system security aaa remote-servers ldap server <i>number</i> bind-authentication password <i>string</i>
Tree	password
String Length	1 to 199
Introduced	16.0.R1
Platforms	All

root-dn *string*

Synopsis	Root domain used for authentication with LDAP server
Context	configure system security aaa remote-servers ldap server <i>number</i> bind-authentication root-dn <i>string</i>
Tree	root-dn
String Length	1 to 512
Introduced	16.0.R1
Platforms	All

search

Synopsis	Enter the search context
Context	configure system security aaa remote-servers ldap server <i>number</i> search
Tree	search
Introduced	16.0.R1
Platforms	All

base-dn *string*

Synopsis	LDAP server search base domain name
Context	configure system security aaa remote-servers ldap server <i>number</i> search base-dn <i>string</i>
Tree	base-dn
String Length	1 to 512
Introduced	16.0.R1
Platforms	All

server-name *string*

Synopsis	LDAP server name
Context	configure system security aaa remote-servers ldap server <i>number</i> server-name <i>string</i>
Tree	server-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

tls-profile *reference*

Synopsis	TLS client profile used to encrypt the LDAP connection
Context	configure system security aaa remote-servers ldap server <i>number</i> tls-profile <i>reference</i>
Tree	tls-profile
Reference	configure system security tls client-tls-profile <i>string</i>
Introduced	16.0.R1
Platforms	All

server-retry *number*

Synopsis	Number of attempts to retry contacting the LDAP server
Context	configure system security aaa remote-servers ldap server-retry <i>number</i>
Tree	server-retry
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	All

server-timeout *number*

Synopsis	Timeout for a response from the LDAP server
Context	configure system security aaa remote-servers ldap server-timeout <i>number</i>
Tree	server-timeout
Range	1 to 90
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	All

use-default-template *boolean*

Synopsis	Apply the default template to LDAP
Context	configure system security aaa remote-servers ldap use-default-template <i>boolean</i>
Tree	use-default-template
Default	true
Introduced	16.0.R1
Platforms	All

radius

Synopsis	Enter the radius context
Context	configure system security aaa remote-servers radius
Tree	radius

Introduced 16.0.R1
Platforms All

access-algorithm *keyword*

Synopsis Algorithm used to access the set of RADIUS servers
Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [radius](#) [access-algorithm](#) *keyword*
Tree [access-algorithm](#)
Default direct
Options direct, round-robin
Introduced 16.0.R1
Platforms All

accounting *boolean*

Synopsis Enable RADIUS command accounting
Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [radius](#) [accounting](#) *boolean*
Tree [accounting](#)
Default false
Introduced 16.0.R1
Platforms All

accounting-port *number*

Synopsis Port number on RADIUS server for accounting requests
Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [radius](#) [accounting-port](#) *number*
Tree [accounting-port](#)
Range 1 to 65535
Default 1813
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the authentication server

Context	configure system security aaa remote-servers radius admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authorization *boolean*

Synopsis	Enable RADIUS authorization
Context	configure system security aaa remote-servers radius authorization <i>boolean</i>
Tree	authorization
Default	false
Introduced	16.0.R1
Platforms	All

interactive-authentication *boolean*

Synopsis	Enable RADIUS interactive authentication
Context	configure system security aaa remote-servers radius interactive-authentication <i>boolean</i>
Tree	interactive-authentication
Default	false
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	UDP port number on which to contact RADIUS server
Context	configure system security aaa remote-servers radius port <i>number</i>
Tree	port
Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	All

route-preference *keyword*

Synopsis	Route preference to reach the AAA server
Context	configure system security aaa remote-servers radius route-preference <i>keyword</i>
Tree	route-preference
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Default	both
Options	both, inband, outband
Introduced	21.5.R1
Platforms	All

server [[index](#)] *number*

Synopsis	Enter the server list instance
Context	configure system security aaa remote-servers radius server <i>number</i>
Tree	server
Max. Instances	5
Introduced	16.0.R1
Platforms	All

[[index](#)] *number*

Synopsis	RADIUS server ID
Context	configure system security aaa remote-servers radius server <i>number</i>
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	configure system security aaa remote-servers radius server <i>number</i> address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

authenticator *keyword*

Synopsis	Authenticator hash algorithm for the RADIUS server
Context	configure system security aaa remote-servers radius server <i>number</i> authenticator <i>keyword</i>
Tree	authenticator
Description	This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets.
Default	md5
Options	md5, sm3
Introduced	22.10.R1
Platforms	All

secret *string*

Synopsis	Secret key to access the RADIUS server
Context	configure system security aaa remote-servers radius server <i>number</i> secret <i>string</i>
Tree	secret
String Length	1 to 115
Introduced	16.0.R1
Platforms	All

tls-client-profile *reference*

Synopsis	TLS client profile for the RADIUS server
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Context	configure system security aaa remote-servers radius server <i>number</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Description	This command specifies the TLS client profile used to encrypt RADIUS communication. When configured, RADIUS messages are sent using TLS.
Reference	configure system security tls client-tls-profile <i>string</i>
Introduced	21.10.R1
Platforms	All

server-retry *number*

Synopsis	Number of attempts to retry contacting RADIUS server
Context	configure system security aaa remote-servers radius server-retry <i>number</i>
Tree	server-retry
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	All

server-timeout *number*

Synopsis	Time to wait for a response from the RADIUS server
Context	configure system security aaa remote-servers radius server-timeout <i>number</i>
Tree	server-timeout
Range	1 to 90
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	All

use-default-template *boolean*

Synopsis	Apply the RADIUS default user template to RADIUS user
Context	configure system security aaa remote-servers radius use-default-template <i>boolean</i>
Tree	use-default-template

Default	false
Introduced	16.0.R1
Platforms	All

tacplus

Synopsis	Enter the tacplus context
Context	configure system security aaa remote-servers tacplus
Tree	tacplus
Introduced	16.0.R1
Platforms	All

accounting

Synopsis	Enable the accounting context
Context	configure system security aaa remote-servers tacplus accounting
Tree	accounting
Introduced	16.0.R1
Platforms	All

record-type *keyword*

Synopsis	Type of accounting record packet sent to TACACS+ server
Context	configure system security aaa remote-servers tacplus accounting record-type <i>keyword</i>
Tree	record-type
Default	stop-only
Options	start-stop, stop-only
Introduced	16.0.R1
Platforms	All

admin-control

Synopsis	Enter the admin-control context
Context	configure system security aaa remote-servers tacplus admin-control
Tree	admin-control

Introduced 16.0.R1
Platforms All

tacplus-map-to-priv-lvl *number*

Synopsis Interactive authentication from node to TACACS+ server
Context **configure** [system security aaa remote-servers tacplus admin-control tacplus-map-to-priv-lvl](#) *number*
Tree [tacplus-map-to-priv-lvl](#)
Range 0 to 15
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the TACACS+ protocol
Context **configure** [system security aaa remote-servers tacplus admin-state](#) *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

authorization

Synopsis Enable the **authorization** context
Context **configure** [system security aaa remote-servers tacplus authorization](#)
Tree [authorization](#)
Introduced 16.0.R1
Platforms All

request-format

Synopsis Enter the **request-format** context
Context **configure** [system security aaa remote-servers tacplus authorization request-format](#)
Tree [request-format](#)

Description	Commands in this context configure access operations that are sent to the TACACS+ server during authorization.
Introduced	21.10.R3
Platforms	All

access-operation-cmd *keyword*

Synopsis	Access operations sent in authorization requests
Context	configure system security aaa remote-servers tacplus authorization request-format access-operation-cmd <i>keyword</i>
Tree	access-operation-cmd
Description	This command sends an operation argument in authorization requests. In model-driven interfaces, this command configures the system to send the operation in the cmd argument, and the path in the cmd-args argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces.
Options	delete
Max. Instances	1
Introduced	21.10.R3
Platforms	All

use-priv-lvl *boolean*

Synopsis	Allow privilege level mapping
Context	configure system security aaa remote-servers tacplus authorization use-priv-lvl <i>boolean</i>
Tree	use-priv-lvl
Description	When configured to true , this command automatically performs a single authorization request to the TACACS+ server for cmd* (all commands) immediately after login, and then uses the local profile associated (via the priv-lvl-map) with the priv-lvl returned by the TACACS+ server for all subsequent authorization (except enable-admin). After the initial authorization for cmd*, no further authorization requests are sent to the TACACS+ server (except enable-admin). When configured to false , each command is sent to the TACACS+ server for authorization (this is true regardless of whether the tacplus use-default-template setting is enabled).
Default	false
Introduced	16.0.R1
Platforms	All

interactive-authentication *boolean*

Synopsis	Allows TACACS+ interactive authentication
Context	configure system security aaa remote-servers tacplus interactive-authentication <i>boolean</i>
Tree	interactive-authentication
Default	false
Introduced	16.0.R1
Platforms	All

priv-lvl-map

Synopsis	Enter the priv-lvl-map context
Context	configure system security aaa remote-servers tacplus priv-lvl-map
Tree	priv-lvl-map
Introduced	16.0.R1
Platforms	All

priv-lvl [[level](#)] *number*

Synopsis	Enter the priv-lvl list instance
Context	configure system security aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i>
Tree	priv-lvl
Introduced	16.0.R1
Platforms	All

[level] *number*

Synopsis	Privilege level for the mapping
Context	configure system security aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i>
Tree	priv-lvl
Range	0 to 15
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

user-profile-name *reference*

Synopsis	User profile for the mapping
Context	configure system security aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number user-profile-name reference</i>
Tree	user-profile-name
Reference	configure system security aaa local-profiles profile <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

route-preference *keyword*

Synopsis	Route preference to reach the AAA server
Context	configure system security aaa remote-servers tacplus route-preference <i>keyword</i>
Tree	route-preference
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Default	both
Options	both, inband, outband
Introduced	21.5.R1
Platforms	All

server [[index](#)] *number*

Synopsis	Enter the server list instance
Context	configure system security aaa remote-servers tacplus server <i>number</i>
Tree	server
Max. Instances	5
Introduced	16.0.R1
Platforms	All

[index] *number*

Synopsis	TACACS+ server ID
Context	configure system security aaa remote-servers tacplus server <i>number</i>
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the TACACS+ server
Context	configure system security aaa remote-servers tacplus server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	TCP port ID on which to contact TACACS+ server
Context	configure system security aaa remote-servers tacplus server <i>number</i> port <i>number</i>
Tree	port
Range	0 1 to 65535
Default	49
Introduced	16.0.R1
Platforms	All

secret *string*

Synopsis	Secret key to access the TACACS+ server
Context	configure system security aaa remote-servers tacplus server <i>number</i> secret <i>string</i>
Tree	secret
String Length	1 to 199

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

server-timeout *number*

Synopsis	Time to wait for a response from the TACACS+ server
Context	configure system security aaa remote-servers tacplus server-timeout <i>number</i>
Tree	server-timeout
Range	1 to 90
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	All

use-default-template *boolean*

Synopsis	Apply TACACS+ default user-template to TACACS+ user
Context	configure system security aaa remote-servers tacplus use-default-template <i>boolean</i>
Tree	use-default-template
Default	true
Introduced	16.0.R1
Platforms	All

vprn-server

Synopsis	Enter the vprn-server context
Context	configure system security aaa remote-servers vprn-server
Tree	vprn-server
Introduced	22.2.R1
Platforms	All

inband *reference*

Synopsis	VPRN service used for AAA by in-band sessions
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Context	configure system security aaa remote-servers vprn-server inband <i>reference</i>
Tree	inband
Description	This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in the Base routing instance.
Reference	configure service vprn <i>string</i>
Introduced	22.2.R1
Platforms	All

outband *reference*

Synopsis	VPRN service used for AAA by out-of-band sessions
Context	configure system security aaa remote-servers vprn-server outband <i>reference</i>
Tree	outband
Description	This command configures TACACS+ and RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions on the console or out-of-band (OOB) Ethernet ports.
Reference	configure service vprn <i>string</i>
Introduced	22.2.R1
Platforms	All

vprn *reference*

Synopsis	VPRN used for AAA in VPRNs without a AAA server
Context	configure system security aaa remote-servers vprn-server vprn <i>reference</i>
Tree	vprn
Description	This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in VPRNs without a AAA server configured.
Reference	configure service vprn <i>string</i>
Introduced	22.2.R1
Platforms	All

user-template [[user-template-name](#)] *keyword*

Synopsis	Enter the user-template list instance
Context	configure system security aaa user-template <i>keyword</i>
Tree	user-template

Introduced 16.0.R1
Platforms All

[user-template-name] *keyword*

Synopsis Default user template applied to the system user
Context **configure system security aaa user-template** *keyword*
Tree [user-template](#)
Options ldap-default, radius-default, tacplus-default
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

access

Synopsis Enter the **access** context
Context **configure system security aaa user-template** *keyword* **access**
Tree [access](#)
Introduced 16.0.R1
Platforms All

console *boolean*

Synopsis Allow console access (serial port or Telnet)
Context **configure system security aaa user-template** *keyword* **access console** *boolean*
Tree [console](#)
Default true
Introduced 16.0.R1
Platforms All

ftp *boolean*

Synopsis Allow FTP access
Context **configure system security aaa user-template** *keyword* **access ftp** *boolean*
Tree [ftp](#)

Default	false
Introduced	16.0.R1
Platforms	All

grpc *boolean*

Synopsis	Allow gRPC access
Context	configure system security aaa user-template <i>keyword</i> access grpc <i>boolean</i>
Tree	grpc
Default	false
Introduced	16.0.R1
Platforms	All

li *boolean*

Synopsis	Allow access to lawful intercept
Context	configure system security aaa user-template <i>keyword</i> access li <i>boolean</i>
Tree	li
Default	false
Introduced	19.10.R1
Platforms	All

netconf *boolean*

Synopsis	Allow NETCONF session access
Context	configure system security aaa user-template <i>keyword</i> access netconf <i>boolean</i>
Tree	netconf
Default	false
Introduced	16.0.R1
Platforms	All

console

Synopsis	Enter the console context
Context	configure system security aaa user-template <i>keyword</i> console

Tree [console](#)
Introduced 16.0.R1
Platforms All

login-exec *string*

Synopsis File to execute for a successful user login via console
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* [console](#) **login-exec** *string*
Tree [login-exec](#)
String Length 1 to 200
Introduced 16.0.R1
Platforms All

home-directory (*sat-url* | *cflash-without-slot-url*)

Synopsis User local home directory based on the template
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* [home-directory](#) (*sat-url* | *cflash-without-slot-url*)
Tree [home-directory](#)
String Length 1 to 200
Introduced 16.0.R1
Platforms All

profile *string*

Synopsis User profile based on the template
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* [profile](#) *string*
Tree [profile](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms All

restricted-to-home *boolean*

Synopsis Restrict file access to the home directory of the user
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* [restricted-to-home](#) *boolean*

Tree	restricted-to-home
Default	false
Introduced	16.0.R1
Platforms	All

save-when-restricted *boolean*

Synopsis	Save configurations when the user is restricted to home
Context	configure system security aaa user-template <i>keyword</i> save-when-restricted <i>boolean</i>
Tree	save-when-restricted
Description	When configured to true , the system permits all configuration save operations (such as admin save) via any management interface (such as CLI and NETCONF) even if restricted-to-home is set to true . The home directory does not need to be configured.
Default	false
Introduced	22.10.R1
Platforms	All

cli-script

Synopsis	Enter the cli-script context
Context	configure system security cli-script
Tree	cli-script
Introduced	16.0.R1
Platforms	All

authorization

Synopsis	Enter the authorization context
Context	configure system security cli-script authorization
Tree	authorization
Introduced	16.0.R1
Platforms	All

cron

Synopsis	Enter the cron context
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Context	configure system security cli-script authorization cron
Tree	cron
Description	Commands in this context configure authorization for the cron job scheduler.
Introduced	16.0.R1
Platforms	All

cli-user reference

Synopsis	User profile name for CLI command script authorization
Context	configure system security cli-script authorization cron cli-user reference
Tree	cli-user
Reference	configure system security user-params local-user user string
Introduced	16.0.R1
Platforms	All

event-handler

Synopsis	Enter the event-handler context
Context	configure system security cli-script authorization event-handler
Tree	event-handler
Description	Commands in this context configure authorization for the Event Handling System (EHS). EHS allows user-controlled programmatic exception handling by allowing a CLI script to be executed upon the detection of a log event.
Introduced	16.0.R1
Platforms	All

cli-user reference

Synopsis	User profile name for CLI command script authorization
Context	configure system security cli-script authorization event-handler cli-user reference
Tree	cli-user
Reference	configure system security user-params local-user user string
Introduced	16.0.R1
Platforms	All

vsd

Synopsis	Enter the vsd context
Context	configure system security cli-script authorization vsd
Tree	vsd
Description	Commands in this context configure authorization for the VSD server.
Introduced	16.0.R1
Platforms	All

cli-user *reference*

Synopsis	User profile name for CLI command script authorization
Context	configure system security cli-script authorization vsd cli-user <i>reference</i>
Tree	cli-user
Reference	configure system security user-params local-user user <i>string</i>
Introduced	16.0.R1
Platforms	All

cpm-filter

Synopsis	Enter the cpm-filter context
Context	configure system security cpm-filter
Tree	cpm-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default-action *keyword*

Synopsis	Action for packets that do not match any filter entries
Context	configure system security cpm-filter default-action <i>keyword</i>
Tree	default-action
Default	accept
Options	drop, accept
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-filter

Synopsis	Enter the ip-filter context
Context	configure system security cpm-filter ip-filter
Tree	ip-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the CPM filter
Context	configure system security cpm-filter ip-filter admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [*entry-id*] *number*

Synopsis	Enter the entry list instance
Context	configure system security cpm-filter ip-filter entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[*entry-id*] *number*

Synopsis	Filter entry ID
Context	configure system security cpm-filter ip-filter entry <i>number</i>
Tree	entry
Range	1 to 131072
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

action

Synopsis	Enter the action context
Context	configure system security cpm-filter ip-filter entry number action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accept

Synopsis	Forward matching packets
Context	configure system security cpm-filter ip-filter entry number action accept
Tree	accept
Notes	The following elements are part of a choice: accept , default , drop , or queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default

Synopsis	Use default action for matching packets
Context	configure system security cpm-filter ip-filter entry number action default
Tree	default
Notes	The following elements are part of a choice: accept , default , drop , or queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	Drop matching packets
Context	configure system security cpm-filter ip-filter entry number action drop
Tree	drop
Notes	The following elements are part of a choice: accept , default , drop , or queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue reference

Synopsis	Forward matching packets to the CPM hardware queue
Context	configure system security cpm-filter ip-filter entry <i>number</i> action queue reference
Tree	queue
Reference	configure system security cpm-queue queue <i>number</i>
Notes	The following elements are part of a choice: accept , default , drop , or queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis	Text description
Context	configure system security cpm-filter ip-filter entry <i>number</i> description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log reference

Synopsis	Log ID where matching packets are entered
Context	configure system security cpm-filter ip-filter entry <i>number</i> log reference
Tree	log
Reference	configure filter log <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

match

Synopsis	Enter the match context
Context	configure system security cpm-filter ip-filter entry <i>number</i> match
Tree	match
Description	Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed.

If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp keyword

Synopsis	DSCP used as the match criterion on the packet
Context	configure system security cpm-filter ip-filter entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-ip

Synopsis	Enter the dst-ip context
Context	configure system security cpm-filter ip-filter entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address (ipv4-address | ipv4-prefix-with-host-bits)

Synopsis	IPv4 address used as the match criterion
Context	configure system security cpm-filter ip-filter entry number match dst-ip address (ipv4-address ipv4-prefix-with-host-bits)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-prefix-list *reference*

Synopsis	IPv4 address prefix list used as match criterion
Context	configure system security cpm-filter ip-filter entry <i>number</i> match dst-ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure filter match-list ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IPv4 address mask used as the match criterion
Context	configure system security cpm-filter ip-filter entry <i>number</i> match dst-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-port

Synopsis	Enter the dst-port context
Context	configure system security cpm-filter ip-filter entry <i>number</i> match dst-port
Tree	dst-port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq *number*

Synopsis	Port number as the match criterion
Context	configure system security cpm-filter ip-filter entry <i>number</i> match dst-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Port mask as the match criterion
Context	configure system security cpm-filter ip-filter entry <i>number match dst-port mask number</i>
Tree	mask
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list *reference*

Synopsis	Port list as the match criterion
Context	configure system security cpm-filter ip-filter entry <i>number match dst-port port-list reference</i>
Tree	port-list
Reference	configure filter match-list port-list string
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the range context
Context	configure system security cpm-filter ip-filter entry <i>number match dst-port range</i>
Tree	range
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end number

Synopsis	Upper bound of the port number to match
Context	configure system security cpm-filter ip-filter entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start number

Synopsis	Lower bound of the port number to match
Context	configure system security cpm-filter ip-filter entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fragment keyword

Synopsis	Match criterion based on presence of fragmented packets
Context	configure system security cpm-filter ip-filter entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Description	<p>This command specifies the match criterion based on the existence or absence of fragmented IP packets.</p> <p>Matching on fragmented IPv4 packets occurs when all packets have either the MF (more fragment) bit set or have the Fragment Offset field of the IP header set to a non-zero value. For IPv6, the existence of the IPv6 Fragmentation Extension Header results in a fragmented packet match.</p> <p>Matching on non-fragmented IPv4 packets occurs when all packets have the MF bit set to zero and the Fragment Offset field is also set to zero. For IPv6, the absence of an IPv6 Fragmentation Extension Header results in a non-fragmented packet match.</p>
Options	false, true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

icmp

Synopsis Enter the **icmp** context
Context **configure system security cpm-filter ip-filter entry number match icmp**
Tree **icmp**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

code number

Synopsis ICMP code to match
Context **configure system security cpm-filter ip-filter entry number match icmp code number**
Tree **code**
Range 0 to 255
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type number

Synopsis ICMP type to match
Context **configure system security cpm-filter ip-filter entry number match icmp type number**
Tree **type**
Range 0 to 255
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-option

Synopsis Enable the **ip-option** context
Context **configure system security cpm-filter ip-filter entry number match ip-option**
Tree **ip-option**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Mask that is ANDed with ip-option value in the packet header
Context	configure system security cpm-filter ip-filter entry <i>number</i> match ip-option mask <i>number</i>
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *number*

Synopsis	Specific IP option to match
Context	configure system security cpm-filter ip-filter entry <i>number</i> match ip-option type <i>number</i>
Tree	type
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiple-option *boolean*

Synopsis	Match on packets containing multiple option fields
Context	configure system security cpm-filter ip-filter entry <i>number</i> match multiple-option <i>boolean</i>
Tree	multiple-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

option-present *boolean*

Synopsis	Match on packets with option field present
Context	configure system security cpm-filter ip-filter entry <i>number</i> match option-present <i>boolean</i>
Tree	option-present
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port

Synopsis Enter the **port** context
Context **configure system security cpm-filter ip-filter entry number match port**
Tree **port**
Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq number

Synopsis Port number as the match criterion
Context **configure system security cpm-filter ip-filter entry number match port eq number**
Tree **eq**
Range 0 to 65535
Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis Port mask as the match criterion
Context **configure system security cpm-filter ip-filter entry number match port mask number**
Tree **mask**
Range 1 to 65535
Default 65535
Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list reference

Synopsis Port list as the match criterion

Context	configure system security cpm-filter ip-filter entry <i>number match port port-list reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>string</i>
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the range context
Context	configure system security cpm-filter ip-filter entry <i>number match port range</i>
Tree	range
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end number

Synopsis	Upper bound of the port number to match
Context	configure system security cpm-filter ip-filter entry <i>number match port range end number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start number

Synopsis	Lower bound of the port number to match
Context	configure system security cpm-filter ip-filter entry <i>number match port range start number</i>
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

protocol (*number* | *keyword*)

Synopsis IP protocol as the match criterion

Context **configure** [system security cpm-filter ip-filter entry](#) *number match protocol* (*number* | *keyword*)

Tree [protocol](#)

Range 0 to 255

Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

router-instance *string*

Synopsis Router instance as the match criteria

Context **configure** [system security cpm-filter ip-filter entry](#) *number match router-instance* *string*

Tree [router-instance](#)

String Length 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-ip

Synopsis Enter the **src-ip** context

Context **configure** [system security cpm-filter ip-filter entry](#) *number match src-ip*

Tree [src-ip](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Synopsis IPv4 address used as the match criterion

Context **configure** [system security cpm-filter ip-filter entry](#) *number match src-ip address* (*ipv4-address* | *ipv4-prefix-with-host-bits*)

Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-prefix-list *reference*

Synopsis	IP4 address prefix list used as match criterion
Context	configure system security cpm-filter ip-filter entry <i>number</i> match src-ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure filter match-list ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IPv4 address mask used as the match criterion
Context	configure system security cpm-filter ip-filter entry <i>number</i> match src-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-port

Synopsis	Enter the src-port context
Context	configure system security cpm-filter ip-filter entry <i>number</i> match src-port
Tree	src-port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq *number*

Synopsis	Port number as the match criterion
Context	configure system security cpm-filter ip-filter entry <i>number match src-port eq number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Port mask as the match criterion
Context	configure system security cpm-filter ip-filter entry <i>number match src-port mask number</i>
Tree	mask
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list *reference*

Synopsis	Port list as the match criterion
Context	configure system security cpm-filter ip-filter entry <i>number match src-port port-list reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>string</i>
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the range context
Context	configure system security cpm-filter ip-filter entry <i>number match src-port range</i>

Tree	range
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end number

Synopsis	Upper bound of the port number to match
Context	configure system security cpm-filter ip-filter entry <i>number</i> match src-port range end <i>number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start number

Synopsis	Lower bound of the port number to match
Context	configure system security cpm-filter ip-filter entry <i>number</i> match src-port range start <i>number</i>
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tcp-flags

Synopsis	Enter the tcp-flags context
Context	configure system security cpm-filter ip-filter entry <i>number</i> match tcp-flags
Tree	tcp-flags
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ack *boolean*

Synopsis	ACK bit in TCP header control bits as match criterion
Context	configure system security cpm-filter ip-filter entry <i>number</i> match tcp-flags ack <i>boolean</i>
Tree	ack
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

syn *boolean*

Synopsis	SYN bit in TCP header control bits as match criterion
Context	configure system security cpm-filter ip-filter entry <i>number</i> match tcp-flags syn <i>boolean</i>
Tree	syn
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-filter

Synopsis	Enter the ipv6-filter context
Context	configure system security cpm-filter ipv6-filter
Tree	ipv6-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the CPM filter
Context	configure system security cpm-filter ipv6-filter admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security cpm-filter ipv6-filter entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[entry-id] *number*

Synopsis	Filter entry ID
Context	configure system security cpm-filter ipv6-filter entry <i>number</i>
Tree	entry
Range	1 to 131072
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

action

Synopsis	Enter the action context
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accept

Synopsis	Forward matching packets
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> action accept
Tree	accept
Notes	The following elements are part of a choice: accept , default , drop , or queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default

Synopsis	Use default action for matching packets
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> action default
Tree	default
Notes	The following elements are part of a choice: accept , default , drop , or queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	Drop matching packets
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a choice: accept , default , drop , or queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue reference

Synopsis	Forward matching packets to the CPM hardware queue
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> action queue reference
Tree	queue
Reference	configure system security cpm-queue queue <i>number</i>
Notes	The following elements are part of a choice: accept , default , drop , or queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis	Text description
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log reference

Synopsis Log ID where matching packets are entered
 Context **configure** [system security cpm-filter ipv6-filter entry number log reference](#)
 Tree [log](#)
 Reference **configure** [filter log number](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

match

Synopsis Enter the **match** context
 Context **configure** [system security cpm-filter ipv6-filter entry number match](#)
 Tree [match](#)
 Description Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed.
 If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp keyword

Synopsis DSCP used as the match criterion on the packet
 Context **configure** [system security cpm-filter ipv6-filter entry number match dscp keyword](#)
 Tree [dscp](#)
 Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-ip

Synopsis	Enter the dst-ip context
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address used as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-ip address (<i>ipv6-address</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-port

Synopsis Enter the **dst-port** context

Context **configure** [system](#) [security](#) [cpm-filter](#) [ipv6-filter](#) [entry](#) *number* [match](#) **dst-port**

Tree [dst-port](#)

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq number

Synopsis Port number as the match criterion

Context **configure** [system](#) [security](#) [cpm-filter](#) [ipv6-filter](#) [entry](#) *number* [match](#) **dst-port** **eq** *number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis Port mask as the match criterion

Context **configure** [system](#) [security](#) [cpm-filter](#) [ipv6-filter](#) [entry](#) *number* [match](#) **dst-port** **mask** *number*

Tree [mask](#)

Range 1 to 65535

Default 65535

Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list *reference*

Synopsis	Port list as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-port port-list reference
Tree	port-list
Reference	configure filter match-list port-list <i>string</i>
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the range context
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end *number*

Synopsis	Upper bound of the port number to match
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-port range end number
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start *number*

Synopsis	Lower bound of the port number to match
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-port range start number

Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

extension-header

Synopsis	Enter the extension-header context
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match extension-header
Tree	extension-header
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hop-by-hop *boolean*

Synopsis	Match on existence of Hop-By-Hop Options Header
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match extension-header hop-by-hop <i>boolean</i>
Tree	hop-by-hop
Description	When configured to true , a match occurs when the Hop-by-Hop Options Extension Header is present. When configured to false , a match occurs when the Hop-by-Hop Options Extension Header is not present.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

flow-label *number*

Synopsis	Flow label in the IPv6 header as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match flow-label <i>number</i>
Tree	flow-label
Range	0 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fragment *keyword*

Synopsis	Match criterion based on presence of fragmented packets
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Description	<p>This command specifies the match criterion based on the existence or absence of fragmented IP packets.</p> <p>Matching on fragmented IPv4 packets occurs when all packets have either the MF (more fragment) bit set or have the Fragment Offset field of the IP header set to a non-zero value. For IPv6, the existence of the IPv6 Fragmentation Extension Header results in a fragmented packet match.</p> <p>Matching on non-fragmented IPv4 packets occurs when all packets have the MF bit set to zero and the Fragment Offset field is also set to zero. For IPv6, the absence of an IPv6 Fragmentation Extension Header results in a non-fragmented packet match.</p>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

icmp

Synopsis	Enter the icmp context
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

code *number*

Synopsis	ICMP code as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match icmp <i>code</i> <i>number</i>
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type number

Synopsis	ICMP type as the match criterion
Context	configure system security cpm-filter ipv6-filter entry number match icmp type number
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

next-header (number | keyword)

Synopsis	IP protocol to match
Context	configure system security cpm-filter ipv6-filter entry number match next-header (number keyword)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port

Synopsis	Enter the port context
Context	configure system security cpm-filter ipv6-filter entry number match port
Tree	port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq number

Synopsis	Port number as the match criterion
Context	configure system security cpm-filter ipv6-filter entry number match port eq number
Tree	eq
Range	0 to 65535

Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis	Port mask as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match port mask <i>number</i>
Tree	mask
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list reference

Synopsis	Port list as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match port port-list <i>reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>string</i>
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the range context
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match port range
Tree	range
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end number

Synopsis	Upper bound of the port number to match
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match port range end number
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start number

Synopsis	Lower bound of the port number to match
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match port range start number
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

router-instance string

Synopsis	Router instance as the match criteria
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match router-instance string
Tree	router-instance
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-ip

Synopsis	Enter the src-ip context
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match src-ip

Tree	src-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address (*ipv6-address* | *ipv6-prefix-with-host-bits*)

Synopsis	IPv6 address used as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match src-ip address (<i>ipv6-address</i> <i>ipv6-prefix-with-host-bits</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match src-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-port

Synopsis	Enter the src-port context
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match src-port
Tree	src-port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq *number*

Synopsis	Port number as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Port mask as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match src-port mask <i>number</i>
Tree	mask
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list *reference*

Synopsis	Port list as the match criterion
Context	configure system security cpm-filter ipv6-filter entry <i>number</i> match src-port port-list reference

Tree	port-list
Reference	configure filter match-list port-list string
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the range context
Context	configure system security cpm-filter ipv6-filter entry number match src-port range
Tree	range
Notes	The following elements are part of a choice: (eq and mask), port-list , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end number

Synopsis	Upper bound of the port number to match
Context	configure system security cpm-filter ipv6-filter entry number match src-port range end number
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start number

Synopsis	Lower bound of the port number to match
Context	configure system security cpm-filter ipv6-filter entry number match src-port range start number
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tcp-flags

Synopsis Enter the **tcp-flags** context
Context **configure system security cpm-filter ipv6-filter entry number match tcp-flags**
Tree [tcp-flags](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ack boolean

Synopsis ACK bit in TCP header control bits as match criterion
Context **configure system security cpm-filter ipv6-filter entry number match tcp-flags ack boolean**
Tree [ack](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

syn boolean

Synopsis SYN bit in TCP header control bits as match criterion
Context **configure system security cpm-filter ipv6-filter entry number match tcp-flags syn boolean**
Tree [syn](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-filter

Synopsis Enter the **mac-filter** context
Context **configure system security cpm-filter mac-filter**
Tree [mac-filter](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the CPM filter
Context	configure system security cpm-filter mac-filter admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [**entry-id**] *number*

Synopsis	Enter the entry list instance
Context	configure system security cpm-filter mac-filter entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**entry-id**] *number*

Synopsis	Filter entry ID
Context	configure system security cpm-filter mac-filter entry <i>number</i>
Tree	entry
Range	1 to 131072
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

action

Synopsis	Enter the action context
Context	configure system security cpm-filter mac-filter entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accept

Synopsis	Forward matching packets
Context	configure system security cpm-filter mac-filter entry <i>number</i> action accept
Tree	accept
Notes	The following elements are part of a choice: accept , default , drop , or queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default

Synopsis	Use default action for matching packets
Context	configure system security cpm-filter mac-filter entry <i>number</i> action default
Tree	default
Notes	The following elements are part of a choice: accept , default , drop , or queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	Drop matching packets
Context	configure system security cpm-filter mac-filter entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a choice: accept , default , drop , or queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue reference

Synopsis	Forward matching packets to the CPM hardware queue
Context	configure system security cpm-filter mac-filter entry <i>number</i> action queue <i>reference</i>
Tree	queue
Reference	configure system security cpm-queue queue <i>number</i>
Notes	The following elements are part of a choice: accept , default , drop , or queue .

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** [system](#) [security](#) [cpm-filter](#) [mac-filter](#) [entry](#) *number* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log *reference*

Synopsis Log ID where matching packets are entered
Context **configure** [system](#) [security](#) [cpm-filter](#) [mac-filter](#) [entry](#) *number* [log](#) *reference*
Tree [log](#)
Reference **configure** [filter](#) [log](#) *number*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

match

Synopsis Enter the **match** context
Context **configure** [system](#) [security](#) [cpm-filter](#) [mac-filter](#) [entry](#) *number* [match](#)
Tree [match](#)
Description Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed.
If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-opcode

Synopsis Enter the **cfm-opcode** context

Context	configure system security cpm-filter mac-filter entry <i>number match cfm-opcode</i>
Tree	cfm-opcode
Description	Commands in this context specify match criteria based on the CFM opcode.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq *number*

Synopsis	Equal to comparison operator for the CFM opcode
Context	configure system security cpm-filter mac-filter entry <i>number match cfm-opcode eq number</i>
Tree	eq
Range	0 to 255
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

gt *number*

Synopsis	Greater than comparison operator for the CFM opcode
Context	configure system security cpm-filter mac-filter entry <i>number match cfm-opcode gt number</i>
Tree	gt
Range	0 to 254
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lt *number*

Synopsis	Less than comparison operator for the CFM opcode
Context	configure system security cpm-filter mac-filter entry <i>number match cfm-opcode lt number</i>
Tree	lt
Range	1 to 255

Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the range context
Context	configure system security cpm-filter mac-filter entry number match cfm-opcode range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end number

Synopsis	Upper bound of the Opcode range to match
Context	configure system security cpm-filter mac-filter entry number match cfm-opcode range end number
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start number

Synopsis	Lower bound of the OpCode range to match
Context	configure system security cpm-filter mac-filter entry number match cfm-opcode range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-mac

Synopsis	Enable the dst-mac context
Context	configure system security cpm-filter mac-filter entry <i>number</i> match dst-mac
Tree	dst-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address string

Synopsis	MAC address used as the match criterion
Context	configure system security cpm-filter mac-filter entry <i>number</i> match dst-mac address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask string

Synopsis	MAC address mask as the match criterion
Context	configure system security cpm-filter mac-filter entry <i>number</i> match dst-mac mask string
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

etype string

Synopsis	Ethernet type as the match criterion
Context	configure system security cpm-filter mac-filter entry <i>number</i> match etype string
Tree	etype
Description	This command specifies an Ethernet type II Ethertype value to be used as a MAC filter match criterion. The Ethernet type field is used by the Ethernet version-II frames and does not apply to IEEE 802.3 Ethernet frames.
String Length	5 to 6

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

frame-type *keyword*

Synopsis	MAC frame type as the match criterion
Context	configure system security cpm-filter mac-filter entry number match frame-type keyword
Tree	frame-type
Options	802dot2-llc, ethernet-ii
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

llc-dsap

Synopsis	Enable the llc-dsap context
Context	configure system security cpm-filter mac-filter entry number match llc-dsap
Tree	llc-dsap
Description	Commands in this context specify match criteria based on the Destination Service Access Point (DSAP).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dsap *number*

Synopsis	8-bit DSAP as the match criterion
Context	configure system security cpm-filter mac-filter entry number match llc-dsap dsap number
Tree	dsap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Mask for DSAP value as the match criterion
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Context	configure system security cpm-filter mac-filter entry <i>number</i> match llc-dsap mask <i>number</i>
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

llc-ssap

Synopsis	Enable the llc-ssap context
Context	configure system security cpm-filter mac-filter entry <i>number</i> match llc-ssap
Tree	llc-ssap
Description	Commands in this context specify match criteria based on the Source Service Access Point (SSAP).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Mask for SSAP value as the match criterion
Context	configure system security cpm-filter mac-filter entry <i>number</i> match llc-ssap mask <i>number</i>
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ssap *number*

Synopsis	8-bit SSAP as the match criterion
Context	configure system security cpm-filter mac-filter entry <i>number</i> match llc-ssap ssap <i>number</i>
Tree	ssap
Range	0 to 255

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

service reference

Synopsis	Service ID used as the match condition
Context	configure system security cpm-filter mac-filter entry number match service reference
Tree	service
Reference	configure service vpls string
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-mac

Synopsis	Enable the src-mac context
Context	configure system security cpm-filter mac-filter entry number match src-mac
Tree	src-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address string

Synopsis	MAC address used as the match criterion
Context	configure system security cpm-filter mac-filter entry number match src-mac address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask string

Synopsis	MAC address mask as the match criterion
Context	configure system security cpm-filter mac-filter entry number match src-mac mask string

Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cpm-queue

Synopsis	Enter the cpm-queue context
Context	configure system security cpm-queue
Tree	cpm-queue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue [[queue-id](#)] *number*

Synopsis	Enter the queue list instance
Context	configure system security cpm-queue queue <i>number</i>
Tree	queue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[queue-id] *number*

Synopsis	CPM queue ID
Context	configure system security cpm-queue queue <i>number</i>
Tree	queue
Range	33 to 2000
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cbs *number*

Synopsis	Buffer size that can be drawn from queue buffer pool
Context	configure system security cpm-queue queue <i>number</i> cbs <i>number</i>

Tree	cbs
Description	This command specifies the amount of buffer that can be drawn from the reserved buffer portion of the buffer pool of the queue.
Range	0 to 131072
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs *number*

Synopsis	Maximum queue depth to which the queue can grow
Context	configure system security cpm-queue queue <i>number</i> mbs <i>number</i>
Tree	mbs
Range	0 to 131072
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the rate context
Context	configure system security cpm-queue queue <i>number</i> rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir (*number* | *keyword*)

Synopsis	Amount of bandwidth committed to the queue
Context	configure system security cpm-queue queue <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 100000000
Default	max
Units	kilobps
Options	max

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis	Peak Information Rate for the queue
Context	configure system security cpm-queue queue <i>number</i> <i>rate</i> pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cpu-protection

Synopsis	Enter the cpu-protection context
Context	configure system security cpu-protection
Tree	cpu-protection
Description	Commands in this context configure CPU protection policies.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enter the ip-src-monitoring context
Context	configure system security cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

included-protocols

Synopsis	Enter the included-protocols context
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Context	configure system security cpu-protection ip-src-monitoring included-protocols
Tree	included-protocols
Description	Commands in this context specify the protocols included in IP source monitoring. The protocol packets will be subject to the per-source-rate of CPU protection policies. This configuration applies system wide and applies to CPU protection globally.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

dhcp boolean

Synopsis	Include extracted DHCP packets for IP source monitoring
Context	configure system security cpu-protection ip-src-monitoring included-protocols dhcp boolean
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

gtp boolean

Synopsis	Include extracted GTP packets for IP source monitoring
Context	configure system security cpu-protection ip-src-monitoring included-protocols gtp boolean
Tree	gtp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

icmp boolean

Synopsis	Include extracted ICMP packets for IP source monitoring
Context	configure system security cpu-protection ip-src-monitoring included-protocols icmp boolean
Tree	icmp
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

igmp *boolean*

Synopsis Include extracted IGMP packets for IP source monitoring

Context **configure** [system](#) [security](#) [cpu-protection](#) [ip-src-monitoring](#) [included-protocols](#) [igmp](#) *boolean*

Tree [igmp](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

link-specific-rate (*number* | *keyword*)

Synopsis Packet arrival rate limit for link level protocols

Context **configure** [system](#) [security](#) [cpu-protection](#) [link-specific-rate](#) (*number* | *keyword*)

Tree [link-specific-rate](#)

Description This command configures a link-specific rate for CPU protection. The limit is applied to all ports within the system. The CPU receives no more than the configured packet rate for all link level protocols, such as LACP, from any one port.
The measurement is cleared each second and is based on the ingress port.

Range 1 to 65535

Units packets per second

Options max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy [[policy-id](#)] *number*

Synopsis Enter the **policy** list instance

Context **configure** [system](#) [security](#) [cpu-protection](#) [policy](#) *number*

Tree [policy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

[policy-id] number

Synopsis	Policy ID
Context	configure system security cpu-protection policy number
Tree	policy
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

alarm boolean

Synopsis	Generate an event when the rate is exceeded
Context	configure system security cpu-protection policy number alarm boolean
Tree	alarm
Description	When configured to true , an event is generated when the rate is exceeded. The event includes information about the offending source. Only one event is generated per monitor period. When configured to false , notifications are disabled.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description string

Synopsis	Text description
Context	configure system security cpu-protection policy number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure system security cpu-protection policy number eth-cfm

Tree	eth-cfm
Description	Commands in this context configure CPU policy entries that determine match criteria and overall arrival rate of the Ethernet Connectivity and Fault Management (ETH-CFM) packets at the CPU.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security cpu-protection policy <i>number</i> eth-cfm entry <i>number</i>
Tree	entry
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

[id] *number*

Synopsis	Entry ID
Context	configure system security cpu-protection policy <i>number</i> eth-cfm entry <i>number</i>
Tree	entry
Range	1 to 100
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

level [start](#) *number* [end](#) *number*

Synopsis	Add a list entry for level
Context	configure system security cpu-protection policy <i>number</i> eth-cfm entry <i>number</i> level start <i>number</i> end <i>number</i>
Tree	level
Description	Commands in this context specify the range of domain levels for the match criterion.
Min. Instances	1

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

start number

Synopsis	Lower bound of the level range
Context	configure system security cpu-protection policy number eth-cfm entry number level start number end number
Tree	level
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

end number

Synopsis	Upper bound of the level range
Context	configure system security cpu-protection policy number eth-cfm entry number level start number end number
Tree	level
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

opcode start number end number

Synopsis	Add a list entry for opcode
Context	configure system security cpu-protection policy number eth-cfm entry number opcode start number end number
Tree	opcode
Description	Commands in this context specify the range of operational codes (that identify the application) for the match criterion.
Min. Instances	1
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

start number

Synopsis Lower bound of the OpCode range

Context **configure system security cpu-protection policy number eth-cfm entry number opcode start number end number**

Tree [opcode](#)

Range 0 to 255

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

end number

Synopsis Upper bound of the OpCode range

Context **configure system security cpu-protection policy number eth-cfm entry number opcode start number end number**

Tree [opcode](#)

Range 0 to 255

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

pir (number | keyword)

Synopsis Packet arrival rate limit

Context **configure system security cpu-protection policy number eth-cfm entry number pir (number | keyword)**

Tree [pir](#)

Range 0 to 65534

Default max

Units packets per second

Options max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

out-profile-rate

Synopsis	Enter the out-profile-rate context
Context	configure system security cpu-protection policy <i>number</i> out-profile-rate
Tree	out-profile-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

log-events *boolean*

Synopsis	Generate a log event when the packet rate is exceeded
Context	configure system security cpu-protection policy <i>number</i> out-profile-rate log-events <i>boolean</i>
Tree	log-events
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

pir (*number* | *keyword*)

Synopsis	Packet arrival rate limit
Context	configure system security cpu-protection policy <i>number</i> out-profile-rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 65534
Units	packets per second
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

overall-rate (*number* | *keyword*)

Synopsis	Packet arrival rate limit for all packets
Context	configure system security cpu-protection policy <i>number</i> overall-rate (<i>number</i> <i>keyword</i>)
Tree	overall-rate
Range	1 to 65534

Units	packets per second
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

per-source-parameters

Synopsis	Enter the per-source-parameters context
Context	configure system security cpu-protection policy number per-source-parameters
Tree	per-source-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enter the ip-src-monitoring context
Context	configure system security cpu-protection policy number per-source-parameters ip-src-monitoring
Tree	ip-src-monitoring
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

limit-dhcp-ci-addr-zero *boolean*

Synopsis	Apply rate limiting to packets with client IP address 0
Context	configure system security cpu-protection policy number per-source-parameters ip-src-monitoring limit-dhcp-ci-addr-zero boolean
Tree	limit-dhcp-ci-addr-zero
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

per-source-rate (*number* | *keyword*)

Synopsis	Per-source packet arrival rate limit
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Context	configure system security cpu-protection policy number per-source-rate (<i>number keyword</i>)
Tree	per-source-rate
Description	<p>This command configures the per-source packet arrival rate limit.</p> <p>A source is defined as a unique combination of SAP and MAC source address or SAP and source IP address. The CPU receives no more than the specified packet rate from each source. The measurement is cleared every second.</p> <p>This configuration is applicable only if the policy is assigned to an interface (such as SAPs, subscriber interfaces, and spoke SDPs), and MAC monitoring or IP source monitoring is specified in the CPU protection configuration of the interface.</p>
Range	1 to 65534
Default	max
Units	packets per second
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

port-overall-rate

Synopsis	Enter the port-overall-rate context
Context	configure system security cpu-protection port-overall-rate
Tree	port-overall-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

action-low-priority *boolean*

Synopsis	Mark packets that exceed the rate as low-priority
Context	configure system security cpu-protection port-overall-rate action-low-priority <i>boolean</i>
Tree	action-low-priority
Description	When configured to true , packets that exceed the per-port packet arrival rate limit are marked as low priority for preferential discard later (if there is congestion in the control plane) rather than discarded immediately.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

pir (*number* | *keyword*)

Synopsis	Per-port packet arrival rate limit
Context	configure system security cpu-protection port-overall-rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 65535
Units	packets per second
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

protocol-protection

Synopsis	Enable the protocol-protection context
Context	configure system security cpu-protection protocol-protection
Tree	protocol-protection
Description	<p>When enabled, the network processor on the CPM discards all packets received for protocols that are not configured on the interface. This action helps to mitigate DoS attacks by filtering invalid control traffic before it ingresses the CPU. For example, if IS-IS is not configured on an interface, protocol protection discards any IS-IS packets received on the interface.</p> <p>Commands in this context further define the action when the context is enabled.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

allow-sham-links *boolean*

Synopsis	Allow OSPF sham link traffic
Context	configure system security cpu-protection protocol-protection allow-sham-links <i>boolean</i>
Tree	allow-sham-links
Description	<p>When configured to true, tunneled OSPF packets received over the backbone network must be explicitly allowed when OSPF sham links form an adjacency over the MPLS-VP RN backbone network.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

block-pim-tunneled *boolean*

Synopsis	Block extraction and processing of PIM packets
Context	configure system security cpu-protection protocol-protection block-pim-tunneled <i>boolean</i>
Tree	block-pim-tunneled
Description	When configured to true , PIM packets arriving at the SR OS node inside a tunnel (for example, MPLS or GRE) on a network interface are blocked and not processed. PIM in an mVPN on the egress DR will not switch traffic from the (*,G) to the (S,G) tree.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

dist-cpu-protection

Synopsis	Enter the dist-cpu-protection context
Context	configure system security dist-cpu-protection
Tree	dist-cpu-protection
Description	Commands in this context configure distributed CPU protection (DCP) attributes.
Introduced	16.0.R1
Platforms	All

policy [[policy-name](#)] *string*

Synopsis	Enter the policy list instance
Context	configure system security dist-cpu-protection policy <i>string</i>
Tree	policy
Description	Commands in this context configure the attributes of DCP policies. These policies can be applied to objects such as SAPs, network interfaces or ports
Max. Instances	130
Introduced	16.0.R1
Platforms	All

[policy-name] *string*

Synopsis	Policy name
Context	configure system security dist-cpu-protection policy <i>string</i>
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system security dist-cpu-protection policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

local-monitoring-policer [policer-name] *string*

Synopsis	Enter the local-monitoring-policer list instance
Context	configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i>
Tree	local-monitoring-policer
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[policer-name] *string*

Synopsis	Local monitoring policer name
Context	configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i>
Tree	local-monitoring-policer
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [system security dist-cpu-protection policy](#) *string* [local-monitoring-policer](#) *string*
[description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

exceed-action *keyword*

Synopsis Action taken when policer rates are exceeded
Context **configure** [system security dist-cpu-protection policy](#) *string* [local-monitoring-policer](#) *string*
[exceed-action](#) *keyword*
Tree [exceed-action](#)
Description This command specifies the action taken on the extracted control packets when the configured policer rates are exceeded.
Default none
Options discard, low-priority, none
Introduced 16.0.R1
Platforms All

log-events *keyword*

Synopsis Control of log events creation for status and activity
Context **configure** [system security dist-cpu-protection policy](#) *string* [local-monitoring-policer](#) *string*
[log-events](#) *keyword*
Tree [log-events](#)
Description This command controls the creation of log events related to the status and activity of the local monitoring policer.
Default true
Options false, true, verbose

Introduced 16.0.R1
Platforms All

rate

Synopsis Enter the **rate** context

Context **configure** [system security dist-cpu-protection policy string local-monitoring-policer string rate](#)

Tree [rate](#)

Description Commands in this context specify the rate and burst tolerance for the policer.
The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.

Introduced 16.0.R1
Platforms All

kbps

Synopsis Enter the **kbps** context

Context **configure** [system security dist-cpu-protection policy string local-monitoring-policer string rate kbps](#)

Tree [kbps](#)

Notes The following elements are part of a choice: **kbps** or **packets**.

Introduced 16.0.R1
Platforms All

limit (*keyword* | *number*)

Synopsis Rate limit

Context **configure** [system security dist-cpu-protection policy string local-monitoring-policer string rate kbps limit \(*keyword* | *number*\)](#)

Tree [limit](#)

Range 1 to 20000000

Default max

Units kilobps

Options max

Introduced 16.0.R1
Platforms All

mbs *number*

Synopsis Tolerance for the rate
Context **configure** [system security dist-cpu-protection policy](#) *string* [local-monitoring-policer](#) *string*
[rate](#) [kbps](#) [mbs](#) *number*
Tree [mbs](#)
Range 0 to 4194304
Units bytes
Introduced 16.0.R1
Platforms All

packets

Synopsis Enter the **packets** context
Context **configure** [system security dist-cpu-protection policy](#) *string* [local-monitoring-policer](#) *string*
[rate](#) [packets](#)
Tree [packets](#)
Notes The following elements are part of a choice: **kbps** or **packets**.
Introduced 16.0.R1
Platforms All

initial-delay *number*

Synopsis Additional packets allowed in an initial burst
Context **configure** [system security dist-cpu-protection policy](#) *string* [local-monitoring-policer](#) *string*
[rate](#) [packets](#) [initial-delay](#) *number*
Tree [initial-delay](#)
Description This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.
Range 0 to 255
Default 0
Units packets

Introduced 16.0.R1
Platforms All

limit (*keyword* | *number*)

Synopsis Packets per interval limit
Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [local-monitoring-policer](#) *string* [rate](#) [packets](#) [limit](#) (*keyword* | *number*)
Tree [limit](#)
Range 0 to 8000
Default max
Units packets per interval
Options max
Introduced 16.0.R1
Platforms All

within *number*

Synopsis Measurement interval for packets rate
Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [local-monitoring-policer](#) *string* [rate](#) [packets](#) [within](#) *number*
Tree [within](#)
Range 1 to 32767
Default 1
Units seconds
Introduced 16.0.R1
Platforms All

protocol [[protocol-name](#)] *keyword*

Synopsis Enter the **protocol** list instance
Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [protocol](#) *keyword*
Tree [protocol](#)
Introduced 16.0.R1
Platforms All

[protocol-name] *keyword*

Synopsis	Protocol name
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i>
Tree	protocol
Options	arp, dhcp, http-redirect, icmp, igmp, mld, ndis, pppoe-pppoa, all-unspecified, mpls-ttl, bfd-cpm, bgp, eth-cfm, isis, ldp, ospf, pim, rsvp, icmp-ping-check, lacp, vrrp, multi-chassis, multi-chassis-sync, bfd, ftp, icmp-v4, icmp-v6, l3-to-my-ipv4, l3-to-my-ipv6, lsp-ping, mc-lag, mcast-snooping, radius, rip, sbfd-reflector, snmp, ssh, stp, tacacs, telnet, tftp, twamp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dynamic-parameters

Synopsis	Enter the dynamic-parameters context
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters
Tree	dynamic-parameters
Introduced	16.0.R1
Platforms	All

detection-time *number*

Synopsis	Minimum time the dynamic policer remains allocated
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters detection-time <i>number</i>
Tree	detection-time
Range	1 to 128000
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

exceed-action

Synopsis	Enter the exceed-action context
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters exceed-action
Tree	exceed-action
Description	Commands in this context specify the settings for the scenario when the configured policer rates are exceeded.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action taken on control packets when rates are exceeded
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters exceed-action action <i>keyword</i>
Tree	action
Default	none
Options	discard, low-priority, none
Introduced	16.0.R1
Platforms	All

hold-down (*keyword* | *number*)

Synopsis	Hold down behavior
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters exceed-action hold-down (<i>keyword</i> <i>number</i>)
Tree	hold-down
Description	<p>This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded.</p> <p>The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer.</p> <p>An indefinite hold down behavior must be cleared using the tools perform security dist-cpu-protection release-hold-down command.</p>
Range	1 to 10080
Default	none

Units	seconds
Options	indefinite, none
Introduced	16.0.R1
Platforms	All

log-events *keyword*

Synopsis	Control of log events creation for status and activity
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters log-events <i>keyword</i>
Tree	log-events
Description	This command controls the creation of log events related to the status and activity of the local monitoring policer.
Default	true
Options	false, true, verbose
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate
Tree	rate
Description	Commands in this context specify the rate and burst tolerance for the policer. The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.
Introduced	16.0.R1
Platforms	All

kbps

Synopsis	Enter the kbps context
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate kbps
Tree	kbps

Notes	The following elements are part of a choice: kbps or packets .
Introduced	16.0.R1
Platforms	All

limit (*keyword* | *number*)

Synopsis	Rate limit
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate kbps limit (<i>keyword</i> <i>number</i>)
Tree	limit
Range	1 to 20000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

mbs *number*

Synopsis	Tolerance for the rate
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate kbps mbs <i>number</i>
Tree	mbs
Range	0 to 4194304
Units	bytes
Introduced	16.0.R1
Platforms	All

packets

Synopsis	Enter the packets context
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate packets
Tree	packets
Notes	The following elements are part of a choice: kbps or packets .
Introduced	16.0.R1

Platforms All

initial-delay *number*

Synopsis Additional packets allowed in an initial burst

Context **configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters rate packets initial-delay *number*

Tree [initial-delay](#)

Description This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.

Range 0 to 255

Default 0

Units packets

Introduced 16.0.R1

Platforms All

limit (*keyword* | *number*)

Synopsis Packets per interval limit

Context **configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters rate packets limit (*keyword* | *number*)

Tree [limit](#)

Range 0 to 8000

Default max

Units packets per interval

Options max

Introduced 16.0.R1

Platforms All

within *number*

Synopsis Measurement interval for packets rate

Context **configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters rate packets within *number*

Tree [within](#)

Range	1 to 32767
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

enforcement

Synopsis	Enter the enforcement context
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> enforcement
Tree	enforcement
Introduced	16.0.R1
Platforms	All

dynamic

Synopsis	Enter the dynamic context
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> enforcement dynamic
Tree	dynamic
Notes	The following elements are part of a choice: dynamic , dynamic-local-mon-bypass , shared , or static .
Introduced	16.0.R1
Platforms	All

mon-policer-name *reference*

Synopsis	Dynamic enforcement policer for the protocol
Context	configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> enforcement dynamic mon-policer-name <i>reference</i>
Tree	mon-policer-name
Description	This command specifies the dynamic enforcement policer that is instantiated when the associated local monitoring policer is determined to be in a nonconforming state (at the end of a minimum monitoring time of 60 seconds to reduce thrashing).
Reference	configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i>
Introduced	16.0.R1

Platforms All

dynamic-local-mon-bypass

Synopsis Do not include packets in the local monitoring function

Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [protocol](#) *keyword*
[enforcement](#) [dynamic-local-mon-bypass](#)

Tree [dynamic-local-mon-bypass](#)

Description When configured, packets from the protocol are not included in the local monitoring function and the dynamic enforcement policer is not instantiated for the protocol.

Notes The following elements are part of a choice: **dynamic**, **dynamic-local-mon-bypass**, **shared**, or **static**.

Introduced 16.0.R1

Platforms All

static

Synopsis Enter the **static** context

Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [protocol](#) *keyword*
[enforcement](#) [static](#)

Tree [static](#)

Notes The following elements are part of a choice: **dynamic**, **dynamic-local-mon-bypass**, **shared**, or **static**.

Introduced 16.0.R1

Platforms All

policer-name *reference*

Synopsis Static policer enforced by the protocol

Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [protocol](#) *keyword*
[enforcement](#) [static](#) [policer-name](#) *reference*

Tree [policer-name](#)

Reference **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [static-policer](#) *string*

Introduced 16.0.R1

Platforms All

static-policer [*policer-name*] *string*

Synopsis	Enter the static-policer list instance
Context	configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i>
Tree	static-policer
Description	<p>Commands in this context configure a static enforcement policer that can be referenced by one or more protocols in the policy. When a policer is referenced by a protocol, the policer is instantiated for each object (for example, a SAP or network interface) that is created and references the policer.</p> <p>If no policer resources are available on the associated card or FP, the object is not created.</p>
Max. Instances	18
Introduced	16.0.R1
Platforms	All

[policer-name] *string*

Synopsis	Static policer name
Context	configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i>
Tree	static-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

detection-time *number*

Synopsis	Minimum time the dynamic policer remains allocated
Context	configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> detection-time <i>number</i>
Tree	detection-time
Range	1 to 128000
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

exceed-action

Synopsis	Enter the exceed-action context
Context	configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> exceed-action
Tree	exceed-action
Description	Commands in this context specify the settings for the scenario when the configured policer rates are exceeded.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action taken on control packets when rates are exceeded
Context	configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> exceed-action action <i>keyword</i>
Tree	action
Default	none
Options	discard, low-priority, none
Introduced	16.0.R1
Platforms	All

hold-down (*keyword* | *number*)

Synopsis	Hold down behavior
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Context	configure system security dist-cpu-protection policy <i>string static-policer string exceed-action hold-down</i> (<i>keyword number</i>)
Tree	hold-down
Description	<p>This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded.</p> <p>The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer.</p> <p>An indefinite hold down behavior must be cleared using the tools perform security dist-cpu-protection release-hold-down command.</p>
Range	1 to 10080
Default	none
Units	seconds
Options	indefinite, none
Introduced	16.0.R1
Platforms	All

log-events *keyword*

Synopsis	Control of log events creation for status and activity
Context	configure system security dist-cpu-protection policy <i>string static-policer string log-events keyword</i>
Tree	log-events
Description	This command controls the creation of log events related to the status and activity of the local monitoring policer.
Default	true
Options	false, true, verbose
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure system security dist-cpu-protection policy <i>string static-policer string rate</i>
Tree	rate
Description	Commands in this context specify the rate and burst tolerance for the policer.

The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.

Introduced 16.0.R1

Platforms All

kbps

Synopsis Enter the **kbps** context

Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [static-policer](#) *string* [rate](#) [kbps](#)

Tree [kbps](#)

Notes The following elements are part of a choice: **kbps** or **packets**.

Introduced 16.0.R1

Platforms All

limit (*keyword* | *number*)

Synopsis Rate limit

Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [static-policer](#) *string* [rate](#) [kbps](#)
[limit](#) (*keyword* | *number*)

Tree [limit](#)

Range 1 to 20000000

Default max

Units kilobps

Options max

Introduced 16.0.R1

Platforms All

mbs *number*

Synopsis Tolerance for the rate

Context **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string* [static-policer](#) *string* [rate](#) [kbps](#)
[mbs](#) *number*

Tree [mbs](#)

Range 0 to 4194304

Units bytes

Introduced	16.0.R1
Platforms	All

packets

Synopsis	Enter the packets context
Context	configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate packets
Tree	packets
Notes	The following elements are part of a choice: kbits or packets .
Introduced	16.0.R1
Platforms	All

initial-delay *number*

Synopsis	Additional packets allowed in an initial burst
Context	configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate packets initial-delay <i>number</i>
Tree	initial-delay
Description	This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.
Range	0 to 255
Default	0
Units	packets
Introduced	16.0.R1
Platforms	All

limit (*keyword* | *number*)

Synopsis	Packets per interval limit
Context	configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate packets limit (<i>keyword</i> <i>number</i>)
Tree	limit
Range	0 to 8000
Default	max

Units	packets per interval
Options	max
Introduced	16.0.R1
Platforms	All

within *number*

Synopsis	Measurement interval for packets rate
Context	configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate packets <i>within</i> <i>number</i>
Tree	within
Range	1 to 32767
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Policy type
Context	configure system security dist-cpu-protection policy <i>string</i> type <i>keyword</i>
Tree	type
Options	access-network, port
Introduced	21.5.R1
Platforms	All

dot1x

Synopsis	Enter the dot1x context
Context	configure system security dot1x
Tree	dot1x
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of 802.1x network access control
Context **configure** [system](#) [security](#) [dot1x](#) **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

radius-policy [[policy-name](#)] *string*

Synopsis Enter the **radius-policy** list instance
Context **configure** [system](#) [security](#) [dot1x](#) **radius-policy** *string*
Tree [radius-policy](#)
Introduced 16.0.R1
Platforms All

[policy-name] *string*

Synopsis RADIUS server policy name for 802.1X authentication
Context **configure** [system](#) [security](#) [dot1x](#) **radius-policy** *string*
Tree [radius-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the server for authentication
Context **configure** [system](#) [security](#) [dot1x](#) **radius-policy** *string* **admin-state** *keyword*
Tree [admin-state](#)

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

retry *number*

Synopsis	Number of RADIUS requests toward the same RADIUS server
Context	configure system security dot1x radius-policy <i>string</i> retry <i>number</i>
Tree	retry
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	All

server [[server-index](#)] *number*

Synopsis	Enter the server list instance
Context	configure system security dot1x radius-policy <i>string</i> server <i>number</i>
Tree	server
Max. Instances	5
Introduced	16.0.R1
Platforms	All

[server-index] *number*

Synopsis	RADIUS server index
Context	configure system security dot1x radius-policy <i>string</i> server <i>number</i>
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-port *number*

Synopsis	UDP port number on which to contact the RADIUS server for accounting requests
Context	configure system security dot1x radius-policy <i>string</i> server <i>number</i> accounting-port <i>number</i>
Tree	accounting-port
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IP address of the RADIUS dot1x server
Context	configure system security dot1x radius-policy <i>string</i> server <i>number</i> address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

authentication-port *number*

Synopsis	UDP port number on which to contact the RADIUS server for authentication
Context	configure system security dot1x radius-policy <i>string</i> server <i>number</i> authentication-port <i>number</i>
Tree	authentication-port
Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	All

secret *string*

Synopsis	Secret key associated with the RADIUS server
Context	configure system security dot1x radius-policy <i>string</i> server <i>number</i> secret <i>string</i>
Tree	secret

String Length	1 to 54
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	RADIUS server type
Context	configure system security dot1x radius-policy <i>string</i> server <i>number</i> type <i>keyword</i>
Tree	type
Default	authorization
Options	authorization, accounting, combined
Introduced	16.0.R1
Platforms	All

source-address *string*

Synopsis	Source address of the RADIUS packet
Context	configure system security dot1x radius-policy <i>string</i> source-address <i>string</i>
Tree	source-address
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time assigned between the request retries toward the same RADIUS server
Context	configure system security dot1x radius-policy <i>string</i> timeout <i>number</i>
Tree	timeout
Range	1 to 90
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

ftp-server *boolean*

Synopsis	Enable FTP servers running on the system
Context	configure system security ftp-server <i>boolean</i>
Tree	ftp-server
Default	false
Introduced	16.0.R1
Platforms	All

hash-control

Synopsis	Enter the hash-control context
Context	configure system security hash-control
Tree	hash-control
Introduced	16.0.R4
Platforms	All

management-interface

Synopsis	Enter the management-interface context
Context	configure system security hash-control management-interface
Tree	management-interface
Description	Commands in this context configure encryption parameters for different management interfaces.
Introduced	16.0.R4
Platforms	All

classic-cli

Synopsis	Enter the classic-cli context
Context	configure system security hash-control management-interface classic-cli
Tree	classic-cli
Introduced	16.0.R4
Platforms	All

read-algorithm *keyword*

Synopsis	Input encryption algorithm for configuration secrets
Context	configure system security hash-control management-interface classic-cli read-algorithm <i>keyword</i>
Tree	read-algorithm
Description	This command specifies how encrypted configuration secrets are interpreted and which encryption types are accepted when secrets are input into the system or read from a configuration file (for example, at system bootup time).
Default	all-hash
Options	all-hash, hash, hash2, custom
Introduced	16.0.R4
Platforms	All

write-algorithm *keyword*

Synopsis	Output encryption algorithm for configuration secrets
Context	configure system security hash-control management-interface classic-cli write-algorithm <i>keyword</i>
Tree	write-algorithm
Description	This command specifies the format of the output for encrypted configuration secrets (for example, in the saved configuration file, or in the output of the info or show commands).
Default	hash2
Options	cleartext, hash, hash2, custom
Introduced	16.0.R4
Platforms	All

grpc

Synopsis	Enter the grpc context
Context	configure system security hash-control management-interface grpc
Tree	grpc
Introduced	16.0.R4
Platforms	All

hash-algorithm *keyword*

Synopsis	Encryption algorithm for configuration secrets
Context	configure system security hash-control management-interface grpc hash-algorithm <i>keyword</i>
Tree	hash-algorithm
Description	This command specifies the format of the input and output for encrypted configuration secrets.
Default	hash2
Options	cleartext, hash, hash2, custom
Introduced	16.0.R4
Platforms	All

md-cli

Synopsis	Enter the md-cli context
Context	configure system security hash-control management-interface md-cli
Tree	md-cli
Introduced	16.0.R4
Platforms	All

hash-algorithm *keyword*

Synopsis	Encryption algorithm for configuration secrets
Context	configure system security hash-control management-interface md-cli hash-algorithm <i>keyword</i>
Tree	hash-algorithm
Description	This command specifies the format of the input and output for encrypted configuration secrets.
Default	hash2
Options	cleartext, hash, hash2, custom
Introduced	16.0.R4
Platforms	All

netconf

Synopsis	Enter the netconf context
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Context	configure system security hash-control management-interface netconf
Tree	netconf
Introduced	16.0.R4
Platforms	All

hash-algorithm *keyword*

Synopsis	Encryption algorithm for configuration secrets
Context	configure system security hash-control management-interface netconf hash-algorithm <i>keyword</i>
Tree	hash-algorithm
Description	This command specifies the format of the input and output for encrypted configuration secrets.
Default	hash2
Options	cleartext, hash, hash2, custom
Introduced	16.0.R4
Platforms	All

keychains

Synopsis	Enter the keychains context
Context	configure system security keychains
Tree	keychains
Introduced	16.0.R1
Platforms	All

keychain [[keychain-name](#)] *string*

Synopsis	Enter the keychain list instance
Context	configure system security keychains keychain <i>string</i>
Tree	keychain
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[keychain-name] *string*

Synopsis	Keychain name
Context	configure system security keychains keychain <i>string</i>
Tree	keychain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the keychain
Context	configure system security keychains keychain <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bidirectional

Synopsis	Enter the bidirectional context
Context	configure system security keychains keychain <i>string</i> bidirectional
Tree	bidirectional
Introduced	16.0.R1
Platforms	All

entry [[keychain-entry-index](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[**keychain-entry-index**] *number*

Synopsis	Keychain identifier
Context	configure system security keychains keychain <i>string bidirectional entry number</i>
Tree	entry
Range	0 to 63 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the keychain entry
Context	configure system security keychains keychain <i>string bidirectional entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

algorithm *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm used by the keychain key
Context	configure system security keychains keychain <i>string bidirectional entry number algorithm keyword</i>
Tree	algorithm
Options	aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16
Introduced	16.0.R1
Platforms	All

authentication-key *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

begin-time *string*

Synopsis	Calendar date and time to start using the key
Context	configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i> begin-time <i>string</i>
Tree	begin-time
Introduced	16.0.R1
Platforms	All

option *keyword*

Synopsis	Keychain key option
Context	configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i> option <i>keyword</i>
Tree	option
Default	none
Options	none, basic, isis-enhanced
Introduced	16.0.R1
Platforms	All

tolerance (*number* | *keyword*)

Synopsis	Time within which an eligible receive key should overlap with the active send key
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Context	configure system security keychains keychain <i>string</i> bidirectional entry <i>number tolerance</i> (<i>number</i> <i>keyword</i>)
Tree	tolerance
Range	0 to 4294967294
Default	300
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system security keychains keychain <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

receive

Synopsis	Enter the receive context
Context	configure system security keychains keychain <i>string</i> receive
Tree	receive
Introduced	16.0.R1
Platforms	All

entry [**keychain-entry-index**] *number*

Synopsis	Enter the entry list instance
Context	configure system security keychains keychain <i>string</i> receive entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[keychain-entry-index] *number*

Synopsis	Keychain identifier
Context	configure system security keychains keychain <i>string</i> receive entry <i>number</i>
Tree	entry
Range	0 to 63 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the keychain entry
Context	configure system security keychains keychain <i>string</i> receive entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

algorithm *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm used by the keychain key
Context	configure system security keychains keychain <i>string</i> receive entry <i>number</i> algorithm <i>keyword</i>
Tree	algorithm
Options	aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16
Introduced	16.0.R1
Platforms	All

authentication-key *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	configure system security keychains keychain <i>string</i> receive entry number <i>authentication-key</i> <i>string</i>
Tree	authentication-key
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

begin-time *string*

Synopsis	Calendar date and time to start using the key
Context	configure system security keychains keychain <i>string</i> receive entry number <i>begin-time</i> <i>string</i>
Tree	begin-time
Introduced	16.0.R1
Platforms	All

end-time *string*

Synopsis	Calendar date and time when the system should stop using the key
Context	configure system security keychains keychain <i>string</i> receive entry number <i>end-time</i> <i>string</i>
Tree	end-time
Introduced	16.0.R1
Platforms	All

tolerance (*number* | *keyword*)

Synopsis	Time within which an eligible receive key should overlap with the active send key
Context	configure system security keychains keychain <i>string</i> receive entry number <i>tolerance</i> (<i>number</i> <i>keyword</i>)
Tree	tolerance

Range	0 to 4294967294
Default	300
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

send

Synopsis	Enter the send context
Context	configure system security keychains keychain <i>string</i> send
Tree	send
Introduced	16.0.R1
Platforms	All

entry [[keychain-entry-index](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security keychains keychain <i>string</i> send entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[[keychain-entry-index](#)] *number*

Synopsis	Keychain identifier
Context	configure system security keychains keychain <i>string</i> send entry <i>number</i>
Tree	entry
Range	0 to 63 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the keychain entry
Context	configure system security keychains keychain <i>string</i> send entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

algorithm *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm used by the keychain key
Context	configure system security keychains keychain <i>string</i> send entry <i>number</i> algorithm <i>keyword</i>
Tree	algorithm
Options	aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16
Introduced	16.0.R1
Platforms	All

authentication-key *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	configure system security keychains keychain <i>string</i> send entry <i>number</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 54
Introduced	16.0.R1

Platforms All

begin-time *string*

Synopsis Calendar date and time to start using the key
 Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [send](#) [entry](#) *number* [begin-time](#) *string*
 Tree [begin-time](#)
 Introduced 16.0.R1
 Platforms All

tcp-option-number

Synopsis Enter the **tcp-option-number** context
 Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [tcp-option-number](#)
 Tree [tcp-option-number](#)
 Introduced 16.0.R1
 Platforms All

receive *keyword*

Synopsis TCP option value expected in the TCP header of received packets
 Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [tcp-option-number](#) [receive](#) *keyword*
 Tree [receive](#)
 Default option-254
 Options option-253, option-254, both, tcp-ao
 Introduced 16.0.R1
 Platforms All

send *keyword*

Synopsis TCP option value assigned in the TCP header of transmitted packets
 Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [tcp-option-number](#) [send](#) *keyword*
 Tree [send](#)
 Default option-254

Options	option-253, option-254, tcp-ao
Introduced	16.0.R1
Platforms	All

management

Synopsis	Enter the management context
Context	configure system security management
Tree	management
Description	Commands in this context control which management protocols can be used to access the SR OS router via the 'Base' and 'management' router instances.
Introduced	16.0.R5
Platforms	All

allow-ftp *boolean*

Synopsis	Allow access to the FTP server
Context	configure system security management allow-ftp <i>boolean</i>
Tree	allow-ftp
Description	When configured to true , this command allows FTP access to the SR OS router via the 'Base' and 'management' router instances. When configured to false , this command disallows access to the SR OS FTP server.
Default	true
Introduced	16.0.R6
Platforms	All

allow-grpc *boolean*

Synopsis	Allow access to the gRPC server
Context	configure system security management allow-grpc <i>boolean</i>
Tree	allow-grpc
Description	When configured to true , the system allows access to the gRPC server via the 'Base' and 'management' router instances.
Default	true
Introduced	19.5.R1
Platforms	All

allow-netconf *boolean*

Synopsis	Allow access to the NETCONF server
Context	configure system security management allow-netconf <i>boolean</i>
Tree	allow-netconf
Description	When configured to true , the system allows NETCONF server access to the SR OS router via the 'Base' and 'management' router instances.
Default	true
Introduced	19.5.R1
Platforms	All

allow-ssh *boolean*

Synopsis	Allow access to the SSH server
Context	configure system security management allow-ssh <i>boolean</i>
Tree	allow-ssh
Description	When configured to true , this command allows SSH server access to the SR OS router via the 'Base' and 'management' router instances. When configured to false , this command disallows SSH server access.
Default	true
Introduced	16.0.R5
Platforms	All

allow-telnet *boolean*

Synopsis	Allow access to the IPv4 Telnet server
Context	configure system security management allow-telnet <i>boolean</i>
Tree	allow-telnet
Description	When configured to true , this command allows IPv4 Telnet server access to the SR OS router via the 'Base' and 'management' router instances. When configured to false , this command disallows access to the IPv4 Telnet server.
Default	true
Introduced	16.0.R5
Platforms	All

allow-telnet6 *boolean*

Synopsis	Allow access to the Telnet IPv6 server
Context	configure system security management allow-telnet6 <i>boolean</i>
Tree	allow-telnet6
Description	When configured to true , this command allows IPv6 Telnet server access to the SR OS router via the 'Base' and 'management' router instances. When configured to false , this command disallows access to the IPv6 Telnet server.
Default	true
Introduced	16.0.R5
Platforms	All

management-access-filter

Synopsis	Enter the management-access-filter context
Context	configure system security management-access-filter
Tree	management-access-filter
Description	Commands in this context configure the attributes for management access filters. Management access filters control all traffic in and out of the CPM. The filters can be used to restrict management of the router by other nodes outside of specific networks (or sub-networks) or through designated ports. Management filters are enforced by the system software.
Introduced	16.0.R4
Platforms	All

ip-filter

Synopsis	Enter the ip-filter context
Context	configure system security management-access-filter ip-filter
Tree	ip-filter
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of management-access filters
Context	configure system security management-access-filter ip-filter admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

default-action *keyword*

Synopsis	Default action for the management access filter
Context	configure system security management-access-filter ip-filter default-action <i>keyword</i>
Tree	default-action
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Default	ignore-match
Options	ignore-match, accept, drop, reject
Introduced	16.0.R4
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security management-access-filter ip-filter entry <i>number</i>
Tree	entry
Introduced	16.0.R4
Platforms	All

[entry-id] *number*

Synopsis	Entry ID to identify the match criteria and the action
Context	configure system security management-access-filter ip-filter entry <i>number</i>
Tree	entry
Description	This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.
Range	1 to 9999

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

action *keyword*

Synopsis	Action associated with the management access filter
Context	configure system security management-access-filter ip-filter entry <i>number</i> action <i>keyword</i>
Tree	action
Description	This command specifies the action associated with the management access filter match criteria entry. If the packet does not meet any of the match criteria, the configured default action is applied.
Default	ignore-match
Options	ignore-match, accept, drop, reject
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure system security management-access-filter ip-filter entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

log-events *boolean*

Synopsis	Enable match logging
Context	configure system security management-access-filter ip-filter entry <i>number</i> log-events <i>boolean</i>
Tree	log-events
Description	When configured to true , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised.

When configured to **false**, match logging is disabled.

Default	false
Introduced	16.0.R4
Platforms	All

match

Synopsis	Enter the match context
Context	configure system security management-access-filter ip-filter entry <i>number</i> match
Tree	match
Description	Commands in this context specify match criteria for the entry.
Introduced	16.0.R4
Platforms	All

dst-port

Synopsis	Enable the dst-port context
Context	configure system security management-access-filter ip-filter entry <i>number</i> match dst-port
Tree	dst-port
Description	Commands in this context specify match criteria based on the destination port.
Introduced	16.0.R4
Platforms	All

mask *number*

Synopsis	IP address mask as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match dst-port mask <i>number</i>
Tree	mask
Range	1 to 65535
Default	65535
Introduced	16.0.R4
Platforms	All

port number

Synopsis	TCP or UDP port number as the match criterion
Context	configure system security management-access-filter ip-filter entry number match dst-port port number
Tree	port
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mgmt-port

Synopsis	Enter the mgmt-port context
Context	configure system security management-access-filter ip-filter entry number match mgmt-port
Tree	mgmt-port
Description	Commands in this context specify match criteria based on the Ethernet port.
Introduced	16.0.R4
Platforms	All

cpm

Synopsis	Match any traffic received on any Ethernet port
Context	configure system security management-access-filter ip-filter entry number match mgmt-port cpm
Tree	cpm
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	16.0.R4
Platforms	All

lag string

Synopsis	LAG ID as the match criterion
Context	configure system security management-access-filter ip-filter entry number match mgmt-port lag string
Tree	lag

String Length	1 to 27
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	21.2.R1
Platforms	All

port-id string

Synopsis	Port ID as the match criterion
Context	configure system security management-access-filter ip-filter entry number match mgmt-port port-id string
Tree	port-id
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	16.0.R4
Platforms	All

protocol (number | keyword)

Synopsis	IP protocol as the match criterion
Context	configure system security management-access-filter ip-filter entry number match protocol (number keyword)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R4
Platforms	All

router-instance string

Synopsis	Router instance as the match criterion
Context	configure system security management-access-filter ip-filter entry number match router-instance string
Tree	router-instance
Introduced	16.0.R4
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure system security management-access-filter ip-filter entry <i>number</i> match src-ip
Tree	src-ip
Description	Commands in this context specify match criteria based on the source IP address.
Introduced	16.0.R4
Platforms	All

address (*ipv4-prefix* | *ipv4-address*)

Synopsis	IP address or IP prefix as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match src-ip address (<i>ipv4-prefix</i> <i>ipv4-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R4
Platforms	All

ip-prefix-list *reference*

Synopsis	IP prefix list as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match src-ip ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure filter match-list ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	20.7.R1
Platforms	All

mask *string*

Synopsis	IP address mask as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match src-ip mask string
Tree	mask

Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R4
Platforms	All

src-port

Synopsis	Enable the src-port context
Context	configure system security management-access-filter ip-filter entry <i>number</i> match src-port
Tree	src-port
Introduced	21.7.R1
Platforms	All

mask *number*

Synopsis	IP address mask as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match src-port mask <i>number</i>
Tree	mask
Range	1 to 65535
Default	65535
Introduced	21.7.R1
Platforms	All

port *number*

Synopsis	TCP or UDP port number as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match src-port port <i>number</i>
Tree	port
Range	1 to 65535
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

ipv6-filter

Synopsis	Enter the ipv6-filter context
Context	configure system security management-access-filter ipv6-filter
Tree	ipv6-filter
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of management-access filters
Context	configure system security management-access-filter ipv6-filter admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

default-action *keyword*

Synopsis	Default action for the management access filter
Context	configure system security management-access-filter ipv6-filter default-action <i>keyword</i>
Tree	default-action
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Default	ignore-match
Options	ignore-match, accept, drop, reject
Introduced	16.0.R4
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security management-access-filter ipv6-filter entry <i>number</i>
Tree	entry
Introduced	16.0.R4

Platforms All

[entry-id] *number*

Synopsis Entry ID to identify the match criteria and the action

Context **configure** [system security management-access-filter ipv6-filter entry](#) *number*

Tree [entry](#)

Description This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.

Range 1 to 9999

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

action *keyword*

Synopsis Action associated with the management access filter

Context **configure** [system security management-access-filter ipv6-filter entry](#) *number* **action** *keyword*

Tree [action](#)

Description This command specifies the action associated with the management access filter match criteria entry.

If the packet does not meet any of the match criteria, the configured default action is applied.

Default ignore-match

Options ignore-match, accept, drop, reject

Introduced 16.0.R4

Platforms All

description *string*

Synopsis Text description

Context **configure** [system security management-access-filter ipv6-filter entry](#) *number* **description** *string*

Tree [description](#)

String Length	1 to 80
Introduced	16.0.R4
Platforms	All

log-events *boolean*

Synopsis	Enable match logging
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> log-events <i>boolean</i>
Tree	log-events
Description	When configured to true , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised. When configured to false , match logging is disabled.
Default	false
Introduced	16.0.R4
Platforms	All

match

Synopsis	Enter the match context
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> match
Tree	match
Description	Commands in this context specify match criteria for the entry.
Introduced	16.0.R4
Platforms	All

dst-port

Synopsis	Enable the dst-port context
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> match dst-port
Tree	dst-port
Description	Commands in this context specify match criteria based on the destination port.
Introduced	16.0.R4
Platforms	All

mask *number*

Synopsis	IP address mask as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number match dst-port mask number</i>
Tree	mask
Range	1 to 65535
Default	65535
Introduced	16.0.R4
Platforms	All

port *number*

Synopsis	TCP or UDP port number as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number match dst-port port number</i>
Tree	port
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

flow-label *number*

Synopsis	Flow identifier used to discriminate traffic flows
Context	configure system security management-access-filter ipv6-filter entry <i>number match flow-label number</i>
Tree	flow-label
Range	0 to 1048575
Introduced	16.0.R4
Platforms	All

mgmt-port

Synopsis	Enter the mgmt-port context
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Context	configure system security management-access-filter ipv6-filter entry <i>number match mgmt-port</i>
Tree	mgmt-port
Description	Commands in this context specify match criteria based on the Ethernet port.
Introduced	16.0.R4
Platforms	All

cpm

Synopsis	Match any traffic received on any Ethernet port
Context	configure system security management-access-filter ipv6-filter entry <i>number match mgmt-port cpm</i>
Tree	cpm
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	16.0.R4
Platforms	All

lag string

Synopsis	LAG ID as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number match mgmt-port lag string</i>
Tree	lag
String Length	1 to 27
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	21.2.R1
Platforms	All

port-id string

Synopsis	Port ID as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number match mgmt-port port-id string</i>
Tree	port-id
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	16.0.R4

Platforms All

next-header (*number* | *keyword*)

Synopsis IP protocol to match

Context **configure system security management-access-filter ipv6-filter entry** *number match next-header* (*number* | *keyword*)

Tree [next-header](#)

Range 0 to 255

Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp

Introduced 16.0.R4

Platforms All

router-instance *string*

Synopsis Router instance as the match criterion

Context **configure system security management-access-filter ipv6-filter entry** *number match router-instance* *string*

Tree [router-instance](#)

Introduced 16.0.R4

Platforms All

src-ip

Synopsis Enter the **src-ip** context

Context **configure system security management-access-filter ipv6-filter entry** *number match src-ip*

Tree [src-ip](#)

Description Commands in this context specify match criteria based on the source port.

Introduced 16.0.R4

Platforms All

address (*ipv6-prefix* | *ipv6-address*)

Synopsis IPv6 address or IPv6 prefix to match

Context	configure system security management-access-filter ipv6-filter entry number match src-ip address (<i>ipv6-prefix ipv6-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R4
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as the match criterion
Context	configure system security management-access-filter ipv6-filter entry number match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.7.R1
Platforms	All

mask *string*

Synopsis	IP address mask as the match criterion
Context	configure system security management-access-filter ipv6-filter entry number match src-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R4
Platforms	All

src-port

Synopsis	Enable the src-port context
Context	configure system security management-access-filter ipv6-filter entry number match src-port
Tree	src-port
Description	Commands in this context specify match criteria based on the source port.
Introduced	21.7.R1

Platforms All

mask *number*

Synopsis IP address mask as the match criterion

Context **configure** [system security management-access-filter ipv6-filter entry](#) *number match src-port mask number*

Tree [mask](#)

Range 1 to 65535

Default 65535

Introduced 21.7.R1

Platforms All

port *number*

Synopsis TCP or UDP port number as the match criterion

Context **configure** [system security management-access-filter ipv6-filter entry](#) *number match src-port port number*

Tree [port](#)

Range 1 to 65535

Notes This element is mandatory.

Introduced 21.7.R1

Platforms All

mac-filter

Synopsis Enter the **mac-filter** context

Context **configure** [system security management-access-filter mac-filter](#)

Tree [mac-filter](#)

Introduced 16.0.R4

Platforms All

admin-state *keyword*

Synopsis Administrative state of management access MAC filter

Context **configure** [system security management-access-filter mac-filter admin-state](#) *keyword*

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

default-action *keyword*

Synopsis	Default action for the management access filter
Context	configure system security management-access-filter mac-filter default-action <i>keyword</i>
Tree	default-action
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Default	ignore-match
Options	ignore-match, accept, drop
Introduced	16.0.R4
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security management-access-filter mac-filter entry <i>number</i>
Tree	entry
Introduced	16.0.R4
Platforms	All

[entry-id] *number*

Synopsis	Entry ID to identify the match criteria and the action
Context	configure system security management-access-filter mac-filter entry <i>number</i>
Tree	entry
Description	This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.
Range	1 to 9999

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

action *keyword*

Synopsis	Action associated with the management access filter
Context	configure system security management-access-filter mac-filter entry <i>number</i> action <i>keyword</i>
Tree	action
Description	This command specifies the action associated with the management access filter match criteria entry. If the packet does not meet any of the match criteria, the configured default action is applied.
Default	ignore-match
Options	ignore-match, accept, drop
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure system security management-access-filter mac-filter entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

log-events *boolean*

Synopsis	Enable match logging
Context	configure system security management-access-filter mac-filter entry <i>number</i> log-events <i>boolean</i>
Tree	log-events
Description	When configured to true , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised.

When configured to **false**, match logging is disabled.

Default	false
Introduced	16.0.R4
Platforms	All

match

Synopsis	Enter the match context
Context	configure system security management-access-filter mac-filter entry <i>number match</i>
Tree	match
Description	Commands in this context specify match criteria for the entry.
Introduced	16.0.R4
Platforms	All

cfm-opcode

Synopsis	Enter the cfm-opcode context
Context	configure system security management-access-filter mac-filter entry <i>number match</i> cfm-opcode
Tree	cfm-opcode
Description	Commands in this context specify match criteria based on the CFM opcode.
Introduced	16.0.R4
Platforms	All

eq *number*

Synopsis	Equal to comparison operator for the CFM opcode
Context	configure system security management-access-filter mac-filter entry <i>number match</i> cfm-opcode eq <i>number</i>
Tree	eq
Range	0 to 255
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R4
Platforms	All

gt *number*

Synopsis	Greater than comparison operator for the CFM opcode
Context	configure system security management-access-filter mac-filter entry <i>number match</i> cfm-opcode gt <i>number</i>
Tree	gt
Range	0 to 254
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R4
Platforms	All

lt *number*

Synopsis	Less than comparison operator for the CFM opcode
Context	configure system security management-access-filter mac-filter entry <i>number match</i> cfm-opcode lt <i>number</i>
Tree	lt
Range	1 to 255
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R4
Platforms	All

range

Synopsis	Enable the range context
Context	configure system security management-access-filter mac-filter entry <i>number match</i> cfm-opcode range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R4
Platforms	All

end *number*

Synopsis	Upper bound of the range for the OpCode to match
Context	configure system security management-access-filter mac-filter entry <i>number match</i> cfm-opcode range end <i>number</i>

Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

start number

Synopsis	Lower bound of the range for the OpCode to match
Context	configure system security management-access-filter mac-filter entry number match cfm-opcode range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

dot1p

Synopsis	Enable the dot1p context
Context	configure system security management-access-filter mac-filter entry number match dot1p
Tree	dot1p
Description	Commands in this context specify match criteria based on the IEEE 802.1p value.
Introduced	16.0.R4
Platforms	All

mask number

Synopsis	3-bit mask as the match criterion
Context	configure system security management-access-filter mac-filter entry number match dot1p mask number
Tree	mask
Range	1 to 7
Default	7
Introduced	16.0.R4

Platforms All

priority number

Synopsis IEEE 802.1p value as the match criterion

Context **configure system security management-access-filter mac-filter entry number match dot1p priority number**

Tree [priority](#)

Range 0 to 7

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

dst-mac

Synopsis Enable the **dst-mac** context

Context **configure system security management-access-filter mac-filter entry number match dst-mac**

Tree [dst-mac](#)

Description Commands in this context specify match criteria based on the destination MAC.

Introduced 16.0.R4

Platforms All

address string

Synopsis MAC address used as the match criterion

Context **configure system security management-access-filter mac-filter entry number match dst-mac address string**

Tree [address](#)

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

mask string

Synopsis MAC address mask as the match criterion

Context	configure system security management-access-filter mac-filter entry <i>number match dst-mac mask string</i>
Tree	mask
Default	ff:ff:ff:ff:ff
Introduced	16.0.R4
Platforms	All

etype string

Synopsis	Ethernet type II Ethertype value as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number match etype string</i>
Tree	etype
Description	This command specifies an Ethernet type II Ethertype value to be used as a MAC filter match criterion. The Ethernet type field is used by the Ethernet version-II frames and does not apply to IEEE 802.3 Ethernet frames.
String Length	5 to 6
Introduced	16.0.R4
Platforms	All

frame-type keyword

Synopsis	MAC frame type as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number match frame-type keyword</i>
Tree	frame-type
Default	802dot3
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii, 802dot1-ag
Introduced	16.0.R4
Platforms	All

llc-dsap

Synopsis	Enable the llc-dsap context
Context	configure system security management-access-filter mac-filter entry <i>number match llc-dsap</i>

Tree	llc-dsap
Description	Commands in this context specify match criteria based on the Destination Service Access Point (DSAP).
Introduced	16.0.R4
Platforms	All

dsap number

Synopsis	8-bit DSAP as the match criterion
Context	configure system security management-access-filter mac-filter entry number match llc-dsap dsap number
Tree	dsap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask number

Synopsis	Mask for DSAP value as the match criterion
Context	configure system security management-access-filter mac-filter entry number match llc-dsap mask number
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R4
Platforms	All

llc-ssap

Synopsis	Enable the llc-ssap context
Context	configure system security management-access-filter mac-filter entry number match llc-ssap
Tree	llc-ssap
Description	Commands in this context specify match criteria based on the Source Service Access Point (SSAP).

Introduced 16.0.R4
Platforms All

mask number

Synopsis Mask for SSAP value as the match criterion
Context **configure** [system security management-access-filter mac-filter entry number match llc-ssap mask number](#)
Tree [mask](#)
Range 1 to 255
Default 255
Introduced 16.0.R4
Platforms All

ssap number

Synopsis 8-bit SSAP as the match criterion
Context **configure** [system security management-access-filter mac-filter entry number match llc-ssap ssap number](#)
Tree [ssap](#)
Range 0 to 255
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

service string

Synopsis Service ID used as the match condition
Context **configure** [system security management-access-filter mac-filter entry number match service string](#)
Tree [service](#)
String Length 1 to 64
Introduced 16.0.R4
Platforms All

snap-oui *keyword*

Synopsis	IEEE 802.3 LLC SNAP Ethernet Frame OUI value for match
Context	configure system security management-access-filter mac-filter entry <i>number</i> match snap-oui <i>keyword</i>
Tree	snap-oui
Description	This command specifies the IEEE 802.3 LLC SNAP Ethernet Frame OUI value as the MAC filter match criterion.
Options	zero, non-zero
Introduced	16.0.R4
Platforms	All

snap-pid *number*

Synopsis	IEEE 802.3 LLC SNAP Ethernet Frame PID as the match
Context	configure system security management-access-filter mac-filter entry <i>number</i> match snap-pid <i>number</i>
Tree	snap-pid
Description	This command specifies an IEEE 802.3 LLC SNAP Ethernet Frame PID value used as the MAC filter match criterion. The SNAP PID match criterion is independent of the OUI field within the SNAP header. Two packets with different 3-byte OUI fields but the same PID field match the same filter entry based on a SNAP PID match criterion.
Range	0 to 65535
Introduced	16.0.R4
Platforms	All

src-mac

Synopsis	Enable the src-mac context
Context	configure system security management-access-filter mac-filter entry <i>number</i> match src-mac
Tree	src-mac
Description	Commands in this context specify match criteria based on the source MAC.
Introduced	16.0.R4
Platforms	All

address string

Synopsis	MAC address used as the match criterion
Context	configure system security management-access-filter mac-filter entry number match src-mac address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask string

Synopsis	MAC address mask as the match criterion
Context	configure system security management-access-filter mac-filter entry number match src-mac mask string
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R4
Platforms	All

per-peer-queuing boolean

Synopsis	Allow CPM hardware queuing per peer
Context	configure system security per-peer-queuing boolean
Tree	per-peer-queuing
Description	When configured to true , the router automatically allocates a separate CPM hardware queue for the peer when a peering session is established. When configured to false , a separate CPM hardware queue is not allowed.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pki

Synopsis	Enter the pki context
Context	configure system security pki
Tree	pki
Introduced	16.0.R1

Platforms All

ca-profile [*ca-profile-name*] *string*

Synopsis Enter the **ca-profile** list instance
Context **configure system security pki ca-profile** *string*
Tree [ca-profile](#)
Max. Instances 128
Introduced 16.0.R1
Platforms All

[ca-profile-name] *string*

Synopsis CA profile name
Context **configure system security pki ca-profile** *string*
Tree [ca-profile](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the CA profile
Context **configure system security pki ca-profile** *string admin-state* *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

auto-crl-update



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the auto-crl-update context
Context	configure system security pki ca-profile <i>string</i> auto-crl-update
Tree	auto-crl-update
Introduced	16.0.R1
Platforms	All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the automatic CRL update
Context	configure system security pki ca-profile <i>string</i> auto-crl-update admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

crl-urls



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the crl-urls context
Context	configure system security pki ca-profile <i>string</i> auto-crl-update crl-urls
Tree	crl-urls
Introduced	16.0.R1
Platforms	All

url-entry [entry-id] number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the url-entry list instance
Context	configure system security pki ca-profile string auto-crl-update crl-urls url-entry number
Tree	url-entry
Introduced	16.0.R1
Platforms	All

[entry-id] number

Synopsis	URL on this system
Context	configure system security pki ca-profile string auto-crl-update crl-urls url-entry number
Tree	url-entry
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

transmission-profile reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	File transmission profile to update CRL
Context	configure system security pki ca-profile string auto-crl-update crl-urls url-entry number transmission-profile reference
Tree	transmission-profile
Reference	configure system transmission-profile string
Introduced	16.0.R4
Platforms	All

url *http-url-path-loose*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Location of updated CRL
Context	configure system security pki ca-profile <i>string</i> auto-crl-update crl-urls url-entry <i>number</i> url <i>http-url-path-loose</i>
Tree	url
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

periodic-update-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval between two consecutive CRL updates
Context	configure system security pki ca-profile <i>string</i> auto-crl-update periodic-update-interval <i>number</i>
Tree	periodic-update-interval
Range	3600 to 31622400
Default	86400
Units	seconds
Introduced	16.0.R1
Platforms	All

pre-update-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time prior to the next update time of the current CRL
Context	configure system security pki ca-profile <i>string</i> auto-crl-update pre-update-time <i>number</i>
Tree	pre-update-time

Range	0 to 31622400
Default	3600
Units	seconds
Introduced	16.0.R1
Platforms	All

retry-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval before retrying to update CRL
Context	configure system security pki ca-profile <i>string</i> auto-crl-update retry-interval <i>number</i>
Tree	retry-interval
Range	0 to 31622400
Default	3600
Units	seconds
Introduced	16.0.R1
Platforms	All

schedule-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time scheduler type for an automated CRL update
Context	configure system security pki ca-profile <i>string</i> auto-crl-update schedule-type <i>keyword</i>
Tree	schedule-type
Default	next-update-based
Options	next-update-based, periodic
Introduced	16.0.R1
Platforms	All

cert-file *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Certificate file name
Context	configure system security pki ca-profile <i>string</i> cert-file <i>string</i>
Tree	cert-file
String Length	1 to 95
Introduced	16.0.R1
Platforms	All

cmpv2



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the cmpv2 context
Context	configure system security pki ca-profile <i>string</i> cmpv2
Tree	cmpv2
Introduced	16.0.R1
Platforms	All

accept-unprotected-message



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the accept-unprotected-message context
Context	configure system security pki ca-profile <i>string</i> cmpv2 accept-unprotected-message
Tree	accept-unprotected-message
Introduced	16.0.R1
Platforms	All

error-message *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept unprotected error messages
Context	configure system security pki ca-profile <i>string</i> cmpv2 accept-unprotected-message error-message <i>boolean</i>
Tree	error-message
Default	false
Introduced	16.0.R1
Platforms	All

pkiconf-message *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept unprotected PKI confirmation messages
Context	configure system security pki ca-profile <i>string</i> cmpv2 accept-unprotected-message pkiconf-message <i>boolean</i>
Tree	pkiconf-message
Default	false
Introduced	16.0.R1
Platforms	All

always-set-sender-for-ir *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Subject name in CMPv2 header for all Initial Registration (IR) messages
Context	configure system security pki ca-profile <i>string</i> cmpv2 always-set-sender-for-ir <i>boolean</i>
Tree	always-set-sender-for-ir
Default	false
Introduced	16.0.R1

Platforms All

http



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **http** context
Context **configure** system security pki ca-profile string cmpv2 http
Tree [http](#)
Introduced 16.0.R1
Platforms All

response-timeout *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis HTTP response timeout
Context **configure** system security pki ca-profile string cmpv2 http response-timeout *number*
Tree [response-timeout](#)
Range 1 to 3600
Default 30
Units seconds
Introduced 16.0.R1
Platforms All

version *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis HTTP version for CMPv2 messages
Context **configure** system security pki ca-profile string cmpv2 http version *keyword*
Tree [version](#)

Default	1.1
Options	1.0, 1.1
Introduced	16.0.R1
Platforms	All

key-list



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key-list context
Context	configure system security pki ca-profile <i>string</i> cmpv2 key-list
Tree	key-list
Introduced	16.0.R1
Platforms	All

key [[reference-number](#)] *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key list instance
Context	configure system security pki ca-profile <i>string</i> cmpv2 key-list key <i>string</i>
Tree	key
Max. Instances	128
Introduced	16.0.R1
Platforms	All

[[reference-number](#)] *string*

Synopsis	Unique identifier for the CA initial authentication key
Context	configure system security pki ca-profile <i>string</i> cmpv2 key-list key <i>string</i>
Tree	key
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

password *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Shared secret for this CA initial authentication key
Context	configure system security pki ca-profile <i>string</i> cmpv2 key-list key <i>string</i> password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	All

recipient-subject *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DN attributes for recipient subject of CMPv2 requests
Context	configure system security pki ca-profile <i>string</i> cmpv2 recipient-subject <i>string</i>
Tree	recipient-subject
Description	This command configures the recipient subject of CMPv2 requests.
String Length	1 to 256
Notes	The following elements are part of a choice: recipient-subject or use-ca-subject .
Introduced	22.10.R1
Platforms	All

response-signing-cert *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	File name of the certificate to verify CMPv2 responses
Context	configure system security pki ca-profile <i>string</i> cmpv2 response-signing-cert <i>string</i>
Tree	response-signing-cert
Description	This command specifies an imported certificate used to verify the CMP response message that they are protected by signature. If this command is not configured, then CA's certificate is used.
String Length	1 to 95
Notes	The following elements are part of a choice: response-signing-cert or response-signing-use-extracert .
Introduced	16.0.R1
Platforms	All

response-signing-use-extracert



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use extraCerts certificate to verify response signature
Context	configure system security pki ca-profile <i>string</i> cmpv2 response-signing-use-extracert
Tree	response-signing-use-extracert
Notes	The following elements are part of a choice: response-signing-cert or response-signing-use-extracert .
Introduced	22.10.R1
Platforms	All

same-recipient-nonce-for-poll-request *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Same recipNonce as the last CMPv2 response for a poll request
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Context	configure system security pki ca-profile <i>string</i> cmpv2 same-recipient-nonce-for-poll-request <i>boolean</i>
Tree	same-recipient-nonce-for-poll-request
Default	false
Introduced	16.0.R1
Platforms	All

url



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the url context
Context	configure system security pki ca-profile <i>string</i> cmpv2 url
Tree	url
Introduced	16.0.R1
Platforms	All

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure system security pki ca-profile <i>string</i> cmpv2 url service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

url-string *http-optional-url-loose*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	URL for CMPv2
Context	configure system security pki ca-profile <i>string</i> cmpv2 url url-string <i>http-optional-url-loose</i>
Tree	url-string
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

use-ca-subject



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use subject DN in CA certificate as CMPv2 request recipient
Context	configure system security pki ca-profile <i>string</i> cmpv2 use-ca-subject
Tree	use-ca-subject
Notes	The following elements are part of a choice: recipient-subject or use-ca-subject .
Introduced	22.10.R1
Platforms	All

crl-file *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Certificate Revocation List (CRL) file name
Context	configure system security pki ca-profile <i>string</i> crl-file <i>string</i>
Tree	crl-file
String Length	1 to 95
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system security pki ca-profile <i>string</i> description <i>string</i>

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ocsp



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the ocsp context
Context	configure system security pki ca-profile <i>string</i> ocsp
Tree	ocsp
Introduced	16.0.R1
Platforms	All

responder-url *http-optional-url-loose*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	HTTP URL of the OCSP responder for the CA
Context	configure system security pki ca-profile <i>string</i> ocsp responder-url <i>http-optional-url-loose</i>
Tree	responder-url
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure system security pki ca-profile <i>string</i> ocsp service-name <i>string</i>

Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

transmission-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Transmission profile for the OCSP
Context	configure system security pki ca-profile <i>string</i> ocsp transmission-profile <i>reference</i>
Tree	transmission-profile
Reference	configure system transmission-profile <i>string</i>
Introduced	16.0.R6
Platforms	All

revocation-check *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Method to verify the revocation status of certificates issued by the CA
Context	configure system security pki ca-profile <i>string</i> revocation-check <i>keyword</i>
Tree	revocation-check
Default	crl
Options	crl, crl-optional
Introduced	16.0.R1
Platforms	All

certificate-auto-update [[certificate-file-name](#)] *string*

Synopsis	Enter the certificate-auto-update list instance
Context	configure system security pki certificate-auto-update <i>string</i>
Tree	certificate-auto-update

Description	Commands in this context configure automatic certificate update associations.
Max. Instances	256
Introduced	22.10.R1
Platforms	All

[certificate-file-name] string

Synopsis	Certificate file name
Context	configure system security pki certificate-auto-update <i>string</i>
Tree	certificate-auto-update
String Length	1 to 95
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

key-file-name string

Synopsis	Imported key filename
Context	configure system security pki certificate-auto-update <i>string</i> key-file-name <i>string</i>
Tree	key-file-name
String Length	1 to 95
Introduced	22.10.R1
Platforms	All

profile reference

Synopsis	Certificate update profile name
Context	configure system security pki certificate-auto-update <i>string</i> profile <i>reference</i>
Tree	profile
Reference	configure system security pki certificate-update-profile <i>string</i>
Introduced	22.10.R1
Platforms	All

certificate-display-format *keyword*

Synopsis	Display format for certificates and Certificate Revocation Lists (CRLs)
Context	configure system security pki certificate-display-format <i>keyword</i>
Tree	certificate-display-format
Default	ascii
Options	ascii, utf8
Introduced	16.0.R1
Platforms	All

certificate-expiration-warning

Synopsis	Enter the certificate-expiration-warning context
Context	configure system security pki certificate-expiration-warning
Tree	certificate-expiration-warning
Introduced	16.0.R1
Platforms	All

hours *number*

Synopsis	Time at which the system generates the certificate expiration warning trap for in-use certificates
Context	configure system security pki certificate-expiration-warning hours <i>number</i>
Tree	hours
Range	0 to 8760
Units	hours
Introduced	16.0.R1
Platforms	All

repeat-hours *number*

Synopsis	Time period when the system repeatedly generates the certificate expiration warning trap
Context	configure system security pki certificate-expiration-warning repeat-hours <i>number</i>
Tree	repeat-hours
Range	0 to 8760

Default	0
Units	hours
Introduced	16.0.R1
Platforms	All

certificate-update-profile [*name*] *string*

Synopsis	Enter the certificate-update-profile list instance
Context	configure system security pki certificate-update-profile <i>string</i>
Tree	certificate-update-profile
Description	Commands in this context configure a certificate update profile that specifies the behavior of the automatic update certificate.
Max. Instances	256
Introduced	22.10.R1
Platforms	All

[name] *string*

Synopsis	Certificate update profile name
Context	configure system security pki certificate-update-profile <i>string</i>
Tree	certificate-update-profile
Description	This command configures the certificate update profile name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

after-issue *number*

Synopsis	Time for scheduler updates after certificate issuance
Context	configure system security pki certificate-update-profile <i>string</i> after-issue <i>number</i>
Tree	after-issue
Description	This command configures the time for scheduler updates after the certificate issue time.
Range	864000 to 157680000

Units	seconds
Notes	The following elements are part of a choice: after-issue or before-expiry .
Introduced	22.10.R1
Platforms	All

before-expiry *number*

Synopsis	Time scheduler updates before certificate expiry
Context	configure system security pki certificate-update-profile <i>string</i> before-expiry <i>number</i>
Tree	before-expiry
Description	This command configures the time that the scheduler updates before the certificate expiration time.
Range	3600 to 157680000
Default	86400
Units	seconds
Notes	The following elements are part of a choice: after-issue or before-expiry .
Introduced	22.10.R1
Platforms	All

cmpv2

Synopsis	Enter the cmpv2 context
Context	configure system security pki certificate-update-profile <i>string</i> cmpv2
Tree	cmpv2
Notes	The following elements are part of a choice: cmpv2 or est .
Introduced	22.10.R1
Platforms	All

ca-profile *reference*

Synopsis	CA profile name
Context	configure system security pki certificate-update-profile <i>string</i> cmpv2 ca-profile <i>reference</i>
Tree	ca-profile
Description	This command specifies the use of CMPv2 as the protocol to update the certificate. The CMPv2 configuration is derived from the referenced CA profile.

Reference	configure system security pki ca-profile <i>string</i>
Introduced	22.10.R1
Platforms	All

dsa

Synopsis	Enter the dsa context
Context	configure system security pki certificate-update-profile <i>string</i> dsa
Tree	dsa
Notes	The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key .
Introduced	22.10.R1
Platforms	All

key-size number

Synopsis	Length of the generated DSA key
Context	configure system security pki certificate-update-profile <i>string</i> dsa key-size <i>number</i>
Tree	key-size
Description	This command specifies that the newly generated key is an DSA key with the specified key length in bits.
Range	512 to 8192
Default	2048
Introduced	22.10.R1
Platforms	All

ecdsa

Synopsis	Enter the ecdsa context
Context	configure system security pki certificate-update-profile <i>string</i> ecdsa
Tree	ecdsa
Notes	The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key .
Introduced	22.10.R1
Platforms	All

curve *keyword*

Synopsis	Elliptic curve to be used in ECDSA key generation
Context	configure system security pki certificate-update-profile <i>string</i> ecdsa curve <i>keyword</i>
Tree	curve
Description	This command specifies that the newly generated key is an ECDSA key with the specified curve.
Default	secp256r1
Options	secp256r1, secp384r1, secp521r1
Introduced	22.10.R1
Platforms	All

est

Synopsis	Enter the est context
Context	configure system security pki certificate-update-profile <i>string</i> est
Tree	est
Notes	The following elements are part of a choice: cmpv2 or est .
Introduced	22.10.R1
Platforms	All

est-profile *reference*

Synopsis	EST profile name
Context	configure system security pki certificate-update-profile <i>string</i> est est-profile <i>reference</i>
Tree	est-profile
Description	This command specifies the use of EST as the protocol to update the certificate. The EST configuration is derived from the referenced EST profile.
Reference	configure system security pki est-profile <i>string</i>
Introduced	22.10.R1
Platforms	All

hash-algorithm *keyword*

Synopsis	Hash algorithm for a certificate request
Context	configure system security pki certificate-update-profile <i>string</i> hash-algorithm <i>keyword</i>

Tree	hash-algorithm
Description	This command specifies the hash algorithm used to generate a certificate request.
Default	sha256
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	22.10.R1
Platforms	All

retry-interval *number*

Synopsis	Retry interval after a failed update
Context	configure system security pki certificate-update-profile <i>string</i> retry-interval <i>number</i>
Tree	retry-interval
Description	This command configures the retry interval after the update fails.
Range	60 to 36000
Default	3600
Units	seconds
Introduced	22.10.R1
Platforms	All

rsa

Synopsis	Enter the rsa context
Context	configure system security pki certificate-update-profile <i>string</i> rsa
Tree	rsa
Notes	The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key .
Introduced	22.10.R1
Platforms	All

key-size *number*

Synopsis	Length of the generated RSA key
Context	configure system security pki certificate-update-profile <i>string</i> rsa key-size <i>number</i>
Tree	key-size
Description	This command specifies that the newly generated key is a RSA key with the specified key length in bits.

Range	512 to 8192
Default	2048
Introduced	22.10.R1
Platforms	All

same-as-existing-key

Synopsis	Generate the new key to same type and key length
Context	configure system security pki certificate-update-profile <i>string</i> same-as-existing-key
Tree	same-as-existing-key
Description	When configured, this command specifies that the newly generated key is the same type and key length as the existing key.
Notes	The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key .
Introduced	22.10.R1
Platforms	All

common-name-list [[cn-list-name](#)] *string*

Synopsis	Enter the common-name-list list instance
Context	configure system security pki common-name-list <i>string</i>
Tree	common-name-list
Max. Instances	64
Introduced	16.0.R1
Platforms	All

[cn-list-name] *string*

Synopsis	CN list name
Context	configure system security pki common-name-list <i>string</i>
Tree	common-name-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

common-name [cn-index] *number*

Synopsis	Enter the common-name list instance
Context	configure system security pki common-name-list <i>string</i> common-name <i>number</i>
Tree	common-name
Introduced	16.0.R1
Platforms	All

[cn-index] *number*

Synopsis	Common name index
Context	configure system security pki common-name-list <i>string</i> common-name <i>number</i>
Tree	common-name
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

cn-type *keyword*

Synopsis	Common name type
Context	configure system security pki common-name-list <i>string</i> common-name <i>number</i> cn-type <i>keyword</i>
Tree	cn-type
Options	ip-address, domain-name
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

cn-value *string*

Synopsis	Common name value
Context	configure system security pki common-name-list <i>string</i> common-name <i>number</i> cn-value <i>string</i>
Tree	cn-value

String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

crl-expiration-warning

Synopsis	Enter the crl-expiration-warning context
Context	configure system security pki crl-expiration-warning
Tree	crl-expiration-warning
Introduced	16.0.R1
Platforms	All

hours *number*

Synopsis	Time when the system generates the Certificate Revocation List (CRL) expiration warning trap
Context	configure system security pki crl-expiration-warning hours <i>number</i>
Tree	hours
Range	0 to 8760
Units	hours
Introduced	16.0.R1
Platforms	All

repeat-hours *number*

Synopsis	Time when the system repeatedly generates the Certificate Revocation List (CRL) expiration warning trap
Context	configure system security pki crl-expiration-warning repeat-hours <i>number</i>
Tree	repeat-hours
Range	0 to 8760
Default	0
Units	hours
Introduced	16.0.R1
Platforms	All

est-profile [*name*] *string*

Synopsis	Enter the est-profile list instance
Context	configure system security pki est-profile <i>string</i>
Tree	est-profile
Description	Commands in this context configure an Enrollment over Secure Transport (EST) profile.
Max. Instances	128
Introduced	21.10.R1
Platforms	All

[name] *string*

Synopsis	Enrollment over Secured Transport profile name
Context	configure system security pki est-profile <i>string</i>
Tree	est-profile
Description	This command configures the EST profile name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

check-id-kp-cmcra-only *boolean*

Synopsis	Check id-kp-cmcra in the EST certificate
Context	configure system security pki est-profile <i>string</i> check-id-kp-cmcra-only <i>boolean</i>
Tree	check-id-kp-cmcra-only
Default	false
Introduced	21.10.R1
Platforms	All

client-tls-profile *string*

Synopsis	TLS client profile assigned to applications
Context	configure system security pki est-profile <i>string</i> client-tls-profile <i>string</i>

Tree	client-tls-profile
Description	This command specifies the TLS client profile to be assigned to applications for encryption. The profile creates the TLS connection to the EST server.
String Length	1 to 32
Introduced	21.10.R1
Platforms	All

http-authentication

Synopsis	Enter the http-authentication context
Context	configure system security pki est-profile <i>string</i> http-authentication
Tree	http-authentication
Introduced	21.10.R1
Platforms	All

password *string*

Synopsis	Password for EST authentication
Context	configure system security pki est-profile <i>string</i> http-authentication password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	21.10.R1
Platforms	All

username *string*

Synopsis	Username for the EST authentication
Context	configure system security pki est-profile <i>string</i> http-authentication username <i>string</i>
Tree	username
String Length	1 to 32
Introduced	21.10.R1
Platforms	All

server

Synopsis	Enter the server context
Context	configure system security pki est-profile <i>string</i> server
Tree	server
Description	Commands in this context configure EST server parameters.
Introduced	21.10.R1
Platforms	All

fqdn *string*

Synopsis	Fully Qualified Domain Name (FQDN) of the EST server
Context	configure system security pki est-profile <i>string</i> server fqdn <i>string</i>
Tree	fqdn
Description	This command specifies to use the FQDN of the EST server.
String Length	1 to 255
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	21.10.R1
Platforms	All

ipv4 *string*

Synopsis	IPv4 address of the EST server
Context	configure system security pki est-profile <i>string</i> server ipv4 <i>string</i>
Tree	ipv4
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	21.10.R1
Platforms	All

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IPv6 address of the EST server
Context	configure system security pki est-profile <i>string</i> server ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .

Introduced 21.10.R1
Platforms All

port number

Synopsis Port number of the EST server
Context **configure** [system security pki est-profile](#) *string* [server port number](#)
Tree [port](#)
Range 1 to 65535
Default 443
Introduced 21.10.R1
Platforms All

transmission-profile string

Synopsis Transmission profile name for EST
Context **configure** [system security pki est-profile](#) *string* [transmission-profile](#) *string*
Tree [transmission-profile](#)
Description This command associates a file transmission profile to the EST profile.
The transmission profile defines transport parameters for protocol such as HTTP, include routing instance, source address, timeout value, and so on.
String Length 1 to 32
Introduced 21.10.R1
Platforms All

imported-format keyword

Synopsis The supported encrypted file formats
Context **configure** [system security pki imported-format](#) *keyword*
Tree [imported-format](#)
Default any
Options any, secure
Introduced 16.0.R6
Platforms All

maximum-cert-chain-depth *number*

Synopsis	Maximum depth of certificate chain verification
Context	configure system security pki maximum-cert-chain-depth <i>number</i>
Tree	maximum-cert-chain-depth
Range	1 to 7
Default	7
Introduced	16.0.R1
Platforms	All

python-script

Synopsis	Enter the python-script context
Context	configure system security python-script
Tree	python-script
Introduced	21.10.R1
Platforms	All

authorization

Synopsis	Enter the authorization context
Context	configure system security python-script authorization
Tree	authorization
Introduced	21.10.R1
Platforms	All

cron

Synopsis	Enter the cron context
Context	configure system security python-script authorization cron
Tree	cron
Introduced	21.10.R1
Platforms	All

cli-user reference

Synopsis	User profile name when executing a Python application
Context	configure system security python-script authorization cron cli-user <i>reference</i>
Tree	cli-user
Reference	configure system security user-params local-user user <i>string</i>
Introduced	21.10.R1
Platforms	All

event-handler

Synopsis	Enter the event-handler context
Context	configure system security python-script authorization event-handler
Tree	event-handler
Introduced	21.10.R1
Platforms	All

cli-user reference

Synopsis	User profile name when executing a Python application
Context	configure system security python-script authorization event-handler cli-user <i>reference</i>
Tree	cli-user
Reference	configure system security user-params local-user user <i>string</i>
Introduced	21.10.R1
Platforms	All

snmp

Synopsis	Enter the snmp context
Context	configure system security snmp
Tree	snmp
Introduced	16.0.R1
Platforms	All

access *[group] string context string security-model keyword security-level keyword*

Synopsis	Enter the access list instance
Context	configure system security snmp access string context string security-model keyword security-level keyword
Tree	access
Introduced	16.0.R1
Platforms	All

[group] *string*

Synopsis	Group name
Context	configure system security snmp access string context string security-model keyword security-level keyword
Tree	access
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

context *string*

Synopsis	String against which the context name should match to gain access rights
Context	configure system security snmp access string context string security-model keyword security-level keyword
Tree	access
String Length	0 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

security-model *keyword*

Synopsis	Security model
Context	configure system security snmp access string context string security-model keyword security-level keyword
Tree	access

Options	snmpv1, snmpv2c, usm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

security-level *keyword*

Synopsis	Minimum level of security required to gain the access rights allowed by this entry
Context	configure system security snmp access <i>string</i> context <i>string</i> security-model <i>keyword</i> security-level <i>keyword</i>
Tree	access
Options	no-auth-no-privacy, auth-no-privacy, privacy
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

notify *string*

Synopsis	SNMP view for notification access
Context	configure system security snmp access <i>string</i> context <i>string</i> security-model <i>keyword</i> security-level <i>keyword</i> notify <i>string</i>
Tree	notify
Description	This command specifies the SNMP view used to control which MIB objects can be accessed for notifications.
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

prefix-match *keyword*

Synopsis	Match type for the context
Context	configure system security snmp access <i>string</i> context <i>string</i> security-model <i>keyword</i> security-level <i>keyword</i> prefix-match <i>keyword</i>
Tree	prefix-match
Options	exact, prefix
Introduced	16.0.R1

Platforms All

read string

Synopsis SNMP view for read access

Context **configure** system security snmp access string context string security-model keyword security-level keyword read string

Tree read

Description This command specifies the SNMP view used to control which MIB objects can be accessed using a read (get) operation.

String Length 1 to 32

Introduced 16.0.R1

Platforms All

write string

Synopsis SNMP view for write access

Context **configure** system security snmp access string context string security-model keyword security-level keyword write string

Tree write

Description This command specifies the SNMP view used to control which MIB objects can be accessed using a write (set) operation.

String Length 1 to 32

Introduced 16.0.R1

Platforms All

attempts

Synopsis Enter the **attempts** context

Context **configure** system security snmp attempts

Tree attempts

Introduced 16.0.R1

Platforms All

count *number*

Synopsis	Unsuccessful attempts count allowed within time period
Context	configure system security snmp attempts count <i>number</i>
Tree	count
Range	1 to 64
Default	20
Introduced	16.0.R1
Platforms	All

lockout *number*

Synopsis	Lockout period during which the host cannot log in
Context	configure system security snmp attempts lockout <i>number</i>
Tree	lockout
Range	0 to 1440
Default	10
Units	minutes
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time before host locked out after unsuccessful attempts
Context	configure system security snmp attempts time <i>number</i>
Tree	time
Range	0 to 60
Default	5
Units	minutes
Introduced	16.0.R1
Platforms	All

community [[community-string](#)] *string*

Synopsis	Enter the community list instance
Context	configure system security snmp community <i>string</i>

Tree	community
Introduced	16.0.R1
Platforms	All

[community-string] *string*

Synopsis	SNMPv1 or SNMPv2c community string
Context	configure system security snmp community <i>string</i>
Tree	community
String Length	1 to 114
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

access-permissions *keyword*

Synopsis	Access permissions for objects in the MIB
Context	configure system security snmp community <i>string</i> access-permissions <i>keyword</i>
Tree	access-permissions
Options	r, rw, rwa, mgmt, vpls-mgmt
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

source-access-list *reference*

Synopsis	Source access list to validate received SNMP requests
Context	configure system security snmp community <i>string</i> source-access-list <i>reference</i>
Tree	source-access-list
Reference	configure system security snmp source-access-list <i>string</i>
Introduced	16.0.R1
Platforms	All

version *keyword*

Synopsis	SNMP version
Context	configure system security snmp community <i>string</i> version <i>keyword</i>
Tree	version
Default	both
Options	v1, v2c, both
Introduced	16.0.R1
Platforms	All

source-access-list [[list-name](#)] *string*

Synopsis	Enter the source-access-list list instance
Context	configure system security snmp source-access-list <i>string</i>
Tree	source-access-list
Description	Commands in this context configure SNMP source access lists. SNMP source access lists are used to validate the source IP address of received SNMP requests. Multiple community (VPRN or Base router) and USM community instances can reference the same SNMP source access list.
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[[list-name](#)] *string*

Synopsis	Source access list name
Context	configure system security snmp source-access-list <i>string</i>
Tree	source-access-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source-host [[host-name](#)] *string*

Synopsis	Enter the source-host list instance
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Context	configure system security snmp source-access-list <i>string</i> source-host <i>string</i>
Tree	source-host
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[host-name] *string*

Synopsis	Source host entry name
Context	configure system security snmp source-access-list <i>string</i> source-host <i>string</i>
Tree	source-host
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address entry used to validate SNMP requests
Context	configure system security snmp source-access-list <i>string</i> source-host <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

usm-community [[community-string](#)] *string*

Synopsis	Enter the usm-community list instance
Context	configure system security snmp usm-community <i>string</i>
Tree	usm-community
Introduced	16.0.R1
Platforms	All

[community-string] *string*

Synopsis	Community string associated with SNMPv3 access group
Context	configure system security snmp usm-community <i>string</i>
Tree	usm-community
String Length	1 to 114
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group *string*

Synopsis	Group to manage access rights of the community string
Context	configure system security snmp usm-community <i>string</i> group <i>string</i>
Tree	group
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

source-access-list *reference*

Synopsis	Source access list to validate received SNMP requests
Context	configure system security snmp usm-community <i>string</i> source-access-list <i>reference</i>
Tree	source-access-list
Reference	configure system security snmp source-access-list <i>string</i>
Introduced	16.0.R1
Platforms	All

view [[view-name](#)] *string* [subtree](#) *string*

Synopsis	Enter the view list instance
Context	configure system security snmp view <i>string</i> subtree <i>string</i>
Tree	view
Introduced	16.0.R1
Platforms	All

[view-name] *string*

Synopsis	View name
Context	configure system security snmp view <i>string subtree string</i>
Tree	view
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

subtree *string*

Synopsis	Object Identifier (OID) value
Context	configure system security snmp view <i>string subtree string</i>
Tree	view
String Length	1 to 256
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Mask value as binary value, or hex value
Context	configure system security snmp view <i>string subtree string mask string</i>
Tree	mask
String Length	1 to 16
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Type of SNMP security view mask
Context	configure system security snmp view <i>string subtree string type keyword</i>
Tree	type
Options	included, excluded

Introduced	16.0.R1
Platforms	All

source-address

Synopsis	Enter the source-address context
Context	configure system security source-address
Tree	source-address
Description	<p>Commands in this context configure the IP source address that is used in all unsolicited packets sent by the specified applications.</p> <p>This configuration applies to packets transmitted in-band (for example, a network port on an IOM) and does not apply to packets transmitted out-of-band on the management interface on the CPM Ethernet port. Packets transmitted using the CPM Ethernet port use the address of the CPM Ethernet port as the IP source address in the packet.</p> <p>When a source address is specified for the PTP application, the port-based 1588 hardware timestamping assist function is applied to PTP packets matching the IPv4 address of the router interface used to ingress the SR/ESS or IP address specified in this command. If the IP address is removed, the port-based 1588 hardware timestamping assist function is only applied to PTP packets matching the IPv4 address of the router interface.</p>
Introduced	16.0.R1
Platforms	All

ipv4 [[application](#)] *keyword*

Synopsis	Enter the ipv4 list instance
Context	configure system security source-address ipv4 <i>keyword</i>
Tree	ipv4
Introduced	16.0.R1
Platforms	All

[\[application\]](#) *keyword*

Synopsis	Application that uses the source IP address
Context	configure system security source-address ipv4 <i>keyword</i>
Tree	ipv4
Options	telnet, ftp, ssh, radius, tacplus, snmptrap, syslog, ping, traceroute, dns, sntp, ntp, cflowd, ptp, mcreporter, sflow, icmp-error, ldap

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source IPv4 address
Context	configure system security source-address ipv4 keyword address string
Tree	address
Notes	The following elements are part of a mandatory choice: address or interface-name .
Introduced	16.0.R1
Platforms	All

interface-name string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP interface name
Context	configure system security source-address ipv4 keyword interface-name string
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: address or interface-name .
Introduced	16.0.R1
Platforms	All

ipv6 [application] keyword

Synopsis	Enter the ipv6 list instance
Context	configure system security source-address ipv6 keyword
Tree	ipv6

Introduced 16.0.R1
Platforms All

[**application**] *keyword*

Synopsis Application which uses the source IPv6 address
Context **configure system security source-address ipv6 keyword**
Tree [ipv6](#)
Options telnet, ftp, radius, tacplus, snmptrap, syslog, ping, traceroute, dns, cflowd, ntp, sflow, icmp6-error, ldap
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

address string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Source IPv6 address
Context **configure system security source-address ipv6 keyword address string**
Tree [address](#)
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

ssh

Synopsis Enter the **ssh** context
Context **configure system security ssh**
Tree [ssh](#)
Introduced 16.0.R1
Platforms All

client-cipher-list-v2

Synopsis	Enter the client-cipher-list-v2 context
Context	configure system security ssh client-cipher-list-v2
Tree	client-cipher-list-v2
Introduced	16.0.R1
Platforms	All

cipher [[index](#)] *number*

Synopsis	Enter the cipher list instance
Context	configure system security ssh client-cipher-list-v2 cipher <i>number</i>
Tree	cipher
Description	Commands in this context configure a client-cipher instance. Client-ciphers are used when the SR OS is acting as an SSH client.
Introduced	16.0.R1
Platforms	All

[\[index\]](#) *number*

Synopsis	Cipher index in the list
Context	configure system security ssh client-cipher-list-v2 cipher <i>number</i>
Tree	cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	Algorithm for performing encryption or decryption
Context	configure system security ssh client-cipher-list-v2 cipher <i>number</i> name <i>keyword</i>
Tree	name
Options	3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

client-kex-list-v2

Synopsis Enter the **client-kex-list-v2** context
 Context **configure system security ssh client-kex-list-v2**
 Tree [client-kex-list-v2](#)
 Introduced 19.10.R3
 Platforms All

kex [[index](#)] *number*

Synopsis Enter the **kex** list instance
 Context **configure system security ssh client-kex-list-v2 kex number**
 Tree [kex](#)
 Description Commands in this context configure SSH Key Exchange (KEX) algorithms for SR OS as a client.
 If a list is configured, SSH uses the list with the first-listed algorithm having the highest priority.
 By default, the client list is empty. The default list contains the following:

- diffie-hellman-group16-sha512
- diffie-hellman-group14-sha256
- diffie-hellman-group14-sha1
- diffie-hellman-group1-sha1

 Introduced 19.10.R3
 Platforms All

[index] *number*

Synopsis SSHv2 KEX algorithm index
 Context **configure system security ssh client-kex-list-v2 kex number**
 Tree [kex](#)
 Description This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list.
 Range 1 to 255

Notes	This element is part of a list key.
Introduced	19.10.R3
Platforms	All

name *keyword*

Synopsis	KEX algorithm for computing a shared secret key
Context	configure system security ssh client-kex-list-v2 kex <i>number</i> name <i>keyword</i>
Tree	name
Options	diffie-hellman-group1-sha1, diffie-hellman-group14-sha1, diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256, diffie-hellman-group16-sha512
Notes	This element is mandatory.
Introduced	19.10.R3
Platforms	All

client-mac-list-v2

Synopsis	Enter the client-mac-list-v2 context
Context	configure system security ssh client-mac-list-v2
Tree	client-mac-list-v2
Introduced	16.0.R1
Platforms	All

mac [[index](#)] *number*

Synopsis	Enter the mac list instance
Context	configure system security ssh client-mac-list-v2 mac <i>number</i>
Tree	mac
Description	Commands in this context configure SSH MAC algorithms for SR OS as a client.
Introduced	16.0.R1
Platforms	All

[index] *number*

Synopsis	MAC algorithm index
----------	---------------------

Context	configure system security ssh client-mac-list-v2 mac number
Tree	mac
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

name keyword

Synopsis	Algorithm for calculating message authentication code
Context	configure system security ssh client-mac-list-v2 mac number name keyword
Tree	name
Options	hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

key-re-exchange

Synopsis	Enter the key-re-exchange context
Context	configure system security ssh key-re-exchange
Tree	key-re-exchange
Introduced	16.0.R1
Platforms	All

client

Synopsis	Enter the client context
Context	configure system security ssh key-re-exchange client
Tree	client
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the key re-exchange
Context	configure system security ssh key-re-exchange client admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

mbytes (*number* | *keyword*)

Synopsis	Maximum bytes transmitted before key re-exchange begins
Context	configure system security ssh key-re-exchange client mbytes (<i>number</i> <i>keyword</i>)
Tree	mbytes
Range	1 to 64000
Default	1024
Units	megabytes
Options	infinite
Introduced	16.0.R1
Platforms	All

minutes (*number* | *keyword*)

Synopsis	Maximum time before key re-exchange is initiated
Context	configure system security ssh key-re-exchange client minutes (<i>number</i> <i>keyword</i>)
Tree	minutes
Range	1 to 1440
Default	60
Units	minutes
Options	infinite
Introduced	16.0.R1
Platforms	All

server

Synopsis	Enter the server context
Context	configure system security ssh key-re-exchange server
Tree	server
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the key re-exchange
Context	configure system security ssh key-re-exchange server admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

mbytes (*number* | *keyword*)

Synopsis	Maximum bytes transmitted before key re-exchange begins
Context	configure system security ssh key-re-exchange server mbytes (<i>number</i> <i>keyword</i>)
Tree	mbytes
Range	1 to 64000
Default	1024
Units	megabytes
Options	infinite
Introduced	16.0.R1
Platforms	All

minutes (*number* | *keyword*)

Synopsis	Maximum time before key re-exchange is initiated
Context	configure system security ssh key-re-exchange server minutes (<i>number</i> <i>keyword</i>)
Tree	minutes
Range	1 to 1440

Default	60
Units	minutes
Options	infinite
Introduced	16.0.R1
Platforms	All

permit-empty-passwords *boolean*

Synopsis	Permit users with empty password strings to log in
Context	configure system security ssh permit-empty-passwords <i>boolean</i>
Tree	permit-empty-passwords
Default	true
Introduced	22.10.R1
Platforms	All

preserve-key *boolean*

Synopsis	Preserve keys and restore on system or server restart
Context	configure system security ssh preserve-key <i>boolean</i>
Tree	preserve-key
Description	When configured to true , private, public, and host keys are saved by the server. The keys are restored following a system reboot or a restart of an SSH server. When configured to false , the keys are held in memory by an SSH server but are not restored following a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

server-admin-state *keyword*

Synopsis	Administrative state of the SSH server
Context	configure system security ssh server-admin-state <i>keyword</i>
Tree	server-admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

server-cipher-list-v2

Synopsis Enter the **server-cipher-list-v2** context
Context **configure system security ssh server-cipher-list-v2**
Tree [server-cipher-list-v2](#)
Introduced 16.0.R1
Platforms All

cipher [[index](#)] *number*

Synopsis Enter the **cipher** list instance
Context **configure system security ssh server-cipher-list-v2 cipher *number***
Tree [cipher](#)
Description Commands in this context configure a server-cipher instance. Server-ciphers are used when SR OS is acting as an SSH server.
Introduced 16.0.R1
Platforms All

[\[index\]](#) *number*

Synopsis Cipher index in the list
Context **configure system security ssh server-cipher-list-v2 cipher *number***
Tree [cipher](#)
Range 1 to 255
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

name *keyword*

Synopsis Algorithm for performing encryption or decryption
Context **configure system security ssh server-cipher-list-v2 cipher *number* **name** *keyword***
Tree [name](#)

Options	3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

server-kex-list-v2

Synopsis	Enter the server-kex-list-v2 context
Context	configure system security ssh server-kex-list-v2
Tree	server-kex-list-v2
Introduced	19.10.R3
Platforms	All

kex [[index](#)] *number*

Synopsis	Enter the kex list instance
Context	configure system security ssh server-kex-list-v2 kex <i>number</i>
Tree	kex
Introduced	19.10.R3
Platforms	All

[\[index\]](#) *number*

Synopsis	SSHv2 KEX algorithm index
Context	configure system security ssh server-kex-list-v2 kex <i>number</i>
Tree	kex
Description	This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list.
Range	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R3
Platforms	All

name *keyword*

Synopsis	KEX algorithm for computing a shared secret key
Context	configure system security ssh server-kex-list-v2 kex <i>number</i> name <i>keyword</i>
Tree	name
Options	diffie-hellman-group1-sha1, diffie-hellman-group14-sha1, diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256, diffie-hellman-group16-sha512
Notes	This element is mandatory.
Introduced	19.10.R3
Platforms	All

server-mac-list-v2

Synopsis	Enter the server-mac-list-v2 context
Context	configure system security ssh server-mac-list-v2
Tree	server-mac-list-v2
Introduced	16.0.R1
Platforms	All

mac [[index](#)] *number*

Synopsis	Enter the mac list instance
Context	configure system security ssh server-mac-list-v2 mac <i>number</i>
Tree	mac
Introduced	16.0.R1
Platforms	All

[[index](#)] *number*

Synopsis	MAC algorithm index
Context	configure system security ssh server-mac-list-v2 mac <i>number</i>
Tree	mac
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

name *keyword*

Synopsis Algorithm for calculating message authentication code

Context **configure** [system](#) [security](#) [ssh](#) [server-mac-list-v2](#) [mac](#) *number* [name](#) *keyword*

Tree [name](#)

Options hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

system-passwords

Synopsis Enter the **system-passwords** context

Context **configure** [system](#) [security](#) [system-passwords](#)

Tree [system-passwords](#)

Description This command enters the context to configure system passwords.

Introduced 16.0.R1

Platforms All

admin-password *string*

Synopsis Context to configure system passwords

Context **configure** [system](#) [security](#) [system-passwords](#) [admin-password](#) *string*

Tree [admin-password](#)

Description This command allows a user with administrative permissions to configure a password that enables a user to become an administrator.

This password is valid only for one session. When enabled, no authorization to TACACS + or RADIUS is performed and the user is locally regarded as an administrative user.

If the **admin-password** is configured in the **configure system security system-passwords admin-password** context, then any user can enter the special mode by entering the **enable** command.

enable is in the default profile. By default, all users are given access to this command.

After the **enable** command is entered, the user is prompted for a password. If the password matches, user is given unrestricted access to all commands.

The minimum length of the password is determined by the **minimum-length** command. The complexity requirements for the password are determined by the **complexity** command.

Note: This command applies to a local user, in addition to users on RADIUS, TACACS, and LDAP.

String Length	3 to 136
Introduced	16.0.R1
Platforms	All

vsd-password *string*

Synopsis	Password that allows the user to assign VSD services
Context	configure system security system-passwords vsd-password <i>string</i>
Tree	vsd-password
Description	This command configures the password required to access the classic CLI enable-vsd-config mode. The enable-vsd-config mode allows editing of services provisioned by the VSD in fully dynamic mode (or by the tools perform service vsd evaluate-script command).
String Length	3 to 136
Introduced	16.0.R1
Platforms	All

tech-support

Synopsis	Enter the tech-support context
Context	configure system security tech-support
Tree	tech-support
Introduced	16.0.R1
Platforms	All

ts-location (*ts-sat-url* | *cflash-url* | *string*)

Synopsis	Default file path for generated tech-support files
Context	configure system security tech-support ts-location (<i>ts-sat-url</i> <i>cflash-url</i> <i>string</i>)
Tree	ts-location
String Length	1 to 180
Introduced	16.0.R1

Platforms All

telnet-server *boolean*

Synopsis Enable Telnet servers running on the system
Context **configure** [system](#) [security](#) [telnet-server](#) *boolean*
Tree [telnet-server](#)
Default false
Introduced 16.0.R1
Platforms All

telnet6-server *boolean*

Synopsis Enable Telnet IPv6 servers running on the system
Context **configure** [system](#) [security](#) [telnet6-server](#) *boolean*
Tree [telnet6-server](#)
Default false
Introduced 16.0.R1
Platforms All

tls

Synopsis Enter the **tls** context
Context **configure** [system](#) [security](#) [tls](#)
Tree [tls](#)
Introduced 16.0.R1
Platforms All

cert-profile [[cert-profile-name](#)] *string*

Synopsis Enter the **cert-profile** list instance
Context **configure** [system](#) [security](#) [tls](#) [cert-profile](#) *string*
Tree [cert-profile](#)
Max. Instances 16
Introduced 16.0.R1

Platforms All

[cert-profile-name] *string*

Synopsis TLS certificate profile name
Context **configure** [system](#) [security](#) [tls](#) [cert-profile](#) *string*
Tree [cert-profile](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the certificate profile
Context **configure** [system](#) [security](#) [tls](#) [cert-profile](#) *string* **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance
Context **configure** [system](#) [security](#) [tls](#) [cert-profile](#) *string* **entry** *number*
Tree [entry](#)
Max. Instances 8
Introduced 16.0.R1
Platforms All

[entry-id] *number*

Synopsis Certificate profile ID

Context	configure system security tls cert-profile <i>string entry number</i>
Tree	entry
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

certificate-file *string*

Synopsis	Certificate file name
Context	configure system security tls cert-profile <i>string entry number certificate-file string</i>
Tree	certificate-file
String Length	1 to 95
Introduced	16.0.R1
Platforms	All

key-file *string*

Synopsis	Key file name
Context	configure system security tls cert-profile <i>string entry number key-file string</i>
Tree	key-file
String Length	1 to 95
Introduced	16.0.R1
Platforms	All

send-chain

Synopsis	Enter the send-chain context
Context	configure system security tls cert-profile <i>string entry number send-chain</i>
Tree	send-chain
Introduced	16.0.R1
Platforms	All

ca-profile [[ca-profile-name](#)] *reference*

Synopsis	Add a list entry for ca-profile
Context	configure system security tls cert-profile <i>string</i> entry <i>number</i> send-chain ca-profile <i>reference</i>
Tree	ca-profile
Max. Instances	7
Introduced	16.0.R1
Platforms	All

[ca-profile-name] *reference*

Synopsis	CA profile name
Context	configure system security tls cert-profile <i>string</i> entry <i>number</i> send-chain ca-profile <i>reference</i>
Tree	ca-profile
Reference	configure system security pki ca-profile <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

client-cipher-list [[client-cipher-list-name](#)] *string*

Synopsis	Enter the client-cipher-list list instance
Context	configure system security tls client-cipher-list <i>string</i>
Tree	client-cipher-list
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[client-cipher-list-name] *string*

Synopsis	Client cipher list name
Context	configure system security tls client-cipher-list <i>string</i>
Tree	client-cipher-list

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

tls12-cipher [[index](#)] *number*

Synopsis	Enter the tls12-cipher list instance
Context	configure system security tls client-cipher-list <i>string</i> tls12-cipher <i>number</i>
Tree	tls12-cipher
Introduced	22.2.R1
Platforms	All

[index] *number*

Synopsis	Index of the cipher
Context	configure system security tls client-cipher-list <i>string</i> tls12-cipher <i>number</i>
Tree	tls12-cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

name *keyword*

Synopsis	Cipher suite code
Context	configure system security tls client-cipher-list <i>string</i> tls12-cipher <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-rsa-with3des-edc-cbc-sha, tls-rsa-with-aes128-cbc-sha, tls-rsa-with-aes256-cbc-sha, tls-rsa-with-aes128-cbc-sha256, tls-rsa-with-aes256-cbc-sha256, tls-rsa-with-aes128-gcm-sha256, tls-rsa-with-aes256-gcm-sha384
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	All

tls13-cipher [[index](#)] *number*

Synopsis	Enter the tls13-cipher list instance
Context	configure system security tls client-cipher-list <i>string</i> tls13-cipher <i>number</i>
Tree	tls13-cipher
Description	Commands in this context configure the TLS 1.3-supported ciphers used by the client.
Introduced	22.7.R1
Platforms	All

[index] *number*

Synopsis	Index number of the TLS 1.3 cipher
Context	configure system security tls client-cipher-list <i>string</i> tls13-cipher <i>number</i>
Tree	tls13-cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

name *keyword*

Synopsis	Name of the TLS 1.3 cipher suite code
Context	configure system security tls client-cipher-list <i>string</i> tls13-cipher <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-aes256-gcm-sha384, tls-aes128-gcm-sha256, tls-chacha20-poly1305-sha256, tls-aes128-ccm8-sha256, tls-aes128-ccm-sha256
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

client-group-list [[client-group-list-name](#)] *string*

Synopsis	Enter the client-group-list list instance
Context	configure system security tls client-group-list <i>string</i>
Tree	client-group-list

Description	Commands in this context configure the list of TLS 1.3-supported group suite codes that the client sends in a client Hello message.
Max. Instances	16
Introduced	22.7.R1
Platforms	All

[client-group-list-name] *string*

Synopsis	Name of the TLS client group list
Context	configure system security tls client-group-list <i>string</i>
Tree	client-group-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

tls13-group [[index](#)] *number*

Synopsis	Enter the tls13-group list instance
Context	configure system security tls client-group-list <i>string</i> tls13-group <i>number</i>
Tree	tls13-group
Description	Commands in this context configure the TLS 1.3-supported group suite codes sent by the client in its Hello messages. SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups.
Introduced	22.7.R1
Platforms	All

[index] *number*

Synopsis	Index number of the TLS 1.3 group
Context	configure system security tls client-group-list <i>string</i> tls13-group <i>number</i>
Tree	tls13-group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1

Platforms All

name *keyword*

Synopsis Name of the TLS 1.3 group suite code
Context **configure** [system](#) [security](#) [tls](#) [client-group-list](#) *string* [tls13-group](#) *number* [name](#) *keyword*
Tree [name](#)
Options [tls-ecdhe-256](#), [tls-ecdhe-384](#), [tls-ecdhe-521](#), [tls-x25519](#), [tls-x448](#)
Notes This element is mandatory.
Introduced 22.7.R1
Platforms All

client-signature-list [[client-signature-list-name](#)] *string*

Synopsis Enter the **client-signature-list** list instance
Context **configure** [system](#) [security](#) [tls](#) [client-signature-list](#) *string*
Tree [client-signature-list](#)
Description Commands in this context configure the list of TLS 1.3-supported signature suite codes that the client sends in a client Hello message.
Max. Instances 16
Introduced 22.7.R1
Platforms All

[client-signature-list-name] *string*

Synopsis Name of the TLS 1.3 client signature list
Context **configure** [system](#) [security](#) [tls](#) [client-signature-list](#) *string*
Tree [client-signature-list](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 22.7.R1
Platforms All

tls13-signature [[index](#)] *number*

Synopsis	Enter the tls13-signature list instance
Context	configure system security tls client-signature-list <i>string</i> tls13-signature <i>number</i>
Tree	tls13-signature
Description	Commands in this context configure the TLS 1.3-supported signature suite codes sent by the client in its Hello messages.
Introduced	22.7.R1
Platforms	All

[index] *number*

Synopsis	Index number of the TLS 1.3 signature
Context	configure system security tls client-signature-list <i>string</i> tls13-signature <i>number</i>
Tree	tls13-signature
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

name *keyword*

Synopsis	Name of the TLS 1.3 signature suite code
Context	configure system security tls client-signature-list <i>string</i> tls13-signature <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-rsa-pkcs1-sha256, tls-ecdsa-secp256r1-sha256, tls-rsa-pkcs1-sha384, tls-ecdsa-secp384r1-sha384, tls-rsa-pkcs1-sha512, tls-ecdsa-secp521r1-sha512, tls-rsa-pss-rsae-sha256, tls-rsa-pss-rsae-sha384, tls-rsa-pss-rsae-sha512, tls-ed25519, tls-ed448, tls-rsa-pss-pss-sha256, tls-rsa-pss-pss-sha384, tls-rsa-pss-pss-sha512
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

client-tls-profile [[client-profile-name](#)] *string*

Synopsis	Enter the client-tls-profile list instance
----------	---

Context	configure system security tls client-tls-profile <i>string</i>
Tree	client-tls-profile
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[client-profile-name] *string*

Synopsis	Client TLS profile name
Context	configure system security tls client-tls-profile <i>string</i>
Tree	client-tls-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the client TLS profile
Context	configure system security tls client-tls-profile <i>string admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

cert-profile *reference*

Synopsis	Certificate profile ID
Context	configure system security tls client-tls-profile <i>string cert-profile</i> <i>reference</i>
Tree	cert-profile
Reference	configure system security tls cert-profile <i>string</i>
Introduced	16.0.R1
Platforms	All

cipher-list *reference*

Synopsis	Cipher list for negotiation in the client Hello message
Context	configure system security tls client-tls-profile <i>string</i> cipher-list <i>reference</i>
Tree	cipher-list
Reference	configure system security tls client-cipher-list <i>string</i>
Introduced	16.0.R1
Platforms	All

group-list *reference*

Synopsis	Name of the list of supported group suite codes
Context	configure system security tls client-tls-profile <i>string</i> group-list <i>reference</i>
Tree	group-list
Description	This command assigns an existing TLS 1.3 group list to the TLS client profile.
Reference	configure system security tls client-group-list <i>string</i>
Introduced	22.7.R1
Platforms	All

protocol-version *keyword*

Synopsis	TLS protocol version used by the TLS client profile
Context	configure system security tls client-tls-profile <i>string</i> protocol-version <i>keyword</i>
Tree	protocol-version
Description	This command configures the TLS version to be negotiated between the client and the server. The client adds the specified version as a supported version in its Hello message to the server.
Default	tls-version-12
Options	tls-version-all, tls-version-12, tls-version-13
Introduced	22.7.R1
Platforms	All

signature-list *reference*

Synopsis	Name of the list of supported signature suite codes
Context	configure system security tls client-tls-profile <i>string</i> signature-list <i>reference</i>
Tree	signature-list
Description	This command assigns an existing TLS 1.3 signature list to the TLS client profile.
Reference	configure system security tls client-signature-list <i>string</i>
Introduced	22.7.R1
Platforms	All

trust-anchor-profile *reference*

Synopsis	Trust anchor profile
Context	configure system security tls client-tls-profile <i>string</i> trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure system security tls trust-anchor-profile <i>string</i>
Introduced	16.0.R1
Platforms	All

server-cipher-list [[server-cipher-list-name](#)] *string*

Synopsis	Enter the server-cipher-list list instance
Context	configure system security tls server-cipher-list <i>string</i>
Tree	server-cipher-list
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[[server-cipher-list-name](#)] *string*

Synopsis	Server cipher list name
Context	configure system security tls server-cipher-list <i>string</i>
Tree	server-cipher-list
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

tls12-cipher [[index](#)] *number*

Synopsis Enter the **tls12-cipher** list instance
Context **configure** [system security tls server-cipher-list](#) *string* [tls12-cipher](#) *number*
Tree [tls12-cipher](#)
Introduced 22.2.R1
Platforms All

[index] *number*

Synopsis Index of the cipher
Context **configure** [system security tls server-cipher-list](#) *string* [tls12-cipher](#) *number*
Tree [tls12-cipher](#)
Range 1 to 255
Notes This element is part of a list key.
Introduced 22.2.R1
Platforms All

name *keyword*

Synopsis Cipher suite code
Context **configure** [system security tls server-cipher-list](#) *string* [tls12-cipher](#) *number* *name* *keyword*
Tree [name](#)
Options [tls-rsa-with3des-edc-cbc-sha](#), [tls-rsa-with-aes128-cbc-sha](#), [tls-rsa-with-aes256-cbc-sha](#),
[tls-rsa-with-aes128-cbc-sha256](#), [tls-rsa-with-aes256-cbc-sha256](#),
[tls-rsa-with-aes128-gcm-sha256](#), [tls-rsa-with-aes256-gcm-sha384](#)
Notes This element is mandatory.
Introduced 22.2.R1
Platforms All

tls13-cipher [[index](#)] *number*

Synopsis	Enter the tls13-cipher list instance
Context	configure system security tls server-cipher-list <i>string</i> tls13-cipher <i>number</i>
Tree	tls13-cipher
Description	Commands in this context configure the TLS 1.3-supported ciphers used by the server.
Introduced	22.7.R1
Platforms	All

[index] *number*

Synopsis	Index number of the TLS 1.3 cipher
Context	configure system security tls server-cipher-list <i>string</i> tls13-cipher <i>number</i>
Tree	tls13-cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

name *keyword*

Synopsis	Name of the TLS 1.3 cipher suite code
Context	configure system security tls server-cipher-list <i>string</i> tls13-cipher <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-aes256-gcm-sha384, tls-aes128-gcm-sha256, tls-chacha20-poly1305-sha256, tls-aes128-ccm8-sha256, tls-aes128-ccm-sha256
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

server-group-list [[server-group-list-name](#)] *string*

Synopsis	Enter the server-group-list list instance
Context	configure system security tls server-group-list <i>string</i>
Tree	server-group-list

Description	Commands in this context configure the list of TLS 1.3-supported group suite codes that the server sends in a server Hello message.
Max. Instances	16
Introduced	22.7.R1
Platforms	All

[server-group-list-name] *string*

Synopsis	Name of the TLS server group list
Context	configure system security tls server-group-list <i>string</i>
Tree	server-group-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

tls13-group [[index](#)] *number*

Synopsis	Enter the tls13-group list instance
Context	configure system security tls server-group-list <i>string</i> tls13-group <i>number</i>
Tree	tls13-group
Description	Commands in this context configure the TLS 1.3-supported group suite codes sent by the server in its Hello messages. SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups.
Introduced	22.7.R1
Platforms	All

[index] *number*

Synopsis	Index number of the TLS 1.3 group
Context	configure system security tls server-group-list <i>string</i> tls13-group <i>number</i>
Tree	tls13-group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1

Platforms All

name *keyword*

Synopsis Name of the TLS 1.3 group suite code
Context **configure** [system](#) [security](#) [tls](#) [server-group-list](#) *string* [tls13-group](#) *number* **name** *keyword*
Tree [name](#)
Options [tls-ecdh-256](#), [tls-ecdh-384](#), [tls-ecdh-521](#), [tls-x25519](#), [tls-x448](#)
Notes This element is mandatory.
Introduced 22.7.R1
Platforms All

server-signature-list [[server-signature-list-name](#)] *string*

Synopsis Enter the **server-signature-list** list instance
Context **configure** [system](#) [security](#) [tls](#) [server-signature-list](#) *string*
Tree [server-signature-list](#)
Description Commands in this context configure the list of TLS 1.3-supported signature suite codes for the digital signature that the server sends in a server Hello message.
Max. Instances 16
Introduced 22.7.R1
Platforms All

[server-signature-list-name] *string*

Synopsis Name of the TLS 1.3 server signature list
Context **configure** [system](#) [security](#) [tls](#) [server-signature-list](#) *string*
Tree [server-signature-list](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 22.7.R1
Platforms All

tls13-signature [[index](#)] *number*

Synopsis	Enter the tls13-signature list instance
Context	configure system security tls server-signature-list <i>string</i> tls13-signature <i>number</i>
Tree	tls13-signature
Description	Commands in this context configure the TLS 1.3-supported signature suite codes sent by the server in its Hello messages.
Introduced	22.7.R1
Platforms	All

[index] *number*

Synopsis	Index number of the TLS 1.3 signature
Context	configure system security tls server-signature-list <i>string</i> tls13-signature <i>number</i>
Tree	tls13-signature
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

name *keyword*

Synopsis	Name of the TLS 1.3 signature suite code
Context	configure system security tls server-signature-list <i>string</i> tls13-signature <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-rsa-pkcs1-sha256, tls-ecdsa-secp256r1-sha256, tls-rsa-pkcs1-sha384, tls-ecdsa-secp384r1-sha384, tls-rsa-pkcs1-sha512, tls-ecdsa-secp521r1-sha512, tls-rsa-pss-rsae-sha256, tls-rsa-pss-rsae-sha384, tls-rsa-pss-rsae-sha512, tls-ed25519, tls-ed448, tls-rsa-pss-pss-sha256, tls-rsa-pss-pss-sha384, tls-rsa-pss-pss-sha512
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

server-tls-profile [[server-profile-name](#)] *string*

Synopsis	Enter the server-tls-profile list instance
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Context	configure system security tls server-tls-profile <i>string</i>
Tree	server-tls-profile
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[server-profile-name] *string*

Synopsis	TLS server profile name
Context	configure system security tls server-tls-profile <i>string</i>
Tree	server-tls-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the server TLS profile
Context	configure system security tls server-tls-profile <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authenticate-client

Synopsis	Enter the authenticate-client context
Context	configure system security tls server-tls-profile <i>string</i> authenticate-client
Tree	authenticate-client
Introduced	16.0.R1
Platforms	All

common-name-list *reference*

Synopsis	Common name list for client certificate authentication
Context	configure system security tls server-tls-profile <i>string</i> authenticate-client common-name-list <i>reference</i>
Tree	common-name-list
Reference	configure system security pki common-name-list <i>string</i>
Introduced	16.0.R1
Platforms	All

trust-anchor-profile *reference*

Synopsis	Trust anchor profile for client authentication
Context	configure system security tls server-tls-profile <i>string</i> authenticate-client trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure system security tls trust-anchor-profile <i>string</i>
Introduced	16.0.R1
Platforms	All

cert-profile *reference*

Synopsis	Certificate profile ID
Context	configure system security tls server-tls-profile <i>string</i> cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure system security tls cert-profile <i>string</i>
Introduced	16.0.R1
Platforms	All

cipher-list *reference*

Synopsis	Cipher list used by the TLS server profile
Context	configure system security tls server-tls-profile <i>string</i> cipher-list <i>reference</i>
Tree	cipher-list
Reference	configure system security tls server-cipher-list <i>string</i>
Introduced	16.0.R1

Platforms All

group-list *reference*

Synopsis Name of the list of supported group suite codes

Context **configure** [system](#) [security](#) [tls](#) [server-tls-profile](#) *string* [group-list](#) *reference*

Tree [group-list](#)

Description This command assigns an existing TLS 1.3 group list to the TLS server profile.

Reference **configure** [system](#) [security](#) [tls](#) [server-group-list](#) *string*

Introduced 22.7.R1

Platforms All

protocol-version *keyword*

Synopsis TLS protocol version used by the TLS server profile

Context **configure** [system](#) [security](#) [tls](#) [server-tls-profile](#) *string* [protocol-version](#) *keyword*

Tree [protocol-version](#)

Description This command configures the TLS version to be negotiated between the server and the client.
The server adds the specified version as a supported version in its Hello message to the client.

Default [tls-version-12](#)

Options [tls-version-all](#), [tls-version-12](#), [tls-version-13](#)

Introduced 22.7.R1

Platforms All

signature-list *reference*

Synopsis Name of the list of supported signature suite codes

Context **configure** [system](#) [security](#) [tls](#) [server-tls-profile](#) *string* [signature-list](#) *reference*

Tree [signature-list](#)

Description This command assigns an existing TLS 1.3 signature list to the TLS server profile.

Reference **configure** [system](#) [security](#) [tls](#) [server-signature-list](#) *string*

Introduced 22.7.R1

Platforms All

tls-re-negotiate-timer *number*

Synopsis	TLS HELLO request timer
Context	configure system security tls server-tls-profile <i>string</i> tls-re-negotiate-timer <i>number</i>
Tree	tls-re-negotiate-timer
Range	0 to 65000
Default	0
Units	minutes
Introduced	16.0.R1
Platforms	All

trust-anchor-profile [[trust-anchor-profile-name](#)] *string*

Synopsis	Enter the trust-anchor-profile list instance
Context	configure system security tls trust-anchor-profile <i>string</i>
Tree	trust-anchor-profile
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[[trust-anchor-profile-name](#)] *string*

Synopsis	Trust anchor profile name
Context	configure system security tls trust-anchor-profile <i>string</i>
Tree	trust-anchor-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

trust-anchor [[ca-profile-name](#)] *reference*

Synopsis	Add a list entry for trust-anchor
Context	configure system security tls trust-anchor-profile <i>string</i> trust-anchor <i>reference</i>

Tree	trust-anchor
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[ca-profile-name] *reference*

Synopsis	Trusted CA profile name
Context	configure system security tls trust-anchor-profile <i>string</i> trust-anchor <i>reference</i>
Tree	trust-anchor
Reference	configure system security pki ca-profile <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

user-params

Synopsis	Enter the user-params context
Context	configure system security user-params
Tree	user-params
Introduced	16.0.R1
Platforms	All

attempts

Synopsis	Enter the attempts context
Context	configure system security user-params attempts
Tree	attempts
Introduced	16.0.R1
Platforms	All

count *number*

Synopsis	Number of unsuccessful login attempts
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Context	configure system security user-params attempts count <i>number</i>
Tree	count
Range	1 to 64
Default	3
Introduced	16.0.R1
Platforms	All

lockout *number*

Synopsis	Lockout period after unsuccessful login attempts
Context	configure system security user-params attempts lockout <i>number</i>
Tree	lockout
Range	0 to 1440
Default	10
Units	minutes
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time frame of unsuccessful login attempts
Context	configure system security user-params attempts time <i>number</i>
Tree	time
Range	0 to 60
Default	5
Units	minutes
Introduced	16.0.R1
Platforms	All

authentication-order

Synopsis	Enter the authentication-order context
Context	configure system security user-params authentication-order
Tree	authentication-order
Introduced	16.0.R1

Platforms All

exit-on-reject *boolean*

Synopsis Ignore subsequent AAA methods after a reject
Context **configure** [system](#) [security](#) [user-params](#) [authentication-order](#) **exit-on-reject** *boolean*
Tree [exit-on-reject](#)
Default false
Introduced 16.0.R1
Platforms All

order *keyword*

Synopsis Preferred order of password authentication
Context **configure** [system](#) [security](#) [user-params](#) [authentication-order](#) **order** *keyword*
Tree [order](#)
Options local, radius, tacplus, ldap
Max. Instances 4
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms All

local-user

Synopsis Enter the **local-user** context
Context **configure** [system](#) [security](#) [user-params](#) **local-user**
Tree [local-user](#)
Introduced 16.0.R1
Platforms All

password

Synopsis Enter the **password** context
Context **configure** [system](#) [security](#) [user-params](#) **local-user** **password**

Tree	password
Introduced	16.0.R1
Platforms	All

aging *number*

Synopsis	Maximum time during which a user password is valid
Context	configure system security user-params local-user password <i>aging</i> <i>number</i>
Tree	aging
Range	1 to 500
Units	days
Introduced	16.0.R1
Platforms	All

complexity-rules

Synopsis	Enter the complexity-rules context
Context	configure system security user-params local-user password complexity-rules
Tree	complexity-rules
Introduced	16.0.R1
Platforms	All

allow-user-name *boolean*

Synopsis	Allow the username to be used as part of the password
Context	configure system security user-params local-user password complexity-rules allow-user-name <i>boolean</i>
Tree	allow-user-name
Default	false
Introduced	16.0.R1
Platforms	All

credits

Synopsis	Enter the credits context
Context	configure system security user-params local-user password complexity-rules credits

Tree	credits
Notes	The following elements are part of a choice: credits or required .
Introduced	16.0.R1
Platforms	All

lowercase number

Synopsis	Maximum credits for the use of lowercase letters
Context	configure system security user-params local-user password complexity-rules credits lowercase <i>number</i>
Tree	lowercase
Range	1 to 10
Introduced	16.0.R1
Platforms	All

numeric number

Synopsis	Maximum credits for the use of numeric characters
Context	configure system security user-params local-user password complexity-rules credits numeric <i>number</i>
Tree	numeric
Range	1 to 10
Introduced	16.0.R1
Platforms	All

special-character number

Synopsis	Maximum credits for the use of special characters
Context	configure system security user-params local-user password complexity-rules credits special-character <i>number</i>
Tree	special-character
Range	1 to 10
Introduced	16.0.R1
Platforms	All

uppercase *number*

Synopsis	Maximum credits for the use of uppercase letters
Context	configure system security user-params local-user password complexity-rules credits uppercase <i>number</i>
Tree	uppercase
Range	1 to 10
Introduced	16.0.R1
Platforms	All

minimum-classes *number*

Synopsis	Minimum number of different character classes to use
Context	configure system security user-params local-user password complexity-rules minimum-classes <i>number</i>
Tree	minimum-classes
Range	2 to 4
Introduced	16.0.R1
Platforms	All

minimum-length *number*

Synopsis	Minimum length required for local passwords
Context	configure system security user-params local-user password complexity-rules minimum-length <i>number</i>
Tree	minimum-length
Range	6 to 50
Default	6
Introduced	16.0.R1
Platforms	All

repeated-characters *number*

Synopsis	Number of times same character can repeat consecutively
Context	configure system security user-params local-user password complexity-rules repeated-characters <i>number</i>
Tree	repeated-characters

Range	2 to 8
Introduced	16.0.R1
Platforms	All

required

Synopsis	Enter the required context
Context	configure system security user-params local-user password complexity-rules required
Tree	required
Notes	The following elements are part of a choice: credits or required .
Introduced	16.0.R1
Platforms	All

lowercase number

Synopsis	Number of lowercase letters required
Context	configure system security user-params local-user password complexity-rules required lowercase <i>number</i>
Tree	lowercase
Range	1 to 10
Introduced	16.0.R1
Platforms	All

numeric number

Synopsis	Number of numeric characters required
Context	configure system security user-params local-user password complexity-rules required numeric <i>number</i>
Tree	numeric
Range	1 to 10
Introduced	16.0.R1
Platforms	All

special-character number

Synopsis	Number of special characters required
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Context	configure system security user-params local-user password complexity-rules required special-character <i>number</i>
Tree	special-character
Range	1 to 10
Introduced	16.0.R1
Platforms	All

uppercase *number*

Synopsis	Number of uppercase letters required
Context	configure system security user-params local-user password complexity-rules required uppercase <i>number</i>
Tree	uppercase
Range	1 to 10
Introduced	16.0.R1
Platforms	All

hashing *keyword*

Synopsis	Hashing algorithm for user passwords
Context	configure system security user-params local-user password hashing <i>keyword</i>
Tree	hashing
Default	bcrypt
Options	bcrypt, sha2-pbkdf2, sha3-pbkdf2
Introduced	20.7.R1
Platforms	All

history-size *number*

Synopsis	Number of previous passwords to compare against
Context	configure system security user-params local-user password history-size <i>number</i>
Tree	history-size
Range	0 to 20
Introduced	16.0.R1
Platforms	All

minimum-age *number*

Synopsis	Minimum age required for a password before changing it
Context	configure system security user-params local-user password minimum-age <i>number</i>
Tree	minimum-age
Range	0 to 86400
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	All

minimum-change *number*

Synopsis	Minimum character differences between passwords
Context	configure system security user-params local-user password minimum-change <i>number</i>
Tree	minimum-change
Range	1 to 20
Default	5
Introduced	16.0.R1
Platforms	All

user [[user-name](#)] *string*

Synopsis	Enter the user list instance
Context	configure system security user-params local-user user <i>string</i>
Tree	user
Introduced	16.0.R1
Platforms	All

[[user-name](#)] *string*

Synopsis	Local user name
Context	configure system security user-params local-user user <i>string</i>
Tree	user
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the access context
Context	configure system security user-params local-user user string access
Tree	access
Introduced	16.0.R1
Platforms	All

console boolean

Synopsis	Allow console access (serial port or Telnet)
Context	configure system security user-params local-user user string access console boolean
Tree	console
Default	false
Introduced	16.0.R1
Platforms	All

ftp boolean

Synopsis	Allow FTP access
Context	configure system security user-params local-user user string access ftp boolean
Tree	ftp
Default	false
Introduced	16.0.R1
Platforms	All

grpc boolean

Synopsis	Allow gRPC access
Context	configure system security user-params local-user user string access grpc boolean
Tree	grpc

Default	false
Introduced	16.0.R1
Platforms	All

li *boolean*

Synopsis	Enable/disable access to LI.
Context	configure system security user-params local-user user <i>string</i> access li <i>boolean</i>
Tree	li
Default	false
Introduced	19.10.R1
Platforms	All

netconf *boolean*

Synopsis	Allow NETCONF session access
Context	configure system security user-params local-user user <i>string</i> access netconf <i>boolean</i>
Tree	netconf
Default	false
Introduced	16.0.R1
Platforms	All

snmp *boolean*

Synopsis	Allow SNMP access
Context	configure system security user-params local-user user <i>string</i> access snmp <i>boolean</i>
Tree	snmp
Default	false
Introduced	16.0.R1
Platforms	All

cli-engine *keyword*

Synopsis	User level override for CLI engine access
Context	configure system security user-params local-user user <i>string</i> cli-engine <i>keyword</i>

Tree	cli-engine
Default	md-cli
Options	classic-cli, md-cli
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

console

Synopsis	Enter the console context
Context	configure system security user-params local-user user <i>string</i> console
Tree	console
Introduced	16.0.R1
Platforms	All

cannot-change-password *boolean*

Synopsis	Change password privileges
Context	configure system security user-params local-user user <i>string</i> console cannot-change-password <i>boolean</i>
Tree	cannot-change-password
Default	false
Introduced	16.0.R1
Platforms	All

login-exec (*sat-url* | *cflash-url* | *ftp-tftp-url* | *filename*)

Synopsis	File to execute when a user successfully logs in
Context	configure system security user-params local-user user <i>string</i> console login-exec (<i>sat-url</i> <i>cflash-url</i> <i>ftp-tftp-url</i> <i>filename</i>)
Tree	login-exec
String Length	1 to 200
Introduced	16.0.R1
Platforms	All

member *reference*

Synopsis	User profiles for this user
Context	configure system security user-params local-user user <i>string</i> console member <i>reference</i>
Tree	member
Reference	configure system security aaa local-profiles profile <i>string</i>
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

new-password-at-login *boolean*

Synopsis	Prompt a user to change password at next console login
Context	configure system security user-params local-user user <i>string</i> console new-password-at-login <i>boolean</i>
Tree	new-password-at-login
Default	false
Introduced	16.0.R1
Platforms	All

home-directory (*sat-url* | *cflash-without-slot-url*)

Synopsis	Home directory for the user
Context	configure system security user-params local-user user <i>string</i> home-directory (<i>sat-url</i> <i>cflash-without-slot-url</i>)
Tree	home-directory
String Length	1 to 200
Introduced	16.0.R1
Platforms	All

password *string*

Synopsis	User password for console and FTP access
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Context	configure system security user-params local-user user <i>string password string</i>
Tree	password
String Length	3 to 136
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

public-keys

Synopsis	Enter the public-keys context
Context	configure system security user-params local-user user <i>string public-keys</i>
Tree	public-keys
Description	Commands in this context configure public keys for SSH.
Introduced	16.0.R1
Platforms	All

ecdsa

Synopsis	Enter the ecdsa context
Context	configure system security user-params local-user user <i>string public-keys ecdsa</i>
Tree	ecdsa
Description	Commands in this context configure Elliptic Curve Digital Signature Algorithm (ECDSA) public keys.
Introduced	16.0.R1
Platforms	All

ecdsa-key [[ecdsa-public-key-id](#)] *number*

Synopsis	Enter the ecdsa-key list instance
Context	configure system security user-params local-user user <i>string public-keys ecdsa ecdsa-key number</i>
Tree	ecdsa-key
Description	Commands in this context configure an ECDSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user.
Introduced	16.0.R1

Platforms All

[ecdsa-public-key-id] number

Synopsis ECDSA public key identifier

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [public-keys](#) [ecdsa](#) [ecdsa-key](#) *number*

Tree [ecdsa-key](#)

Range 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

description string

Synopsis Text description

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [public-keys](#) [ecdsa](#) [ecdsa-key](#) *number* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

key-value string

Synopsis ECDSA public key value

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [public-keys](#) [ecdsa](#) [ecdsa-key](#) *number* [key-value](#) *string*

Tree [key-value](#)

Description This command configures a value for the ECDSA public key. The public key must be enclosed in quotation marks. For ECDSA, the key is between 1 and 1024 bits.

String Length 1 to 255

Introduced 16.0.R1

Platforms All

rsa

Synopsis	Enter the rsa context
Context	configure system security user-params local-user user <i>string</i> public-keys rsa
Tree	rsa
Description	Commands in this context configure RSA public keys.
Introduced	16.0.R1
Platforms	All

rsa-key [[rsa-public-key-id](#)] *number*

Synopsis	Enter the rsa-key list instance
Context	configure system security user-params local-user user <i>string</i> public-keys rsa rsa-key <i>number</i>
Tree	rsa-key
Description	Commands in this context configure an RSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user.
Introduced	16.0.R1
Platforms	All

[[rsa-public-key-id](#)] *number*

Synopsis	RSA public key identifier
Context	configure system security user-params local-user user <i>string</i> public-keys rsa rsa-key <i>number</i>
Tree	rsa-key
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system security user-params local-user user <i>string</i> public-keys rsa rsa-key <i>number</i> description <i>string</i>

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

key-value *string*

Synopsis	RSA public key value
Context	configure system security user-params local-user user <i>string</i> public-keys rsa rsa-key number key-value <i>string</i>
Tree	key-value
Description	This command configures a value for the RSA public key. The public key must be enclosed in quotation marks. For RSA, the key is between 768 and 4096 bits.
String Length	1 to 800
Introduced	16.0.R1
Platforms	All

restricted-to-home *boolean*

Synopsis	Restrict file access to the home directory of the user
Context	configure system security user-params local-user user <i>string</i> restricted-to-home <i>boolean</i>
Tree	restricted-to-home
Default	false
Introduced	16.0.R1
Platforms	All

save-when-restricted *boolean*

Synopsis	Save configurations when the user is restricted to home
Context	configure system security user-params local-user user <i>string</i> save-when-restricted <i>boolean</i>
Tree	save-when-restricted
Description	When configured to true , the system permits all configuration save operations (such as admin save) via any management interface (such as CLI and NETCONF) even if restricted-to-home is set to true . The home directory does not need to be configured.
Default	false

Introduced 22.10.R1
Platforms All

snmp

Synopsis Enter the **snmp** context
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* **snmp**
Tree [snmp](#)
Introduced 16.0.R1
Platforms All

authentication

Synopsis Enable the **authentication** context
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* **snmp** **authentication**
Tree [authentication](#)
Description Commands in this context configure the SNMPv3 authentication and privacy protocols for the user to communicate with the router. The keys are stored in an encrypted format in the configuration.

The keys configured with these commands must be localized keys, which are a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the **tools perform system management-interface snmp generate-key** command to generate localized authentication and privacy keys.

If authentication is not configured, only the username is required to allow and authenticate SNMPv3 operations.

Introduced 16.0.R1
Platforms All

authentication-key *string*

Synopsis Localized authentication key
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* **snmp** **authentication** **authentication-key** *string*
Tree [authentication-key](#)
Description This command specifies the authentication key for the authentication protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the **tools perform system**

management-interface snmp generate-key command to generate a localized authentication key.

String Length	1 to 115
Introduced	16.0.R1
Platforms	All

authentication-protocol *keyword*

Synopsis	Authentication protocol
Context	configure system security user-params local-user user <i>string</i> snmp authentication authentication-protocol <i>keyword</i>
Tree	authentication-protocol
Options	hmac-md5-96, hmac-sha1-96, hmac-sha2-224, hmac-sha2-256, hmac-sha2-384, hmac-sha2-512
Introduced	16.0.R1
Platforms	All

privacy

Synopsis	Enable the privacy context
Context	configure system security user-params local-user user <i>string</i> snmp authentication privacy
Tree	privacy
Introduced	16.0.R1
Platforms	All

privacy-key *string*

Synopsis	Localized privacy key
Context	configure system security user-params local-user user <i>string</i> snmp authentication privacy privacy-key <i>string</i>
Tree	privacy-key
Description	This command specifies the privacy key for the privacy protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the tools perform system management-interface snmp generate-key command to generate a localized privacy key.
String Length	1 to 71

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

privacy-protocol *keyword*

Synopsis	Privacy protocol
Context	configure system security user-params local-user user <i>string</i> snmp authentication privacy privacy-protocol <i>keyword</i>
Tree	privacy-protocol
Options	cbc-des, cfb128-aes-128, cfb128-aes-192, cfb128-aes-256
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

group *string*

Synopsis	User to associate with a group name
Context	configure system security user-params local-user user <i>string</i> snmp group <i>string</i>
Tree	group
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

vprn-network-exceptions

Synopsis	Enable the vprn-network-exceptions context
Context	configure system security vprn-network-exceptions
Tree	vprn-network-exceptions
Description	<p>Commands in this context configure the rate limiting attributes for processing packets with label TTL expiry received within an LSP shortcut or VPRN instances in the system and from all network IP interfaces. This includes labeled user and control plan packets, ping, and traceroute packets within GRT and VPRN, and ICMP replies.</p> <p>These commands do not rate limit MPLS or service OAM packets.</p>
Introduced	16.0.R1
Platforms	All

count *number*

Synopsis	Limit of exception messages received
Context	configure system security vprn-network-exceptions count <i>number</i>
Tree	count
Description	This command specifies the threshold limit of exception messages. If the threshold value is exceeded within the configured time interval, packets are dropped.
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

window *number*

Synopsis	Time interval to measure exception messages
Context	configure system security vprn-network-exceptions window <i>number</i>
Tree	window
Description	This command configures the time interval within which exception messages are counted. If the threshold value is exceeded within the configured time interval, packets are dropped.
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

selective-fib *boolean*

Synopsis	FIB assigned to the system
Context	configure system selective-fib <i>boolean</i>
Tree	selective-fib
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

software-repository [[repository-name](#)] *string*

Synopsis	Enter the software-repository list instance
Context	configure system software-repository <i>string</i>
Tree	software-repository
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[repository-name] *string*

Synopsis	Software repository name
Context	configure system software-repository <i>string</i>
Tree	software-repository
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure system software-repository <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-location *string*

Synopsis	Primary location for files in the software repository
Context	configure system software-repository <i>string</i> primary-location <i>string</i>
Tree	primary-location
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary-location *string*

Synopsis	Secondary location for files in the software repository
Context	configure system software-repository <i>string</i> secondary-location <i>string</i>
Tree	secondary-location
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tertiary-location *string*

Synopsis	Tertiary location for files in the software repository
Context	configure system software-repository <i>string</i> tertiary-location <i>string</i>
Tree	tertiary-location
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

switch-fabric

Synopsis	Enter the switch-fabric context
Context	configure system switch-fabric
Tree	switch-fabric
Description	Commands in this context configure system level attributes related to the switch fabric.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7, 7750 SR-7s, 7750 SR-14s, 7950 XRS-20, 7950 XRS-40

failure-recovery

Synopsis	Enter the failure-recovery context
Context	configure system switch-fabric failure-recovery
Tree	failure-recovery
Description	Commands in this context configure the attributes related to the automatic switch fabric recovery process. This process is triggered when there are two resets of an IOM/XCM due to ICC failures within a small time frame. The recovery process involves the sequential resetting of SFM in case the issues are due to one of the SFM in the ICC

communication path. As the final step in the recovery process, a CPM switchover is triggered to reset the active CPM.

Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR-7, 7950 XRS-20, 7950 XRS-40

admin-state *keyword*

Synopsis	Administrative state of the failure recovery process
Context	configure system switch-fabric failure-recovery admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR-7, 7950 XRS-20, 7950 XRS-40

sfm-loss-threshold *number*

Synopsis	Number of SFMs that can fail before SFM overload state
Context	configure system switch-fabric sfm-loss-threshold <i>number</i>
Tree	sfm-loss-threshold
Description	This command specifies the number of SFMs that are permitted to fail before the system goes into SFM overload state. The default value for the 7750 SR-7s is 1 and the default value for the 7750 SR-14s is 2. Users can select the SFM limit based on the number possible for the system minus one. For the 7750 SR-7s, the limit is 3 and the limit for the 7750 SR-14s is 7.
Range	1 to 7
Introduced	20.5.R1
Platforms	7750 SR-7s, 7750 SR-14s

telemetry

Synopsis	Enter the telemetry context
Context	configure system telemetry
Tree	telemetry
Description	Commands in this context configure the parameters for the dial-out telemetry functionality.

Introduced 20.2.R1
Platforms All

destination-group [*name*] *string*

Synopsis Enter the **destination-group** list instance
Context **configure** [system telemetry destination-group](#) *string*
Tree [destination-group](#)
Description Commands in this context configure parameters for destination groups.
Max. Instances 225
Introduced 20.5.R1
Platforms All

[name] *string*

Synopsis Destination group name
Context **configure** [system telemetry destination-group](#) *string*
Tree [destination-group](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 20.5.R1
Platforms All

allow-unsecure-connection

Synopsis Allow connection without secured transport protocol
Context **configure** [system telemetry destination-group](#) *string* [allow-unsecure-connection](#)
Tree [allow-unsecure-connection](#)
Description When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.
Notes The following elements are part of a choice: **allow-unsecure-connection** or **tls-client-profile**.
Introduced 20.5.R1
Platforms All

description *string*

Synopsis	Text description
Context	configure system telemetry destination-group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

destination [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) [port](#) *number*

Synopsis	Enter the destination list instance
Context	configure system telemetry destination-group <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i>
Tree	destination
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	20.5.R1
Platforms	All

[[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

Synopsis	Address of the destination within the destination group
Context	configure system telemetry destination-group <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i>
Tree	destination
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

port *number*

Synopsis	TCP port number for the destination
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Context	configure system telemetry destination-group <i>string</i> destination (<i>ipv4-address-no-zone ipv6-address-no-zone fully-qualified-domain-name</i>) port <i>number</i>
Tree	destination
Range	0 1 to 65535
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

router-instance *string*

Synopsis	Router name or VPRN service name
Context	configure system telemetry destination-group <i>string</i> destination (<i>ipv4-address-no-zone ipv6-address-no-zone fully-qualified-domain-name</i>) port <i>number</i> router-instance <i>string</i>
Tree	router-instance
Introduced	20.5.R1
Platforms	All

tcp-keepalive

Synopsis	Enter the tcp-keepalive context
Context	configure system telemetry destination-group <i>string</i> tcp-keepalive
Tree	tcp-keepalive
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the TCP keep-alive algorithm
Context	configure system telemetry destination-group <i>string</i> tcp-keepalive admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.5.R1
Platforms	All

idle-time *number*

Synopsis	Time until the first TCP keepalive probe is sent
Context	configure system telemetry destination-group <i>string</i> tcp-keepalive idle-time <i>number</i>
Tree	idle-time
Range	1 to 100000
Default	600
Units	seconds
Introduced	20.5.R1
Platforms	All

interval *number*

Synopsis	Time between TCP keepalive probes
Context	configure system telemetry destination-group <i>string</i> tcp-keepalive interval <i>number</i>
Tree	interval
Range	1 to 100000
Default	15
Units	seconds
Introduced	20.5.R1
Platforms	All

retries *number*

Synopsis	Number of probe retries before closing the connection
Context	configure system telemetry destination-group <i>string</i> tcp-keepalive retries <i>number</i>
Tree	retries
Description	This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range	3 to 100
Default	4
Introduced	20.5.R1
Platforms	All

tls-client-profile *reference*

Synopsis	TLS client profile assigned to the destination group
Context	configure system telemetry destination-group <i>string</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Reference	configure system security tls client-tls-profile <i>string</i>
Notes	The following elements are part of a choice: allow-unsecure-connection or tls-client-profile .
Introduced	20.5.R1
Platforms	All

notification-bundling

Synopsis	Enter the notification-bundling context
Context	configure system telemetry notification-bundling
Tree	notification-bundling
Description	Commands in this context configure the bundling of multiple notifications into one telemetry message.
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of notification bundling
Context	configure system telemetry notification-bundling admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	All

max-msg-count *number*

Synopsis	Maximum notifications count in telemetry message bundle
Context	configure system telemetry notification-bundling max-msg-count <i>number</i>
Tree	max-msg-count

Range	2 to 1000
Default	100
Introduced	21.10.R1
Platforms	All

max-time-granularity *number*

Synopsis	Maximum interval when bundling of notifications occurs
Context	configure system telemetry notification-bundling max-time-granularity <i>number</i>
Tree	max-time-granularity
Description	This command sets the maximum time interval during which telemetry notifications are bundled. All bundled notifications have the same timestamp, which is the timestamp of the bundle.
Range	1 to 1000
Default	100
Units	milliseconds
Introduced	21.10.R1
Platforms	All

persistent-subscriptions

Synopsis	Enter the persistent-subscriptions context
Context	configure system telemetry persistent-subscriptions
Tree	persistent-subscriptions
Introduced	20.5.R1
Platforms	All

subscription [*name*] *string*

Synopsis	Enter the subscription list instance
Context	configure system telemetry persistent-subscriptions subscription <i>string</i>
Tree	subscription
Max. Instances	225
Introduced	20.5.R1
Platforms	All

[name] *string*

Synopsis	Persistent subscription name
Context	configure system telemetry persistent-subscriptions subscription <i>string</i>
Tree	subscription
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the persistent subscription
Context	configure system telemetry persistent-subscriptions subscription <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system telemetry persistent-subscriptions subscription <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

destination-group *reference*

Synopsis	Name of the destination group used in the subscription
Context	configure system telemetry persistent-subscriptions subscription <i>string</i> destination-group <i>reference</i>

Tree	destination-group
Reference	configure system telemetry destination-group <i>string</i>
Introduced	20.5.R1
Platforms	All

encoding *keyword*

Synopsis	Encoding used for telemetry notifications
Context	configure system telemetry persistent-subscriptions subscription <i>string encoding keyword</i>
Tree	encoding
Description	This command specifies the encoding used for telemetry notifications as defined by the gNMI OpenConfig standard.
Default	json
Options	json, bytes, proto, json-ietf
Introduced	20.5.R1
Platforms	All

local-source-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Local IP address of packets sent from the source
Context	configure system telemetry persistent-subscriptions subscription <i>string local-source-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	local-source-address
Introduced	20.5.R1
Platforms	All

mode *keyword*

Synopsis	Mode for telemetry notifications
Context	configure system telemetry persistent-subscriptions subscription <i>string mode keyword</i>
Tree	mode
Description	This command specifies the subscription path mode for telemetry notifications sent out for the persistent subscription.
Options	target-defined, on-change, sample
Introduced	20.5.R1

Platforms All

originated-qos-marking *keyword*

Synopsis QoS marking used for telemetry notification packets

Context **configure system telemetry persistent-subscriptions subscription** *string* **originated-qos-marking** *keyword*

Tree [originated-qos-marking](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 20.5.R1

Platforms All

sample-interval *number*

Synopsis Sampling interval for the persistent subscription

Context **configure system telemetry persistent-subscriptions subscription** *string* **sample-interval** *number*

Tree [sample-interval](#)

Description This command configures the sampling interval for the persistent subscription. The interval applies only in sampling or target-defined modes.

Range 1000 to 18446744073709551615

Default 10000

Units milliseconds

Introduced 20.5.R1

Platforms All

sensor-group *reference*

Synopsis Sensor group used in the persistent subscription

Context **configure system telemetry persistent-subscriptions subscription** *string* **sensor-group** *reference*

Tree [sensor-group](#)

Description	This command specifies the sensor group to be used in the persistent subscription. If no valid paths exist in the sensor group, the configuration is accepted, however, no gRPC connection is established when persistent subscription is activated.
Reference	configure system telemetry sensor-groups sensor-group <i>string</i>
Introduced	20.5.R1
Platforms	All

sensor-groups

Synopsis	Enter the sensor-groups context
Context	configure system telemetry sensor-groups
Tree	sensor-groups
Introduced	20.5.R1
Platforms	All

sensor-group [[name](#)] *string*

Synopsis	Enter the sensor-group list instance
Context	configure system telemetry sensor-groups sensor-group <i>string</i>
Tree	sensor-group
Max. Instances	225
Introduced	20.5.R1
Platforms	All

[\[name\]](#) *string*

Synopsis	Sensor group name
Context	configure system telemetry sensor-groups sensor-group <i>string</i>
Tree	sensor-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure system telemetry sensor-groups sensor-group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

path [[xpath](#)] *string*

Synopsis	Add a list entry for path
Context	configure system telemetry sensor-groups sensor-group <i>string</i> path <i>string</i>
Tree	path
Max. Instances	4500
Introduced	20.5.R1
Platforms	All

[xpath] *string*

Synopsis	YANG model path indicating the data to be streamed
Context	configure system telemetry sensor-groups sensor-group <i>string</i> path <i>string</i>
Tree	path
Description	The command specifies the path from which data is streamed to the collector. Streamed data includes all descendants of the tree indicated by the path.
String Length	1 to 512
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

thresholds

Synopsis	Enter the thresholds context
Context	configure system thresholds
Tree	thresholds

Introduced	16.0.R1
Platforms	All

cflash-cap-alarm-percent [*cflash-id*] *string*

Synopsis	Enter the cflash-cap-alarm-percent list instance
Context	configure system thresholds cflash-cap-alarm-percent <i>string</i>
Tree	cflash-cap-alarm-percent
Introduced	16.0.R1
Platforms	All

[cflash-id] *string*

Synopsis	cflash device name monitored for capacity
Context	configure system thresholds cflash-cap-alarm-percent <i>string</i>
Tree	cflash-cap-alarm-percent
String Length	1 to 200
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	configure system thresholds cflash-cap-alarm-percent <i>string</i> falling-threshold <i>number</i>
Tree	falling-threshold
Description	<p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is equal to the falling or either values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold command.</p>
Range	0 to 100
Units	percent

Introduced	16.0.R4
Platforms	All

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	configure system thresholds cflash-cap-alarm-percent <i>string</i> interval <i>number</i>
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	configure system thresholds cflash-cap-alarm-percent <i>string</i> rising-threshold <i>number</i>
Tree	rising-threshold
Description	<p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm command is equal to the rising or either values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the falling-threshold command.</p>
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs
Context	configure system thresholds cflash-cap-alarm-percent <i>string</i> rmon-event-type <i>keyword</i>
Tree	rmon-event-type
Default	both
Options	none, log, trap, both
Introduced	16.0.R1
Platforms	All

startup-alarm *keyword*

Synopsis	Alarm type when the alarm is first created
Context	configure system thresholds cflash-cap-alarm-percent <i>string</i> startup-alarm <i>keyword</i>
Tree	startup-alarm
Description	This command specifies the alarm type that may be sent when this alarm is first created. If the first sample is greater than or equal to the rising threshold value and startup-alarm is equal to rising or either , a single rising threshold crossing event is generated. If the first sample is less than or equal to the falling threshold value and startup-alarm is equal to falling or either , a single falling threshold crossing event is generated.
Default	either
Options	rising, falling, either
Introduced	16.0.R1
Platforms	All

cflash-cap-warn-percent [**cflash-id**] *string*

Synopsis	Enter the cflash-cap-warn-percent list instance
Context	configure system thresholds cflash-cap-warn-percent <i>string</i>
Tree	cflash-cap-warn-percent
Description	Commands in this context configure the capacity monitoring of the compact flash. The usage is monitored as a percentage of the capacity of the compact flash. The severity level is warning. Both a rising and falling threshold can be specified.
Introduced	16.0.R1
Platforms	All

[cflash-id] *string*

Synopsis	cflash device name monitored for capacity
Context	configure system thresholds cflash-cap-warn-percent <i>string</i>
Tree	cflash-cap-warn-percent
String Length	1 to 200
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	configure system thresholds cflash-cap-warn-percent <i>string</i> falling-threshold <i>number</i>
Tree	falling-threshold
Description	<p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is equal to the falling or either values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold command.</p>
Range	0 to 100
Units	percent
Introduced	16.0.R4
Platforms	All

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	configure system thresholds cflash-cap-warn-percent <i>string</i> interval <i>number</i>
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	configure system thresholds cflash-cap-warn-percent <i>string</i> rising-threshold <i>number</i>
Tree	rising-threshold
Description	<p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm command is equal to the rising or either values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the falling-threshold command.</p>
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs
Context	configure system thresholds cflash-cap-warn-percent <i>string</i> rmon-event-type <i>keyword</i>
Tree	rmon-event-type
Default	both
Options	none, log, trap, both
Introduced	16.0.R1
Platforms	All

startup-alarm *keyword*

Synopsis	Alarm type when the alarm is first created
Context	configure system thresholds cflash-cap-warn-percent <i>string</i> startup-alarm <i>keyword</i>

Tree	startup-alarm
Description	<p>This command specifies the alarm type that may be sent when this alarm is first created.</p> <p>If the first sample is greater than or equal to the rising threshold value and startup-alarm is equal to rising or either, a single rising threshold crossing event is generated.</p> <p>If the first sample is less than or equal to the falling threshold value and startup-alarm is equal to falling or either, a single falling threshold crossing event is generated.</p>
Default	either
Options	rising, falling, either
Introduced	16.0.R1
Platforms	All

kb-memory-use-alarm

Synopsis	Enable the kb-memory-use-alarm context
Context	configure system thresholds kb-memory-use-alarm
Tree	kb-memory-use-alarm
Introduced	16.0.R4
Platforms	All

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	configure system thresholds kb-memory-use-alarm falling-threshold <i>number</i>
Tree	falling-threshold
Description	<p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is equal to the falling or either values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold command.</p>
Range	-2147483648 to 2147483647
Introduced	16.0.R4
Platforms	All

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	configure system thresholds kb-memory-use-alarm interval <i>number</i>
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	configure system thresholds kb-memory-use-alarm rising-threshold <i>number</i>
Tree	rising-threshold
Description	<p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm command is equal to the rising or either values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the falling-threshold command.</p>
Range	-2147483648 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs
Context	configure system thresholds kb-memory-use-alarm rmon-event-type <i>keyword</i>
Tree	rmon-event-type
Default	both
Options	none, log, trap, both

Introduced 16.0.R4
Platforms All

startup-alarm *keyword*

Synopsis Alarm type when the alarm is first created

Context **configure** [system thresholds kb-memory-use-alarm startup-alarm](#) *keyword*

Tree [startup-alarm](#)

Description This command specifies the alarm type that may be sent when this alarm is first created. If the first sample is greater than or equal to the rising threshold value and **startup-alarm** is equal to **rising** or **either**, a single rising threshold crossing event is generated. If the first sample is less than or equal to the falling threshold value and **startup-alarm** is equal to **falling** or **either**, a single falling threshold crossing event is generated.

Default either

Options rising, falling, either

Introduced 16.0.R4

Platforms All

kb-memory-use-warn

Synopsis Enable the **kb-memory-use-warn** context

Context **configure** [system thresholds kb-memory-use-warn](#)

Tree [kb-memory-use-warn](#)

Introduced 16.0.R4

Platforms All

falling-threshold *number*

Synopsis Falling threshold for the sampled statistic

Context **configure** [system thresholds kb-memory-use-warn falling-threshold](#) *number*

Tree [falling-threshold](#)

Description This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated **startup-alarm** command is equal to the **falling** or **either** values.

After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the **rising-threshold** command.

Range	-2147483648 to 2147483647
Introduced	16.0.R4
Platforms	All

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	configure system thresholds kb-memory-use-warn interval <i>number</i>
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	configure system thresholds kb-memory-use-warn rising-threshold <i>number</i>
Tree	rising-threshold
Description	<p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm command is equal to the rising or either values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the falling-threshold command.</p>
Range	-2147483648 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs
Context	configure system thresholds kb-memory-use-warn rmon-event-type <i>keyword</i>
Tree	rmon-event-type
Default	both
Options	none, log, trap, both
Introduced	16.0.R4
Platforms	All

startup-alarm *keyword*

Synopsis	Alarm type when the alarm is first created
Context	configure system thresholds kb-memory-use-warn startup-alarm <i>keyword</i>
Tree	startup-alarm
Description	This command specifies the alarm type that may be sent when this alarm is first created. If the first sample is greater than or equal to the rising threshold value and startup-alarm is equal to rising or either , a single rising threshold crossing event is generated. If the first sample is less than or equal to the falling threshold value and startup-alarm is equal to falling or either , a single falling threshold crossing event is generated.
Default	either
Options	rising, falling, either
Introduced	16.0.R4
Platforms	All

rmon

Synopsis	Enter the rmon context
Context	configure system thresholds rmon
Tree	rmon
Introduced	16.0.R1
Platforms	All

alarm [[rmon-alarm-id](#)] *number*

Synopsis	Enter the alarm list instance
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Context	configure system thresholds rmon alarm <i>number</i>
Tree	alarm
Max. Instances	1200
Introduced	16.0.R1
Platforms	All

[rmon-alarm-id] *number*

Synopsis	Index ID for an entry in the alarm table
Context	configure system thresholds rmon alarm <i>number</i>
Tree	alarm
Range	0 to 65400
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

falling-event *number*

Synopsis	RMON event ID for falling threshold crossing event
Context	configure system thresholds rmon alarm <i>number</i> falling-event <i>number</i>
Tree	falling-event
Range	0 to 65400
Introduced	16.0.R1
Platforms	All

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	configure system thresholds rmon alarm <i>number</i> falling-threshold <i>number</i>
Tree	falling-threshold
Description	This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold and the value at the last sampling interval was greater than this threshold, a single threshold crossing event is generated. A single threshold crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is set to falling or either .

After a falling threshold crossing event is generated, another such event is not generated until the sampled value exceeds this threshold and reaches or exceeds the **rising-threshold** command setting.

Range	-2147483648 to 2147483647
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	configure system thresholds rmon alarm <i>number interval number</i>
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

owner *string*

Synopsis	Owner that created this entry and uses the resources
Context	configure system thresholds rmon alarm <i>number owner string</i>
Tree	owner
String Length	1 to 80
Default	TIMOS CLI
Introduced	16.0.R1
Platforms	All

rising-event *number*

Synopsis	RMON event ID for rising threshold crossing event
Context	configure system thresholds rmon alarm <i>number rising-event number</i>
Tree	rising-event
Range	0 to 65400
Introduced	16.0.R1

Platforms All

rising-threshold *number*

Synopsis Rising threshold for the sampled statistic

Context **configure** **system** **thresholds** **rmon** **alarm** *number* **rising-threshold** *number*

Tree **rising-threshold**

Description This command specifies the rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold and the value at the last sampling interval was below this threshold, a single threshold crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated **startup-alarm** command is set to **rising** or **either**.

After a rising threshold crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches or falls below the **falling-threshold** command setting.

Range -2147483648 to 2147483647

Introduced 16.0.R1

Platforms All

sample-type *keyword*

Synopsis Sampling type for value comparison with thresholds

Context **configure** **system** **thresholds** **rmon** **alarm** *number* **sample-type** *keyword*

Tree **sample-type**

Default absolute

Options absolute, delta

Introduced 16.0.R1

Platforms All

startup-alarm *keyword*

Synopsis Alarm to send when this entry is first set to valid

Context **configure** **system** **thresholds** **rmon** **alarm** *number* **startup-alarm** *keyword*

Tree **startup-alarm**

Default either

Options rising, falling, either

Introduced 16.0.R1
Platforms All

variable-oid *string*

Synopsis Object identifier to sample the specific variable
Context **configure** [system](#) [thresholds](#) [rmon](#) [alarm](#) *number* **variable-oid** *string*
Tree [variable-oid](#)
String Length 1 to 255
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

event [[rmon-event-id](#)] *number*

Synopsis Enter the **event** list instance
Context **configure** [system](#) [thresholds](#) [rmon](#) [event](#) *number*
Tree [event](#)
Max. Instances 1200
Introduced 16.0.R1
Platforms All

[rmon-event-id] *number*

Synopsis Index ID for an entry in the event table
Context **configure** [system](#) [thresholds](#) [rmon](#) [event](#) *number*
Tree [event](#)
Range 1 to 65400
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

description *string*

Synopsis	Text description
Context	configure system thresholds rmon event <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

event-type *keyword*

Synopsis	Notification action to be taken when the event occurs
Context	configure system thresholds rmon event <i>number</i> event-type <i>keyword</i>
Tree	event-type
Default	both
Options	none, log, trap, both
Introduced	16.0.R1
Platforms	All

owner *string*

Synopsis	Owner that created this entry and uses the resources
Context	configure system thresholds rmon event <i>number</i> owner <i>string</i>
Tree	owner
String Length	1 to 80
Default	TiMOS CLI
Introduced	16.0.R1
Platforms	All

time

Synopsis	Enter the time context
Context	configure system time
Tree	time
Introduced	16.0.R1
Platforms	All

dst-zone [**summer-time-zone**] *string*

Synopsis	Enter the dst-zone list instance
Context	configure system time dst-zone string
Tree	dst-zone
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[summer-time-zone] *string*

Synopsis	Summer time zone name
Context	configure system time dst-zone string
Tree	dst-zone
String Length	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end

Synopsis	Enter the end context
Context	configure system time dst-zone string end
Tree	end
Introduced	16.0.R1
Platforms	All

day *keyword*

Synopsis	Day of the week to end Daylight Savings Time
Context	configure system time dst-zone string end day keyword
Tree	day
Default	sunday
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday

Introduced 16.0.R1
Platforms All

hours-minutes *string*

Synopsis Time to end Daylight Savings Time in hh:mm format
Context **configure** [system time dst-zone](#) *string* **end** [hours-minutes](#) *string*
Tree [hours-minutes](#)
String Length 5
Default 00:00
Introduced 16.0.R1
Platforms All

month *keyword*

Synopsis Month to end Daylight Savings Time
Context **configure** [system time dst-zone](#) *string* **end** [month](#) *keyword*
Tree [month](#)
Default january
Options january, february, march, april, may, june, july, august, september, october, november, december
Introduced 16.0.R1
Platforms All

week *keyword*

Synopsis Week of the month to end Daylight Savings Time
Context **configure** [system time dst-zone](#) *string* **end** [week](#) *keyword*
Tree [week](#)
Default first
Options first, second, third, fourth, last
Introduced 16.0.R1
Platforms All

offset *number*

Synopsis	Offset for Daylight Savings Time
Context	configure system time dst-zone <i>string</i> offset <i>number</i>
Tree	offset
Range	0 to 60
Default	60
Units	minutes
Introduced	16.0.R1
Platforms	All

start

Synopsis	Enter the start context
Context	configure system time dst-zone <i>string</i> start
Tree	start
Introduced	16.0.R1
Platforms	All

day *keyword*

Synopsis	Day of the week to start Daylight Savings Time
Context	configure system time dst-zone <i>string</i> start day <i>keyword</i>
Tree	day
Default	sunday
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Introduced	16.0.R1
Platforms	All

hours-minutes *string*

Synopsis	Time to start Daylight Savings Time in hh:mm format
Context	configure system time dst-zone <i>string</i> start hours-minutes <i>string</i>
Tree	hours-minutes
String Length	5
Default	00:00

Introduced 16.0.R1
Platforms All

month *keyword*

Synopsis Month to start Daylight Savings Time
Context **configure** [system time dst-zone](#) *string* **start month** *keyword*
Tree [month](#)
Default january
Options january, february, march, april, may, june, july, august, september, october, november, december
Introduced 16.0.R1
Platforms All

week *keyword*

Synopsis Week of the month to start Daylight Savings Time
Context **configure** [system time dst-zone](#) *string* **start week** *keyword*
Tree [week](#)
Default first
Options first, second, third, fourth, last
Introduced 16.0.R1
Platforms All

ntp

Synopsis Enable the **ntp** context
Context **configure** [system time ntp](#)
Tree [ntp](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of NTP execution
Context **configure** [system time ntp admin-state](#) *keyword*

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-check *boolean*

Synopsis	Reject NTP PDUs that do not match the authentication key-id, type, or key requirements
Context	configure system time ntp authentication-check <i>boolean</i>
Tree	authentication-check
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key [[key-id](#)] *number*

Synopsis	Enter the authentication-key list instance
Context	configure system time ntp authentication-key <i>number</i>
Tree	authentication-key
Introduced	16.0.R1
Platforms	All

[key-id] *number*

Synopsis	Index of the NTP authentication key table that uniquely identifies an authentication key and type
Context	configure system time ntp authentication-key <i>number</i>
Tree	authentication-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

key string

Synopsis	Key to authenticate NTP packets
Context	configure system time ntp authentication-key number key string
Tree	key
String Length	1 to 71
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Type of authentication method to authenticate NTP packet
Context	configure system time ntp authentication-key number type keyword
Tree	type
Options	des, message-digest
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

broadcast [[router-instance](#)] *reference interface-name string*

Synopsis	Enter the broadcast list instance
Context	configure system time ntp broadcast reference interface-name string
Tree	broadcast
Introduced	16.0.R1
Platforms	All

[router-instance] *reference*

Synopsis	Router name
Context	configure system time ntp broadcast reference interface-name string
Tree	broadcast
Reference	configure router string
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

interface-name *string*

Synopsis Interface to transmit or receive NTP broadcast packets
Context **configure** [system](#) [time](#) [ntp](#) [broadcast](#) *reference* [interface-name](#) *string*
Tree [broadcast](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

key-id *reference*

Synopsis Authentication key and type used by the node
Context **configure** [system](#) [time](#) [ntp](#) [broadcast](#) *reference* [interface-name](#) *string* [key-id](#) *reference*
Tree [key-id](#)
Reference **configure** [system](#) [time](#) [ntp](#) [authentication-key](#) *number*
Introduced 16.0.R1
Platforms All

ttl *number*

Synopsis TTL value of messages transmitted by this broadcast address
Context **configure** [system](#) [time](#) [ntp](#) [broadcast](#) *reference* [interface-name](#) *string* [ttl](#) *number*
Tree [ttl](#)
Range 1 to 255
Default 127
Introduced 16.0.R1
Platforms All

version *number*

Synopsis NTP version number generated or accepted by this node in NTP packets

Context	configure system time ntp broadcast <i>reference interface-name string version number</i>
Tree	version
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

broadcast-client [*router-instance*] *string interface-name string*

Synopsis	Enter the broadcast-client list instance
Context	configure system time ntp broadcast-client <i>string interface-name string</i>
Tree	broadcast-client
Introduced	16.0.R1
Platforms	All

[router-instance] *string*

Synopsis	Router name or VPRN service name
Context	configure system time ntp broadcast-client <i>string interface-name string</i>
Tree	broadcast-client
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

interface-name *string*

Synopsis	Interface to transmit or receive NTP broadcast packets
Context	configure system time ntp broadcast-client <i>string interface-name string</i>
Tree	broadcast-client
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

authenticate *boolean*

Synopsis	Enforce authentication of NTP PDUs
Context	configure system time ntp broadcast-client <i>string</i> interface-name <i>string</i> authenticate <i>boolean</i>
Tree	authenticate
Default	false
Introduced	16.0.R1
Platforms	All

multicast

Synopsis	Enable the multicast context
Context	configure system time ntp multicast
Tree	multicast
Introduced	16.0.R1
Platforms	All

key-id *reference*

Synopsis	Authentication key and type used by the node
Context	configure system time ntp multicast key-id <i>reference</i>
Tree	key-id
Reference	configure system time ntp authentication-key <i>number</i>
Introduced	16.0.R1
Platforms	All

version *number*

Synopsis	NTP version number generated by the node
Context	configure system time ntp multicast version <i>number</i>
Tree	version
Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4

Introduced 16.0.R1
Platforms All

multicast-client

Synopsis Enable the **multicast-client** context
Context **configure** [system](#) [time](#) [ntp](#) [multicast-client](#)
Tree [multicast-client](#)
Introduced 16.0.R1
Platforms All

authenticate *boolean*

Synopsis Enforce authentication of NTP PDUs
Context **configure** [system](#) [time](#) [ntp](#) [multicast-client](#) [authenticate](#) *boolean*
Tree [authenticate](#)
Default false
Introduced 16.0.R1
Platforms All

ntp-server

Synopsis Enable the **ntp-server** context
Context **configure** [system](#) [time](#) [ntp](#) [ntp-server](#)
Tree [ntp-server](#)
Introduced 16.0.R1
Platforms All

authenticate *boolean*

Synopsis Authentication of NTP PDUs when acting as a server
Context **configure** [system](#) [time](#) [ntp](#) [ntp-server](#) [authenticate](#) *boolean*
Tree [authenticate](#)
Default false
Introduced 16.0.R1

Platforms All

peer [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *router-instance string*

Synopsis Enter the **peer** list instance

Context **configure system time ntp peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *router-instance string*

Tree *peer*

Introduced 16.0.R1

Platforms All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the peer for a peering relationship

Context **configure system time ntp peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *router-instance string*

Tree *peer*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

router-instance string

Synopsis Router name or VPRN service name

Context **configure system time ntp peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *router-instance string*

Tree *peer*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

key-id reference

Synopsis Authentication key and type used by the node

Context **configure system time ntp peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *router-instance string key-id reference*

Tree	key-id
Reference	configure system time ntp authentication-key <i>number</i>
Introduced	16.0.R1
Platforms	All

prefer *boolean*

Synopsis	Set NTP server as preferred to receive time
Context	configure system time ntp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router-instance <i>string</i> prefer <i>boolean</i>
Tree	prefer
Default	false
Introduced	16.0.R1
Platforms	All

version *number*

Synopsis	NTP version number generated by the node
Context	configure system time ntp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router-instance <i>string</i> version <i>number</i>
Tree	version
Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

server [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*) **router-instance** *string*

Synopsis	Enter the server list instance
Context	configure system time ntp server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>keyword</i>) router-instance <i>string</i>
Tree	server
Introduced	16.0.R1

Platforms All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*)

Synopsis IP address of an external NTP server

Context **configure system time ntp server** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*) **router-instance string**

Tree **server**

Options ptp

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

router-instance string

Synopsis Router name or VPRN service name

Context **configure system time ntp server** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*) **router-instance string**

Tree **server**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

key-id reference

Synopsis Authentication key and type used by the node

Context **configure system time ntp server** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*) **router-instance string key-id reference**

Tree **key-id**

Reference **configure system time ntp authentication-key number**

Introduced 16.0.R1

Platforms All

prefer boolean

Synopsis Set NTP server as preferred to receive time

Context	configure system time ntp server (<i>ipv4-address-no-zone ipv6-address-no-zone keyword</i>) <i>router-instance string prefer boolean</i>
Tree	prefer
Default	false
Introduced	16.0.R1
Platforms	All

version number

Synopsis	NTP version number generated by the node
Context	configure system time ntp server (<i>ipv4-address-no-zone ipv6-address-no-zone keyword</i>) <i>router-instance string version number</i>
Tree	version
Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

prefer-local-time boolean

Synopsis	Use local time over UTC time in the system
Context	configure system time prefer-local-time <i>boolean</i>
Tree	prefer-local-time
Description	<p>When configured to true, the system uses local time. This preference is applied to objects such as log file names, created and completed times reported in log files, NETCONF and gRPC date-and-time leafs, and rollback times displayed in show command outputs.</p> <p>When configured to false, the system uses UTC time.</p> <p>Note: The timezone used for show command outputs during a CLI session can be controlled using the environment time-display command.</p> <p>Note: The format used for the date-time strings may change, depending on the command setting. For example, when this command is set to true, all date-time strings include a suffix of three to five characters that indicates the timezone used.</p> <p>Note: The time format for timestamps on log events is controlled on a per-log basis, using the configure log log-id time-format command.</p>

Default	false
Introduced	16.0.R1
Platforms	All

sntp

Synopsis	Enter the sntp context
Context	configure system time sntp
Tree	sntp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of SNTP
Context	configure system time sntp admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

server [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the server list instance
Context	configure system time sntp server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	server
Introduced	16.0.R1
Platforms	All

[*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the SNTP server
Context	configure system time sntp server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	server

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Frequency of querying the server
Context	configure system time sntp server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	64 to 1024
Default	64
Units	seconds
Introduced	16.0.R1
Platforms	All

prefer *boolean*

Synopsis	Preference value for this SNTP server
Context	configure system time sntp server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) prefer <i>boolean</i>
Tree	prefer
Default	false
Introduced	16.0.R1
Platforms	All

version *number*

Synopsis	SNTP version supported by this server
Context	configure system time sntp server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) version <i>number</i>
Tree	version
Range	1 to 3
Default	3
Introduced	16.0.R1
Platforms	All

sntp-state *keyword*

Synopsis	Mode for Simple Network Time Protocol (SNTP)
Context	configure system time sntp sntp-state <i>keyword</i>
Tree	sntp-state
Default	unicast
Options	unicast, broadcast
Introduced	16.0.R1
Platforms	All

zone

Synopsis	Enter the zone context
Context	configure system time zone
Tree	zone
Introduced	16.0.R1
Platforms	All

non-standard

Synopsis	Enter the non-standard context
Context	configure system time zone non-standard
Tree	non-standard
Notes	The following elements are part of a choice: non-standard or standard .
Introduced	16.0.R1
Platforms	All

name *string*

Synopsis	Non-standard time zone name
Context	configure system time zone non-standard name <i>string</i>
Tree	name
String Length	1 to 5
Introduced	16.0.R1
Platforms	All

offset *string*

Synopsis	Offset from UTC
Context	configure system time zone non-standard offset <i>string</i>
Tree	offset
String Length	5 to 6
Introduced	16.0.R1
Platforms	All

standard

Synopsis	Enter the standard context
Context	configure system time zone standard
Tree	standard
Notes	The following elements are part of a choice: non-standard or standard .
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	Standard time zone name
Context	configure system time zone standard name <i>keyword</i>
Tree	name
Default	utc
Options	hst, akst, pst, mst, cst, est, ast, nst, utc, gmt, wet, cet, eet, msk, msd, awst, acst, aest, nzst
Introduced	16.0.R1
Platforms	All

transmission-profile [[name](#)] *string*

Synopsis	Enter the transmission-profile list instance
Context	configure system transmission-profile <i>string</i>
Tree	transmission-profile
Introduced	16.0.R4

Platforms All

[name] *string*

Synopsis File transmission profile name
Context **configure** [system](#) [transmission-profile](#) *string*
Tree [transmission-profile](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

ipv4-source-address *string*

Synopsis IPv4 source address used for the transport protocol
Context **configure** [system](#) [transmission-profile](#) *string* [ipv4-source-address](#) *string*
Tree [ipv4-source-address](#)
Introduced 16.0.R4
Platforms All

ipv6-source-address *string*

Synopsis IPv6 source address used for the transport protocol
Context **configure** [system](#) [transmission-profile](#) *string* [ipv6-source-address](#) *string*
Tree [ipv6-source-address](#)
Introduced 16.0.R4
Platforms All

redirection *number*

Synopsis Maximum level of redirection
Context **configure** [system](#) [transmission-profile](#) *string* [redirection](#) *number*
Tree [redirection](#)
Range 1 to 8
Introduced 16.0.R4

Platforms All

retry *number*

Synopsis Number of attempts to reconnecting to the server
Context **configure** [system](#) [transmission-profile](#) *string* **retry** *number*
Tree [retry](#)
Range 1 to 256
Introduced 16.0.R4
Platforms All

router-instance *string*

Synopsis Router instance used by the transport protocol
Context **configure** [system](#) [transmission-profile](#) *string* **router-instance** *string*
Tree [router-instance](#)
String Length 1 to 64
Default Base
Introduced 16.0.R4
Platforms All

timeout *number*

Synopsis Timeout for a response from the server
Context **configure** [system](#) [transmission-profile](#) *string* **timeout** *number*
Tree [timeout](#)
Range 1 to 3600
Default 60
Units seconds
Introduced 16.0.R4
Platforms All

usb [[usb-cflash](#)] *keyword*

Synopsis Enter the **usb** list instance

Context	configure system usb keyword
Tree	usb
Description	Commands in this context configure the operational state of the USB port.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

[usb-cflash] keyword

Synopsis	Specifies the compact flash ID
Context	configure system usb keyword
Tree	usb
Options	cf2
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

admin-state keyword

Synopsis	Administrative state of the USB port
Context	configure system usb keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

3.47 test-oam commands

```

configure
- test-oam
  - apply-groups reference
  - apply-groups-exclude reference
  - icmp
    - ipv6
      - apply-groups reference
      - apply-groups-exclude reference
      - length-field boolean
      - maximum-original-datagram boolean
    - ping-template string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - dot1p number
      - dscp keyword
      - failure-threshold number
      - interval number
      - reactivation-failure-threshold number
      - reactivation-interval number
      - reactivation-threshold number
      - reactivation-timeout number
      - size number
      - timeout number
      - ttl number
  - link-measurement
    - measurement-template string
      - admin-state keyword
      - aggregate-sample-window
        - multiplier number
        - threshold
          - absolute number
          - relative number
        - window-integrity number
      - apply-groups reference
      - apply-groups-exclude reference
      - delay keyword
      - description string
      - interval number
      - last-reported-delay-hold number
      - reporting boolean
      - sample-window
        - multiplier number
        - threshold
          - absolute number
          - relative number
        - window-integrity number
      - twamp-light
        - allow-egress-remark-dscp boolean
        - allow-ipv6-udp-checksum-zero boolean
        - dest-udp-port number
        - dscp keyword
        - fc keyword
        - ipv6-destination-discovery
          - admin-state keyword
          - discovery-interval number
          - discovery-timer number
          - update-interval number
        - pad-tlv-size number

```

configure test-oam link-measurement measurement-template twamp-light profile

- **profile** *keyword*
- **return-path**
 - **link** *boolean*
 - **src-udp-port** *number*
 - **timestamp-format** *keyword*
 - **ttl** *number*
- **unidirectional-measurement** *keyword*
- **mpls-dm**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **twamp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **server**
 - **admin-state** *keyword*
 - **allow-ipv6-udp-checksum-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inactivity-timeout** *number*
 - **max-connections** *number*
 - **max-sessions** *number*
 - **prefix** (*ipv4-prefix | ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **max-connections** *number*
 - **max-sessions** *number*
- **twamp-light**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inactivity-timeout** *number*
 - **source-udp-port-pools**
 - **port** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **pool-type** *keyword*

3.47.1 test-oam command descriptions

test-oam

Synopsis	Enter the test-oam context
Context	configure test-oam
Tree	test-oam
Introduced	16.0.R4
Platforms	All

icmp

Synopsis	Enter the icmp context
Context	configure test-oam icmp
Tree	icmp
Introduced	20.10.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure test-oam icmp ipv6
Tree	ipv6
Introduced	22.7.R1
Platforms	All

length-field *boolean*

Synopsis	Use length field in ICMPv6 responses
Context	configure test-oam icmp ipv6 length-field <i>boolean</i>
Tree	length-field
Default	false
Introduced	22.7.R1
Platforms	All

maximum-original-datagram *boolean*

Synopsis	ICMPv6 traceroute responses with largest datagram
Context	configure test-oam icmp ipv6 maximum-original-datagram <i>boolean</i>
Tree	maximum-original-datagram
Description	When configured to true , this command enables the original datagram field of the ICMPv6 error message to be a maximum of 1232 bytes. When configured to false , the original datagram field of the ICMPv6 error message smaller than 1232 bytes be built smaller.
Default	false
Introduced	22.7.R1
Platforms	All

ping-template [[name](#)] *string*

Synopsis	Enter the ping-template list instance
Context	configure test-oam icmp ping-template <i>string</i>
Tree	ping-template
Description	Commands in this context define ping timers and thresholds that verify connectivity and the the operational state of the IP interface.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[name] *string*

Synopsis	Ping template name
Context	configure test-oam icmp ping-template <i>string</i>
Tree	ping-template
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
----------	------------------

Context	configure test-oam icmp ping-template <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dot1p *number*

Synopsis	Dot1p in Ethernet header of outgoing ping packets
Context	configure test-oam icmp ping-template <i>string dot1p number</i>
Tree	dot1p
Range	0 to 7
Default	7
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp *keyword*

Synopsis	DSCP value used in the outgoing ping packet
Context	configure test-oam icmp ping-template <i>string dscp keyword</i>
Tree	dscp
Default	nc1
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

failure-threshold *number*

Synopsis	Failure threshold to declare inter-connectivity down
Context	configure test-oam icmp ping-template <i>string failure-threshold number</i>
Tree	failure-threshold
Range	2 to 10

Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Packet transmit interval
Context	configure test-oam icmp ping-template <i>string</i> interval <i>number</i>
Tree	interval
Range	1 to 60
Default	60
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reactivation-failure-threshold *number*

Synopsis	Threshold of consecutive failures at reactivation
Context	configure test-oam icmp ping-template <i>string</i> reactivation-failure-threshold <i>number</i>
Tree	reactivation-failure-threshold
Description	This command configures the number of consecutive failures that must occur when transmitting at the reactivation interval without success before the transmission interval is changed to the standard interval.
Range	1 to 10
Default	4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reactivation-interval *number*

Synopsis	Ping reactivation interval
Context	configure test-oam icmp ping-template <i>string</i> reactivation-interval <i>number</i>
Tree	reactivation-interval
Description	This command configures the packet transmit interval used when the IP interface becomes operationally down because of a ping template failure after receiving a successful response to the previous ICMP echo request.

Range	1 to 60
Default	1
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reactivation-threshold *number*

Synopsis	Success threshold to declare inter-connectivity up
Context	configure test-oam icmp ping-template <i>string</i> reactivation-threshold <i>number</i>
Tree	reactivation-threshold
Description	This command configures the minimum number of consecutive successful responses of ICMP replies that must occur before the IP interface transitions from operationally down (due to ping validation failure) to operationally up. This value is a stability metric intended to prevent flapping.
Range	1 to 10
Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reactivation-timeout *number*

Synopsis	Reactivation wait time before packet is declared lost
Context	configure test-oam icmp ping-template <i>string</i> reactivation-timeout <i>number</i>
Tree	reactivation-timeout
Range	1 to 60
Default	1
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

size *number*

Synopsis	Data field size of the outgoing ICMP echo packet
Context	configure test-oam icmp ping-template <i>string</i> size <i>number</i>
Tree	size

Range	12 to 9786
Default	56
Units	octets
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timeout *number*

Synopsis	Wait time before ICMP echo request is declared lost
Context	configure test-oam icmp ping-template <i>string</i> timeout <i>number</i>
Tree	timeout
Range	1 to 60
Default	5
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ttl *number*

Synopsis	TTL value for the outgoing ping packet
Context	configure test-oam icmp ping-template <i>string</i> tll <i>number</i>
Tree	ttl
Description	This command configures the TTL value used in the outgoing ping packet. The tested interface must be directly connected on the same subnet.
Range	1 to 255
Default	1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

link-measurement

Synopsis	Enter the link-measurement context
Context	configure test-oam link-measurement
Tree	link-measurement

Description	Commands in this context configure the link measurement template attributes that are inherited on associated IP interfaces for delay reporting to the routing engine.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

measurement-template [[template-name](#)] *string*

Synopsis	Enter the measurement-template list instance
Context	configure test-oam link-measurement measurement-template <i>string</i>
Tree	measurement-template
Description	Commands in this context configure the attributes of the measurement template that can be assigned to an IP interface. Changes can be made without disabling the template, although some modifications cause the test on associated IP interfaces to terminate and restart. A measurement template can be removed if no interfaces reference it.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[template-name] *string*

Synopsis	Measurement template name
Context	configure test-oam link-measurement measurement-template <i>string</i>
Tree	measurement-template
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the measurement template
Context	configure test-oam link-measurement measurement-template <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

aggregate-sample-window

Synopsis	Enter the aggregate-sample-window context
Context	configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window
Tree	aggregate-sample-window
Description	Commands in this context configure the attributes of the aggregate sample window used with the measurement template assigned to an IP interface. The aggregate sample window is the collection of sample windows.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	Number of sample windows in the aggregate sample window
Context	configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window multiplier <i>number</i>
Tree	multiplier
Range	1 to 12
Default	12
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold

Synopsis	Enter the threshold context
Context	configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window threshold
Tree	threshold
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

absolute *number*

Synopsis	Absolute delta for delay measurement reporting
Context	configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window threshold absolute <i>number</i>
Tree	absolute
Description	This command configures the absolute minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine. If an absolute value is not configured the threshold is disabled.
Range	1 to 100000
Units	microseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

relative *number*

Synopsis	Relative delta for measurement reporting
Context	configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window threshold relative <i>number</i>
Tree	relative
Description	This command configures the relative minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine. If a relative value is not configured, the threshold is disabled.
Range	1 to 100
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window-integrity *number*

Synopsis	Sample percentage required for window integrity report
Context	configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window window-integrity <i>number</i>
Tree	window-integrity
Description	This command configures the percentage value that is used to determine whether the aggregate sample window is integral, by comparing the number of samples received from the sample window to the percentage configured.

The configured percentage translates to a required sample window count that must be included in the aggregate sample window. The number of samples is computed as follows:

$$(\text{window-integrity (\%)}) \times (((\text{aggregate-sample-window length (s)}) / (\text{sample-window length (s)}))$$

If the number of samples in the aggregate sample window is equal to or greater than the computed number of required samples, the sample window has integrity and the aggregate sample window result is compared to the configured sample window thresholds.

If the count is less than the computed number of required samples, the aggregate sample window does not have integrity and the value is not considered as representative. In this case the aggregate sample window results are not compared to the configured sample window thresholds.

If this parameter is not configured, integrity checking is disabled and all results are compared to the configured thresholds.

Range	1 to 100
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delay *keyword*

Synopsis	Delay measurement statistic type
Context	configure test-oam link-measurement measurement-template <i>string</i> delay <i>keyword</i>
Tree	delay
Description	This command configures the type of delay measurement statistic used in the sample window and aggregate sample window.
Default	min
Options	min, max, avg
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure test-oam link-measurement measurement-template <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Interval between test packet transmissions
Context	configure test-oam link-measurement measurement-template <i>string interval number</i>
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

last-reported-delay-hold *number*

Synopsis	Time to wait to flush the last reported delay
Context	configure test-oam link-measurement measurement-template <i>string last-reported-delay-hold number</i>
Tree	last-reported-delay-hold
Description	<p>This command configures the timer that specifies the wait time before the last reported delay measurement is flushed after a link measurement test enters the operationally down state.</p> <p>The aging timer delays the flushing of the last reported delay metric to the routing engine. This timer starts a countdown to zero when an administrative function causes the operational state of the test on that specific interface to transition from up to down. If the timer expires before the operational state transitions to up, the previously reported value is flushed. The Delay Measurement Last Reported indicates "Cleared". The timestamp indicates the time of the clear event. The Triggered By indicates "Expired". If the administrative state recovers to operationally up before the expiration of the timer, the previous reported value is not flushed.</p> <p>The aging timer does not apply to failure conditions that do not affect the administrative state of the interface, for example interface failure or routing changes.</p>
Range	0 1 to 86400
Default	86400
Units	seconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reporting *boolean*

Synopsis	Report behavior for values for the configured threshold
Context	configure test-oam link-measurement measurement-template <i>string</i> reporting <i>boolean</i>
Tree	reporting
Description	<p>When configured to true, the system reports a reached threshold to the routing engine. Reaching a configured sample-window or aggregate-sample-window indicates a value of interest.</p> <p>When configured to false, values reaching thresholds are not reported to the routing engine. In both enabled and disabled cases, the sample-window and aggregate-sample-window information and computed values are stored on the node until overwriting occurs.</p>
Default	true
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sample-window

Synopsis	Enter the sample-window context
Context	configure test-oam link-measurement measurement-template <i>string</i> sample-window
Tree	sample-window
Description	Commands in this context configure sample window attributes used when the measurement template is assigned to an IP interface. The sample window is the collection of individual probe results over a defined period.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	Multiplier of interval used for sample window length
Context	configure test-oam link-measurement measurement-template <i>string</i> sample-window multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of probe results that should be in the sample window. For example, a multiplier of 10 and an interval of 5 equals 50 probes being transmitted from an individual sample window. Consequently, 50 probe results are expected within the 50 second duration that the sample window is "In-progress".
Range	1 to 900

Default	10
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold

Synopsis	Enter the threshold context
Context	configure test-oam link-measurement measurement-template <i>string</i> sample-window threshold
Tree	threshold
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

absolute *number*

Synopsis	Absolute delta for delay measurement reporting
Context	configure test-oam link-measurement measurement-template <i>string</i> sample-window threshold absolute <i>number</i>
Tree	absolute
Description	This command configures the absolute minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine. If an absolute value is not configured the threshold is disabled.
Range	1 to 100000
Units	microseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

relative *number*

Synopsis	Relative delta for delay measurement reporting
Context	configure test-oam link-measurement measurement-template <i>string</i> sample-window threshold relative <i>number</i>
Tree	relative
Description	This command configures the relative minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.

If a relative value is not configured, the threshold is disabled.

Range	1 to 500
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window-integrity *number*

Synopsis	Sample percentage required for window integrity report
Context	configure test-oam link-measurement measurement-template <i>string</i> sample-window window-integrity <i>number</i>
Tree	window-integrity
Description	<p>This command configures the percentage value that is used to determine whether the sample window has enough samples to be considered representative for that window (integrity), by comparing the number of samples received from the sample window to the percentage configured.</p> <p>The configured percentage considers the interval of probes and the length of the sample window to determine the number of packets required in the sample:</p> $(\text{window-integrity (\%)}) \times ((\text{sample-window length (s)}) / \text{pps per test (interval)})$ <p>If the count is less than the computed number of required samples, the sample window does not have integrity and the sample window results are not compared to configured sample window thresholds.</p> <p>If the count is equal to or greater than the computed number of required samples, the sample window has integrity and the aggregate sample window result is compared to the configured sample window thresholds.</p> <p>If the count is less than the computed number of required samples, the sample window does not have integrity and the value is not considered as representative. In this case the sample window results are not compared to the configured sample window thresholds.</p> <p>If this parameter is not configured, integrity checking is disabled and all results are compared to the configured thresholds.</p>
Range	1 to 100
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

twamp-light

Synopsis	Enter the twamp-light context
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Context	configure test-oam link-measurement measurement-template <i>string</i> twamp-light
Tree	twamp-light
Description	Commands in this context configure TWAMP Light attributes that are used with the measurement template when assigned to IP interfaces.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-egress-remark-dscp *boolean*

Synopsis	Allow overwrite of DSCP value by the egress QoS policy
Context	configure test-oam link-measurement measurement-template <i>string</i> twamp-light allow-egress-remark-dscp <i>boolean</i>
Tree	allow-egress-remark-dscp
Description	<p>When configured to true, the egress QoS process is able to modify the DSCP based on the egress QoS configuration and expose the DSCP to egress DSCP processing rules.</p> <p>When configured to false, the egress QoS process uses the DSCP as configured and bypasses egress QoS DSCP marking.</p> <p>If the configure qos network egress remark-trusted force-egress-marking command is configured for the network egress QoS profile, the egress QoS process is applied and the DSCP can be overwritten regardless of the allow-egress-remark-dscp configuration.</p>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean*

Synopsis	Process IPv6 packets with UDP check sum zero
Context	configure test-oam link-measurement measurement-template <i>string</i> twamp-light allow-ipv6-udp-checksum-zero <i>boolean</i>
Tree	allow-ipv6-udp-checksum-zero
Description	<p>When configured to true, processing of IPv6 packets that arrive with a UDP checksum of zero is allowed. The destination UDP ports that are registered as TWAMP Test packets in the template allow this behavior.</p> <p>When configured to false, IPv6 packets that arrive with a UDP checksum of zero are discarded.</p>
Default	false
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dest-udp-port *number*

Synopsis Destination UDP port used by link measurement tests

Context **configure** **test-oam link-measurement measurement-template** *string* **twamp-light dest-udp-port** *number*

Tree **dest-udp-port**

Description This command configures the destination UDP port on outbound TWAMP Light measurement packets sent from the session controller. The destination UDP port must match the UDP port value configured on the TWAMP Light reflector that responds to this specific TWAMP Light test.

Range 1 to 65535

Default 862

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp *keyword*

Synopsis DSCP copied to TWAMP Light echo request packet header

Context **configure** **test-oam link-measurement measurement-template** *string* **twamp-light dscp** *keyword*

Tree **dscp**

Description This command configures the DSCP to be copied into the IP header of each TWAMP Light echo request packet launched for the test.

Default nc1

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis Forwarding class name for the TWAMP Light packets

Context	configure test-oam link-measurement measurement-template <i>string</i> twamp-light <i>fc</i> <i>keyword</i>
Tree	fc
Default	h1
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-destination-discovery

Synopsis	Enter the ipv6-destination-discovery context
Context	configure test-oam link-measurement measurement-template <i>string</i> twamp-light ipv6-destination-discovery
Tree	ipv6-destination-discovery
Description	Commands in this context configure IPv6 discovery of a directly-connected IPv6 peer address.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of IPv6 auto destination discovery
Context	configure test-oam link-measurement measurement-template <i>string</i> twamp-light ipv6-destination-discovery admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

discovery-interval *number*

Synopsis	Transmission frequency for discovery packets
Context	configure test-oam link-measurement measurement-template <i>string</i> twamp-light ipv6-destination-discovery discovery-interval <i>number</i>
Tree	discovery-interval

Description	This command configures transmission frequency of the discovery packet to the all-routers multicast group (ff02::2) to discover the link-local address of the peer. This frequency is used during the discover-timer interval.
Range	1 to 10
Default	10
Units	seconds
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

discover-timer *number*

Synopsis	Maximum time to remain in the discovery phase
Context	configure test-oam link-measurement measurement-template <i>string</i> twamp-light ipv6-destination-discovery discover-timer <i>number</i>
Tree	discover-timer
Description	This command configures the amount of time to transmit peer discovery packets at the discover-interval . The timer starts when the IPv6 protocols is enabled under the configure router interface if-attribute delay dynamic twamp-light ipv6 context. At the expiration of the discover-interval or when a peer is discovered, whichever comes first, the probe interval changes to the value configured for the update-interval .
Range	1 to 1800
Default	60
Units	seconds
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

update-interval *number*

Synopsis	Transmission frequency to maintain the peer address
Context	configure test-oam link-measurement measurement-template <i>string</i> twamp-light ipv6-destination-discovery update-interval <i>number</i>
Tree	update-interval
Range	0 1 to 3600
Default	600
Units	seconds
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pad-tlv-size *number*

Synopsis Optional PAD TLV size

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light pad-tlv-size](#) *number*

Tree [pad-tlv-size](#)

Description This command enables a STAMP PDU to include the PAD TLV. This increases the size of the STAMP PDU by the size of the added TLV. The PAD TLV includes an all zeros pattern.

Range 4 to 9714

Units bytes

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*

Synopsis QoS profile for packet treatment in local node

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light profile](#) *keyword*

Tree [profile](#)

Description This command specifies if the packets should be treated as in or out of profile as they move through the local node.

Default in

Options in, out

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

return-path

Synopsis Enter the **return-path** context

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light return-path](#)

Tree [return-path](#)

Description Commands in this context configure the return-path TLV carried in the STAMP PDU.

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

link *boolean*

Synopsis The Return Path sub-TLV specifying link

Context **configure** test-oam link-measurement measurement-template *string* twamp-light return-path link *boolean*

Tree link

Description When configured to **true**, the system includes the **return-path** TLV link. The link sub-tlv instructs a Session-Reflector configured for type **stamp** to use the receiving logical IP interface for the transmission of the response packet from the reflector to the **session-sender**. The destination of the reflected packet must be installed in the forwarding table and reachable out the IP interface or the packet is dropped by the Session-Reflector. When there are parallel non-equal cost return paths between the Session-Reflector and the Session-Sender the response packet can only be returned on the lowest cost path.

When configured to **false**, the Return Path TLV carried in the STAMP PDU is not included with the test packet.

Default false

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-udp-port *number*

Synopsis Fixed source UDP port for link measurement tests

Context **configure** test-oam link-measurement measurement-template *string* twamp-light src-udp-port *number*

Tree src-udp-port

Description This command specifies a source UDP port for link measurement tests.

Unless required, Nokia suggests that the link measurement dynamically select an available source UDP port from the dynamic range. Before a UDP port in the configurable range can be configured as a source it must be owned by the application. Use the **configure test-oam twamp twamp-light source-udp-port-pools port pool-type** command to map the port range to the application.

By default a source UDP port allocates from the dynamic range. The configuration of the source port should only be configured when required for interoperability. When the source IP, destination IP, and destination UPD port are the same for a test, the source UDP port must be different in order to uniquely identify the session.

Range 64374 to 64383

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timestamp-format *keyword*

Synopsis	Format of the timestamp used in TWAMP Light PDU
Context	configure test-oam link-measurement measurement-template <i>string</i> twamp-light timestamp-format <i>keyword</i>
Tree	timestamp-format
Description	This command configures the format of the timestamp used in the TWAMP Light PDU and places the requested timestamp format in the packet using the appropriate epoch. This is unrelated to any time distribution protocol used to synchronize time between clocks.
Default	ntp
Options	ntp, ptp
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tll *number*

Synopsis	Time to live value used in the TWAMP Light test packet
Context	configure test-oam link-measurement measurement-template <i>string</i> twamp-light tll <i>number</i>
Tree	tll
Range	1 to 255
Default	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

unidirectional-measurement *keyword*

Synopsis	Method used to compute the unidirectional delay value
Context	configure test-oam link-measurement measurement-template <i>string</i> unidirectional-measurement <i>keyword</i>
Tree	unidirectional-measurement
Description	This command specifies the unidirectional delay computation method as the actual forward delay (calculated using T2-T1 timestamps) or as derived using the round-trip delay divided by two (required if nodal clocks are not synchronized using an accurate time-synchronization method or protocol such as PTP).
Default	derived

Options	derived, actual
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mpls-dm

Synopsis	Enter the mpls-dm context
Context	configure test-oam mpls-dm
Tree	mpls-dm
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of MPLS DM packet processing
Context	configure test-oam mpls-dm admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

twamp

Synopsis	Enter the twamp context
Context	configure test-oam twamp
Tree	twamp
Introduced	16.0.R4
Platforms	All

server

Synopsis	Enter the server context
Context	configure test-oam twamp server
Tree	server

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the TWAMP server
Context	configure test-oam twamp server admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean*

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	configure test-oam twamp server allow-ipv6-udp-checksum-zero <i>boolean</i>
Tree	allow-ipv6-udp-checksum-zero
Description	<p>When configured to true, this command configures the acceptance of IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x0000 arriving packets are discarded.</p> <p>When configured to false, packets that arrive with an IPv6 UDP checksum of 0x0000 are discarded.</p>
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

inactivity-timeout *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Inactivity timeout for TWAMP control connections
Context	configure test-oam twamp server inactivity-timeout <i>number</i>

Tree	inactivity-timeout
Range	60 to 3600
Default	900
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-connections *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Limit of concurrent TWAMP server control connections
Context	configure test-oam twamp server max-connections <i>number</i>
Tree	max-connections
Range	0 to 64
Default	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-sessions *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of concurrent TWAMP server test sessions
Context	configure test-oam twamp server max-sessions <i>number</i>
Tree	max-sessions
Range	0 to 128
Default	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Max. Instances	100
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Prefix to match against TWAMP client address
Context	configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) description string
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-connections *number*

Synopsis	Maximum number of control connections for TWAMP prefix
Context	configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) max-connections number
Tree	max-connections
Range	0 to 64
Default	32

Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-sessions *number*

Synopsis Maximum concurrent TWAMP test sessions based on prefix
Context **configure** [test-oam twamp server prefix](#) (*ipv4-prefix | ipv6-prefix*) [max-sessions](#) *number*
Tree [max-sessions](#)
Range 0 to 128
Default 32
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

twamp-light

Synopsis Enter the **twamp-light** context
Context **configure** [test-oam twamp twamp-light](#)
Tree [twamp-light](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

inactivity-timeout *number*

Synopsis Time to maintain stale state on the session reflector
Context **configure** [test-oam twamp twamp-light inactivity-timeout](#) *number*
Tree [inactivity-timeout](#)
Range 10 to 100
Default 100
Units seconds
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-udp-port-pools

Synopsis Enter the **source-udp-port-pools** context

Context	configure test-oam twamp twamp-light source-udp-port-pools
Tree	source-udp-port-pools
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port [port-number] *number*

Synopsis	Enter the port list instance
Context	configure test-oam twamp twamp-light source-udp-port-pools port <i>number</i>
Tree	port
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[port-number] *number*

Synopsis	Source UDP port pools port number
Context	configure test-oam twamp twamp-light source-udp-port-pools port <i>number</i>
Tree	port
Range	64374 to 64383
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pool-type *keyword*

Synopsis	Pool type of an application pool
Context	configure test-oam twamp twamp-light source-udp-port-pools port <i>number</i> pool-type <i>keyword</i>
Tree	pool-type
Description	<p>This command maps the specified source UDP port to the TWAMP Light application allowed to configure the source UDP port. OAM-PM IP tests can only configure the source UDP port when the port pool UDP source port is configured with a pool-type oam-pm. The test-oam link-measurement measurement-template can only configure the src-udp-port when the port pool UDP source port is configured with pool-type link-measurement.</p> <p>This command maps the specified source UDP port to the application allowed to configure the source UDP port. The OAM-PM IP family of tests can only configure the source UDP port when the port pool UDP source port is configured with a pool-type</p>

oam-pm. The test-oam link-measurement measurement-template can only configure the src-udp-port when the port pool UDP source port is configured with a pool-type link-measurement. A pool-type cannot be changed if its current application is a test (either an oam-pm session or link-measurement template) and is configured to use the specified port, regardless of the administrative or operational state. The configuration reference linking to the source UDP prevents the change.

Default	oam-pm
Options	oam-pm, link-measurement
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

3.48 vrrp commands

```

configure
- vrrp
- apply-groups reference
- apply-groups-exclude reference
- policy number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- context string
- delta-in-use-limit number
- description string
- priority-event
- host-unreachable (ipv4-address-with-zone | ipv6-address-with-zone)
- apply-groups reference
- apply-groups-exclude reference
- drop-count number
- hold-clear number
- hold-set number
- padding-size number
- priority
- event-type keyword
- priority-level number
- request-interval number
- timeout number
- lag-port-down string
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- number-down number
- apply-groups reference
- apply-groups-exclude reference
- priority
- event-type keyword
- priority-level number
- weight-down number
- apply-groups reference
- apply-groups-exclude reference
- priority
- event-type keyword
- priority-level number
- mc-ipsec-non-forwarding number
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- priority
- event-type keyword
- priority-level number
- port-down string
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- priority
- event-type keyword
- priority-level number
- route-unknown (ipv4-prefix | ipv6-prefix)
- apply-groups reference

```

configure vrrp policy priority-event route-unknown apply-groups-exclude

- **apply-groups-exclude** *reference*
- **hold-clear** *number*
- **hold-set** *number*
- **less-specific**
 - **allow-default** *boolean*
- **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
- **priority**
 - **event-type** *keyword*
 - **priority-level** *number*
- **protocol** *keyword*

3.48.1 vrrp command descriptions

vrrp

Synopsis	Enter the vrrp context
Context	configure vrrp
Tree	vrrp
Introduced	16.0.R1
Platforms	All

policy [[policy-id](#)] *number*

Synopsis	Enter the policy list instance
Context	configure vrrp policy number
Tree	policy
Introduced	16.0.R1
Platforms	All

[policy-id] *number*

Synopsis	Policy ID
Context	configure vrrp policy number
Tree	policy
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP priority control policy
Context	configure vrrp policy number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable

Introduced 16.0.R1
Platforms All

context *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Service name to which this policy applies
Context **configure vrrp policy number context string**
Tree [context](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms All

delta-in-use-limit *number*

Synopsis Limit on the delta priority control events
Context **configure vrrp policy number delta-in-use-limit number**
Tree [delta-in-use-limit](#)
Range 1 to 254
Default 1
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure vrrp policy number description string**
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

priority-event

Synopsis	Enter the priority-event context
Context	configure vrrp policy number priority-event
Tree	priority-event
Introduced	16.0.R1
Platforms	All

host-unreachable [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Enter the host-unreachable list instance
Context	configure vrrp policy number priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	host-unreachable
Introduced	16.0.R1
Platforms	All

[\[ip-address\]](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Host IP address that receives a constant ping probe
Context	configure vrrp policy number priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	host-unreachable
Description	This command configures the host IP address for which the specific host unreachable priority event monitors connectivity with a continuous ICMP echo request (ping) probe.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Threshold for consecutive message send attempts
Context	configure vrrp policy number priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) drop-count number
Tree	drop-count
Range	1 to 60
Default	3

Introduced 16.0.R1
Platforms All

hold-clear *number*

Synopsis Delay time for a cleared event on the router instance
Context **configure** [vrrp policy number priority-event host-unreachable](#) (*ipv4-address-with-zone | ipv6-address-with-zone*) **hold-clear** *number*
Tree [hold-clear](#)
Range 1 to 86400
Units seconds
Introduced 16.0.R1
Platforms All

hold-set *number*

Synopsis Hold time before transitioning to cleared state
Context **configure** [vrrp policy number priority-event host-unreachable](#) (*ipv4-address-with-zone | ipv6-address-with-zone*) **hold-set** *number*
Tree [hold-set](#)
Range 1 to 86400
Units seconds
Introduced 16.0.R1
Platforms All

padding-size *number*

Synopsis Packet length padding of the ICMP packet
Context **configure** [vrrp policy number priority-event host-unreachable](#) (*ipv4-address-with-zone | ipv6-address-with-zone*) **padding-size** *number*
Tree [padding-size](#)
Range 0 to 16384
Default 56
Units bytes
Introduced 16.0.R1
Platforms All

priority

Synopsis	Enter the priority context
Context	configure vrrp policy number priority-event host-unreachable (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) priority
Tree	priority
Introduced	16.0.R1
Platforms	All

event-type *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	configure vrrp policy number priority-event host-unreachable (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) priority event-type keyword
Tree	event-type
Default	delta
Options	delta, explicit
Introduced	16.0.R1
Platforms	All

priority-level *number*

Synopsis	Priority level associated with this event
Context	configure vrrp policy number priority-event host-unreachable (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) priority priority-level number
Tree	priority-level
Range	1 to 254
Introduced	16.0.R1
Platforms	All

request-interval *number*

Synopsis	Time interval between consecutive ICMP echo requests
Context	configure vrrp policy number priority-event host-unreachable (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) request-interval number
Tree	request-interval

Range	1 to 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout for ICMP echo request messages
Context	configure vrrp policy <i>number</i> priority-event host-unreachable (ipv4-address-with-zone ipv6-address-with-zone) timeout <i>number</i>
Tree	timeout
Range	1 to 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

lag-port-down [[lag-name](#)] *string*

Synopsis	Enter the lag-port-down list instance
Context	configure vrrp policy <i>number</i> priority-event lag-port-down <i>string</i>
Tree	lag-port-down
Introduced	16.0.R1
Platforms	All

[lag-name] *string*

Synopsis	LAG name
Context	configure vrrp policy <i>number</i> priority-event lag-port-down <i>string</i>
Tree	lag-port-down
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	configure <i>vrp policy number priority-event lag-port-down string hold-clear number</i>
Tree	<i>hold-clear</i>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

hold-set *number*

Synopsis	Hold time before transitioning to cleared state
Context	configure <i>vrp policy number priority-event lag-port-down string hold-set number</i>
Tree	<i>hold-set</i>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

number-down [*number-of-lag-ports-down*] *number*

Synopsis	Enter the number-down list instance
Context	configure <i>vrp policy number priority-event lag-port-down string number-down number</i>
Tree	<i>number-down</i>
Introduced	16.0.R1
Platforms	All

[number-of-lag-ports-down] *number*

Synopsis	Threshold of down LAG ports that create a set event
Context	configure <i>vrp policy number priority-event lag-port-down string number-down number</i>
Tree	<i>number-down</i>
Range	1 to 64
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

priority

Synopsis Enter the **priority** context
Context **configure** [vrrp policy number](#) [priority-event lag-port-down string](#) [number-down number](#)
[priority](#)
Tree [priority](#)
Introduced 16.0.R1
Platforms All

event-type *keyword*

Synopsis Effect of priority-level value on base priority value
Context **configure** [vrrp policy number](#) [priority-event lag-port-down string](#) [number-down number](#)
[priority event-type keyword](#)
Tree [event-type](#)
Default delta
Options delta, explicit
Introduced 16.0.R1
Platforms All

priority-level *number*

Synopsis Priority level associated with this event
Context **configure** [vrrp policy number](#) [priority-event lag-port-down string](#) [number-down number](#)
[priority priority-level number](#)
Tree [priority-level](#)
Range 1 to 254
Introduced 16.0.R1
Platforms All

weight-down [[lag-ports-down-weight](#)] *number*

Synopsis Enter the **weight-down** list instance

Context	configure <i>vrrp policy number priority-event lag-port-down string weight-down number</i>
Tree	<i>weight-down</i>
Introduced	16.0.R1
Platforms	All

[lag-ports-down-weight] number

Synopsis	LAG name for the reduced LAG ports
Context	configure <i>vrrp policy number priority-event lag-port-down string weight-down number</i>
Tree	<i>weight-down</i>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

priority

Synopsis	Enter the priority context
Context	configure <i>vrrp policy number priority-event lag-port-down string weight-down number priority</i>
Tree	<i>priority</i>
Introduced	16.0.R1
Platforms	All

event-type keyword

Synopsis	Effect of priority-level value on base priority value
Context	configure <i>vrrp policy number priority-event lag-port-down string weight-down number priority event-type keyword</i>
Tree	<i>event-type</i>
Default	delta
Options	delta, explicit
Introduced	16.0.R1
Platforms	All

priority-level *number*

Synopsis	Priority level associated with this event
Context	configure vrrp policy <i>number</i> priority-event lag-port-down <i>string</i> weight-down <i>number</i> priority priority-level <i>number</i>
Tree	priority-level
Range	1 to 254
Introduced	16.0.R1
Platforms	All

mc-ipsec-non-forwarding [[tunnel-group-id](#)] *number*

Synopsis	Enter the mc-ipsec-non-forwarding list instance
Context	configure vrrp policy <i>number</i> priority-event mc-ipsec-non-forwarding <i>number</i>
Tree	mc-ipsec-non-forwarding
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tunnel-group-id] *number*

Synopsis	IPSEC tunnel group monitored by priority control event
Context	configure vrrp policy <i>number</i> priority-event mc-ipsec-non-forwarding <i>number</i>
Tree	mc-ipsec-non-forwarding
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	configure vrrp policy <i>number</i> priority-event mc-ipsec-non-forwarding <i>number</i> hold-clear <i>number</i>
Tree	hold-clear
Range	1 to 86400
Units	seconds

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-set *number*

Synopsis Hold time before transitioning to cleared state
Context **configure** *vrp policy number priority-event mc-ipsec-non-forwarding number hold-set number*
Tree [hold-set](#)
Range 1 to 86400
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority

Synopsis Enter the **priority** context
Context **configure** *vrp policy number priority-event mc-ipsec-non-forwarding number priority*
Tree [priority](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-type *keyword*

Synopsis Event type
Context **configure** *vrp policy number priority-event mc-ipsec-non-forwarding number priority event-type keyword*
Tree [event-type](#)
Default delta
Options delta, explicit
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-level *number*

Synopsis Priority level associated with this event

Context	configure <i>vrrp policy number priority-event mc-ipsec-non-forwarding number priority priority-level number</i>
Tree	<i>priority-level</i>
Range	1 to 254
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-down [*port-id*] *string*

Synopsis	Enter the port-down list instance
Context	configure <i>vrrp policy number priority-event port-down string</i>
Tree	<i>port-down</i>
Introduced	16.0.R1
Platforms	All

[port-id] *string*

Synopsis	Port ID for the reduced LAG ports
Context	configure <i>vrrp policy number priority-event port-down string</i>
Tree	<i>port-down</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	configure <i>vrrp policy number priority-event port-down string hold-clear number</i>
Tree	<i>hold-clear</i>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

hold-set *number*

Synopsis	Hold time before transitioning to cleared state
Context	configure <i>vrrp policy number priority-event port-down string hold-set number</i>
Tree	hold-set
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

priority

Synopsis	Enter the priority context
Context	configure <i>vrrp policy number priority-event port-down string priority</i>
Tree	priority
Introduced	16.0.R1
Platforms	All

event-type *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	configure <i>vrrp policy number priority-event port-down string priority event-type keyword</i>
Tree	event-type
Default	delta
Options	delta, explicit
Introduced	16.0.R1
Platforms	All

priority-level *number*

Synopsis	Priority level associated with this event
Context	configure <i>vrrp policy number priority-event port-down string priority priority-level number</i>
Tree	priority-level
Range	1 to 254
Introduced	16.0.R1

Platforms All

route-unknown [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **route-unknown** list instance

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [route-unknown](#)

Introduced 16.0.R1

Platforms All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix of route monitored by priority control event

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [route-unknown](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

hold-clear *number*

Synopsis Delay time for a cleared event on the router instance

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)
[hold-clear](#) *number*

Tree [hold-clear](#)

Range 1 to 86400

Units seconds

Introduced 16.0.R1

Platforms All

hold-set *number*

Synopsis Hold time before transitioning to cleared state

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)
[hold-set](#) *number*

Tree [hold-set](#)

Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

less-specific

Synopsis	Enable the less-specific context
Context	configure vrrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) less-specific
Tree	less-specific
Introduced	16.0.R1
Platforms	All

allow-default *boolean*

Synopsis	Match on default route
Context	configure vrrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) less-specific allow-default <i>boolean</i>
Tree	allow-default
Default	false
Introduced	16.0.R1
Platforms	All

next-hop [*ip-address*] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Add a list entry for next-hop
Context	configure vrrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	next-hop
Introduced	19.5.R1
Platforms	All

[*ip-address*] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Next-hop IP address for a returned route prefix
----------	---

Context	configure vrrp policy number priority-event route-unknown (<i>ipv4-prefix ipv6-prefix</i>) next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>)
Tree	next-hop
Description	This command configures the next-hop IP address used to match the route prefix being monitored by the priority control event with the results of a route table lookup.
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

priority

Synopsis	Enter the priority context
Context	configure vrrp policy number priority-event route-unknown (<i>ipv4-prefix ipv6-prefix</i>) priority
Tree	priority
Introduced	16.0.R1
Platforms	All

event-type *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	configure vrrp policy number priority-event route-unknown (<i>ipv4-prefix ipv6-prefix</i>) priority event-type keyword
Tree	event-type
Default	delta
Options	delta, explicit
Introduced	16.0.R1
Platforms	All

priority-level *number*

Synopsis	Priority level associated with this event
Context	configure vrrp policy number priority-event route-unknown (<i>ipv4-prefix ipv6-prefix</i>) priority priority-level number
Tree	priority-level
Range	1 to 254

Introduced 16.0.R1
Platforms All

protocol *keyword*

Synopsis Routing protocol as match criterion
Context **configure** *vrp policy number priority-event route-unknown* (*ipv4-prefix | ipv6-prefix*)
protocol keyword
Tree *protocol*
Options bgp, ospf, isis, rip, static, bgp-vpn
Max. Instances 6
Introduced 16.0.R1
Platforms All

4 Deprecated and obsolete commands

This section lists the deprecated and obsolete commands in this major release.

4.1 Deprecated commands

This chapter provides a list of commands that are marked as “status deprecated” in the Nokia YANG models and the MD-CLI and should no longer be used. Only releases in which commands are initially deprecated are included in this section. If applicable, the equivalent configuration groups command is also deprecated (but not explicitly listed).

See the SR OS Software Release Notes for more information.

4.1.1 22.7.R1

router commands:

- configure router nat inside large-scale dual-stack-lite deterministic policy-map
- configure router nat inside large-scale dual-stack-lite deterministic policy-map admin-state
- configure router nat inside large-scale dual-stack-lite deterministic policy-map apply-groups
- configure router nat inside large-scale dual-stack-lite deterministic policy-map apply-groups-exclude
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups-exclude
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map first-outside-address
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map from
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map to
- configure router nat inside large-scale dual-stack-lite deterministic policy-map nat-policy
- configure router nat inside large-scale dual-stack-lite deterministic policy-map source-prefix
- configure router nat inside large-scale nat44 deterministic policy-map
- configure router nat inside large-scale nat44 deterministic policy-map admin-state
- configure router nat inside large-scale nat44 deterministic policy-map apply-groups
- configure router nat inside large-scale nat44 deterministic policy-map apply-groups-exclude
- configure router nat inside large-scale nat44 deterministic policy-map map
- configure router nat inside large-scale nat44 deterministic policy-map map apply-groups
- configure router nat inside large-scale nat44 deterministic policy-map map apply-groups-exclude
- configure router nat inside large-scale nat44 deterministic policy-map map first-outside-address
- configure router nat inside large-scale nat44 deterministic policy-map map from
- configure router nat inside large-scale nat44 deterministic policy-map map to
- configure router nat inside large-scale nat44 deterministic policy-map nat-policy
- configure router nat inside large-scale nat44 deterministic policy-map source-prefix

service commands:

- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map admin-state
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map apply-groups
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map apply-groups-exclude
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups-exclude
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map first-outside-address
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map from
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map to
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map nat-policy
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map source-prefix
- configure service vprn nat inside large-scale nat44 deterministic policy-map
- configure service vprn nat inside large-scale nat44 deterministic policy-map admin-state
- configure service vprn nat inside large-scale nat44 deterministic policy-map apply-groups
- configure service vprn nat inside large-scale nat44 deterministic policy-map apply-groups-exclude
- configure service vprn nat inside large-scale nat44 deterministic policy-map map
- configure service vprn nat inside large-scale nat44 deterministic policy-map map apply-groups
- configure service vprn nat inside large-scale nat44 deterministic policy-map map apply-groups-exclude
- configure service vprn nat inside large-scale nat44 deterministic policy-map map first-outside-address
- configure service vprn nat inside large-scale nat44 deterministic policy-map map from
- configure service vprn nat inside large-scale nat44 deterministic policy-map map to
- configure service vprn nat inside large-scale nat44 deterministic policy-map nat-policy
- configure service vprn nat inside large-scale nat44 deterministic policy-map source-prefix

4.1.2 22.10.R1

lag commands:

- configure lag port-weight-speed
- configure lag weight-threshold
- configure lag weight-threshold action
- configure lag weight-threshold cost
- configure lag weight-threshold value

4.1.3 22.10.R3

isa commands:

- configure isa video-group ad-insert
- configure isa video-group rt-client

service commands:

- configure service ies video-interface adi
- configure service ies video-interface adi scte30
- configure service ies video-interface adi scte30 ad-server
- configure service ies video-interface adi scte30 ad-server address
- configure service ies video-interface adi scte30 local-address
- configure service ies video-interface adi scte30 local-address apply-groups
- configure service ies video-interface adi scte30 local-address apply-groups-exclude
- configure service ies video-interface adi scte30 local-address control
- configure service ies video-interface adi scte30 local-address data
- configure service ies video-interface rt-client
- configure service ies video-interface rt-client apply-groups
- configure service ies video-interface rt-client apply-groups-exclude
- configure service ies video-interface rt-client src-address
- configure service vprn video-interface adi
- configure service vprn video-interface adi scte30
- configure service vprn video-interface adi scte30 ad-server
- configure service vprn video-interface adi scte30 ad-server address
- configure service vprn video-interface adi scte30 local-address
- configure service vprn video-interface adi scte30 local-address apply-groups
- configure service vprn video-interface adi scte30 local-address apply-groups-exclude
- configure service vprn video-interface adi scte30 local-address control
- configure service vprn video-interface adi scte30 local-address data
- configure service vprn video-interface rt-client
- configure service vprn video-interface rt-client apply-groups
- configure service vprn video-interface rt-client apply-groups-exclude
- configure service vprn video-interface rt-client src-address

4.2 Obsolete commands

This chapter provides a list of commands that are marked as “status obsolete” in the Nokia YANG models and the MD-CLI. These commands can no longer be used and are considered invalid. Only releases in which commands are initially obsoleted are included in this section. If applicable, the equivalent configuration groups command is also obsoleted (but not explicitly listed).

See the SR OS Software Release Notes for more information.

4.2.1 22.2.R1

card commands:

- configure card mda access egress pool
- configure card mda access egress pool amber-alarm-threshold
- configure card mda access egress pool apply-groups
- configure card mda access egress pool apply-groups-exclude
- configure card mda access egress pool name
- configure card mda access egress pool red-alarm-threshold
- configure card mda access egress pool resv-cbs
- configure card mda access egress pool resv-cbs amber-alarm-action
- configure card mda access egress pool resv-cbs amber-alarm-action max
- configure card mda access egress pool resv-cbs amber-alarm-action step
- configure card mda access egress pool resv-cbs cbs
- configure card mda access egress pool slope-policy
- configure card mda access ingress pool
- configure card mda access ingress pool amber-alarm-threshold
- configure card mda access ingress pool apply-groups
- configure card mda access ingress pool apply-groups-exclude
- configure card mda access ingress pool name
- configure card mda access ingress pool red-alarm-threshold
- configure card mda access ingress pool resv-cbs
- configure card mda access ingress pool resv-cbs amber-alarm-action
- configure card mda access ingress pool resv-cbs amber-alarm-action max
- configure card mda access ingress pool resv-cbs amber-alarm-action step
- configure card mda access ingress pool resv-cbs cbs
- configure card mda access ingress pool slope-policy
- configure card mda network egress pool
- configure card mda network egress pool amber-alarm-threshold

- configure card mda network egress pool apply-groups
- configure card mda network egress pool apply-groups-exclude
- configure card mda network egress pool name
- configure card mda network egress pool red-alarm-threshold
- configure card mda network egress pool resv-cbs
- configure card mda network egress pool resv-cbs amber-alarm-action
- configure card mda network egress pool resv-cbs amber-alarm-action max
- configure card mda network egress pool resv-cbs amber-alarm-action step
- configure card mda network egress pool resv-cbs cbs
- configure card mda network egress pool slope-policy

fwd-path-ext commands:

- configure fwd-path-ext fpe application pw-port
- configure fwd-path-ext fpe application vxlan-termination
- configure fwd-path-ext fpe application vxlan-termination router-instance

log commands:

- configure log accounting-policy custom-record override-counter
- configure log accounting-policy custom-record override-counter apply-groups
- configure log accounting-policy custom-record override-counter apply-groups-exclude
- configure log accounting-policy custom-record override-counter e-counters
- configure log accounting-policy custom-record override-counter e-counters in-profile-octets-discarded-count
- configure log accounting-policy custom-record override-counter e-counters in-profile-octets-forwarded-count
- configure log accounting-policy custom-record override-counter e-counters in-profile-packets-discarded-count
- configure log accounting-policy custom-record override-counter e-counters in-profile-packets-forwarded-count
- configure log accounting-policy custom-record override-counter e-counters out-profile-octets-discarded-count
- configure log accounting-policy custom-record override-counter e-counters out-profile-octets-forwarded-count
- configure log accounting-policy custom-record override-counter e-counters out-profile-packets-discarded-count
- configure log accounting-policy custom-record override-counter e-counters out-profile-packets-forwarded-count
- configure log accounting-policy custom-record override-counter i-counters
- configure log accounting-policy custom-record override-counter i-counters all-octets-offered-count
- configure log accounting-policy custom-record override-counter i-counters all-packets-offered-count
- configure log accounting-policy custom-record override-counter i-counters high-octets-discarded-count

- configure log accounting-policy custom-record override-counter i-counters high-packets-discarded-count
- configure log accounting-policy custom-record override-counter i-counters in-profile-octets-forwarded-count
- configure log accounting-policy custom-record override-counter i-counters in-profile-packets-forwarded-count
- configure log accounting-policy custom-record override-counter i-counters low-octets-discarded-count
- configure log accounting-policy custom-record override-counter i-counters low-packets-discarded-count
- configure log accounting-policy custom-record override-counter i-counters out-profile-octets-forwarded-count
- configure log accounting-policy custom-record override-counter i-counters out-profile-packets-forwarded-count
- configure log accounting-policy custom-record override-counter id
- configure log accounting-policy custom-record ref-override-counter
- configure log accounting-policy custom-record ref-override-counter all
- configure log accounting-policy custom-record ref-override-counter e-counters
- configure log accounting-policy custom-record ref-override-counter e-counters in-profile-octets-discarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters in-profile-octets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters in-profile-packets-discarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters in-profile-packets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters out-profile-octets-discarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters out-profile-octets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters out-profile-packets-discarded-count
- configure log accounting-policy custom-record ref-override-counter e-counters out-profile-packets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters
- configure log accounting-policy custom-record ref-override-counter i-counters all-octets-offered-count
- configure log accounting-policy custom-record ref-override-counter i-counters all-packets-offered-count
- configure log accounting-policy custom-record ref-override-counter i-counters high-octets-discarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters high-packets-discarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters in-profile-octets-forwarded-count

- configure log accounting-policy custom-record ref-override-counter i-counters in-profile-packets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters low-octets-discarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters low-packets-discarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters out-profile-octets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter i-counters out-profile-packets-forwarded-count
- configure log accounting-policy custom-record ref-override-counter id

port commands:

- configure port dwdm channel
- configure port dwdm coherent channel
- configure port dwdm rxdtv-adjust
- configure port dwdm wavetracker
- configure port dwdm wavetracker apply-groups
- configure port dwdm wavetracker apply-groups-exclude
- configure port dwdm wavetracker encode
- configure port dwdm wavetracker encode key1
- configure port dwdm wavetracker encode key2
- configure port dwdm wavetracker power-control
- configure port dwdm wavetracker power-control target-power
- configure port dwdm wavetracker report-alarm
- configure port dwdm wavetracker report-alarm encoder-degrade
- configure port dwdm wavetracker report-alarm encoder-failure
- configure port dwdm wavetracker report-alarm missing-pluggable-voa
- configure port dwdm wavetracker report-alarm power-control-degrade
- configure port dwdm wavetracker report-alarm power-control-failure
- configure port dwdm wavetracker report-alarm power-control-high-limit
- configure port dwdm wavetracker report-alarm power-control-low-limit
- configure port ethernet access ingress queue-group queue-overrides queue monitor-depth

service commands:

- configure service cpipe sap ingress qos sap-ingress overrides queue monitor-depth
- configure service epipe sap ingress qos sap-ingress overrides queue monitor-depth
- configure service ies interface sap ingress qos sap-ingress overrides queue monitor-depth
- configure service ipipe sap ingress qos sap-ingress overrides queue monitor-depth
- configure service vpls sap ingress qos sap-ingress overrides queue monitor-depth

- configure service vpn interface sap ingress qos sap-ingress overrides queue monitor-depth

subscriber-mgmt commands:

- configure subscriber-mgmt radius-accounting-policy custom-record override-counter
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter apply-groups
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter apply-groups-exclude
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters in-profile-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters in-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters in-profile-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters in-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters out-profile-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters out-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters out-profile-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter e-counters out-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters all-octets-offered-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters all-packets-offered-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters high-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters high-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters in-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters in-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters low-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters low-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters out-profile-octets-forwarded-count

- configure subscriber-mgmt radius-accounting-policy custom-record override-counter i-counters out-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record override-counter id
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter all
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters in-profile-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters in-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters in-profile-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters in-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters out-profile-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters out-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters out-profile-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter e-counters out-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters all-octets-offered-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters all-packets-offered-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters high-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters high-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters in-profile-octets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters in-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters low-octets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters low-packets-discarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters out-profile-octets-forwarded-count

- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter i-counters out-profile-packets-forwarded-count
- configure subscriber-mgmt radius-accounting-policy custom-record ref-override-counter id

system commands:

- configure system security tls client-cipher-list cipher
- configure system security tls client-cipher-list cipher apply-groups
- configure system security tls client-cipher-list cipher apply-groups-exclude
- configure system security tls client-cipher-list cipher index
- configure system security tls client-cipher-list cipher name
- configure system security tls server-cipher-list cipher
- configure system security tls server-cipher-list cipher apply-groups
- configure system security tls server-cipher-list cipher apply-groups-exclude
- configure system security tls server-cipher-list cipher index
- configure system security tls server-cipher-list cipher name

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system commands:

- configure system security ssh client-cipher-list-v1
- configure system security ssh client-cipher-list-v1 apply-groups
- configure system security ssh client-cipher-list-v1 apply-groups-exclude
- configure system security ssh client-cipher-list-v1 cipher
- configure system security ssh client-cipher-list-v1 cipher apply-groups
- configure system security ssh client-cipher-list-v1 cipher apply-groups-exclude
- configure system security ssh client-cipher-list-v1 cipher index
- configure system security ssh client-cipher-list-v1 cipher name
- configure system security ssh server-cipher-list-v1
- configure system security ssh server-cipher-list-v1 apply-groups
- configure system security ssh server-cipher-list-v1 apply-groups-exclude
- configure system security ssh server-cipher-list-v1 cipher
- configure system security ssh server-cipher-list-v1 cipher apply-groups
- configure system security ssh server-cipher-list-v1 cipher apply-groups-exclude
- configure system security ssh server-cipher-list-v1 cipher index
- configure system security ssh server-cipher-list-v1 cipher name
- configure system security ssh version

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